Key Lectures

K-1
Quality control and quality assurance in ART lab

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Introduction: The most important issues of activities in ART lab is to assure the highest level of success and outcome , with considering of prevention of errors, satisfaction of patients, following of guidelines, rules and policies. Quality control is to ensure all elements of ART lab are functioning as required with the inspection of all ART Lab activities: Data record, protocols, procedures, guidelines, safety, personnel training and skills, responsibilities and job description, equipment, supplies, corrective actions, policies, laboratory design, and proficiency testing. Quality Assurance is to evaluate, to validate and to verify all ART lab activities and performances with the assessment of elements which have been inspected and measured in Quality control program.
Conclusion: This review has been explained Quality control and Quality Assurance and elements, methods and procedures of those in details and the outcomes derived from following Quality control and quality assurance are useful to determine whether the ART lab is functioning at its optimum rate.

K-2
Influence of human oocyte morphology on embryo development, implantation and its correlation with genotype

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The appearance of the oocyte changes with the multifactor and complex mechanisms which makes the evaluation of oocyte morphology difficult. Developmental capability and implantation potential of derived embryo may be influenced by significant morphological variations of oocyte. These variations may result from intrinsic factors such as age and genetic defects or extrinsic factors such as stimulation protocols, culture conditions, and nutrition.
The aims this study was to detect if certain morphological markers are predictive for oocyte quality in assisted reproductive technology (IVF/ICSI) and also to find out if there is a correlation between oocyte morphology and its genetic status which could be predictive for the genetic health of the oocyte. The controlled ovarian-hyper stimulated IVF/ICSI patients had different qualities and morphologies of maturated oocytes (MII) after follicular puncture. In these oocytes both nuclear and cytoplasmic maturation have to be completed to ensure an optimal oocyte. Criteria's of an optimal and maturated oocyte are; clear cytoplasm with only moderate granulation, intact first polar body and morphologically normal zona pellucida.
Disorders or asynchrony of these processes may result in different morphological abnormalities depending on whether nuclear or cytoplasmic maturation has been affected. The rate of fertilisation or clinical pregnancy may be diminished by some disturbances. To sum up, non-invasive selection criteria's help to identify embryos showing a high implantation potential and reduce the high multiple pregnancies rate after IVF-treatment. In the moment, day 1 embryos turned out to be the time of choice for morphological evaluation. The object of this investigation was also to find out if there is a correlation between oocyte morphology and its genetic status which could be predictive for the genetic health of the oocyte.

K-3
Serum anti-müllerian hormone as a predictive marker in assisted reproduction technology

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Introduction: Anti-Mullerian hormone (AMH) is a dimeric glycoprotein, a member of the transforming growth factor (TGF) superfamily. It is produced exclusively in the gonads and is involved in the regulation of follicular growth and development. In the ovary AMH is produced by the granulosa cells of early developing follicles and seems to be able to inhibit the initiation of primordial follicle growth and FSH-induced follicle growth.
Materials and Methods: From an original sample of 210 patients (age from 20 to 42) serum were collected on the day 3-5 of menstrual cycle and studied for the basal level of AMH, FSH and the number of antral follicles (AFN). In further studies serum and follicular fluid (FF) were collected from 95 IVF/ICSI patients on the day of follicular puncture (FP). The aetiology of patients was tubal or male factor infertility. These patients were divided into two groups as follows: In Group 1: a) correlation between serum and FF with

respect to AMH and correlation between AMH and estradiol (E_2) in serum; and b) comparison of AMH level in serum in response to ovarian stimulation and comparison of AMH level in serum between pregnant and non-pregnant patients. In Group 2: Patients (n=25) were monitored throughout the menstrual cycle until 4 weeks after embryo transfer. In this group, AMH levels in serum were analysed throughout the different ovarian cycle phases and gestation.

Results: There was a significant positive correlation between basal AMH in serum and total number of antral follicles on the day 3-5 of menstrual cycle (r=0.7, p<0.001). We found inverse relations between serum AMH concentrations, FSH and advents patients age. In group 1 on the day of oocytes retrieval, the mean AMH level in FF (2.23±1.2 ng/ml) was significantly higher than that in serum (1.23±0.79 ng/ml (p<0.001). On the basis of normal distributed values of AMH levels in serum and FF, we found a significant positive correlation (r=0.86, p<0.001). There was also a significant and positive correlation between the AMH levels in serum and FF and number of follicles. In response to ovarian stimulation AMH levels in serum increased from low, through moderate, to high response patients (p=0.001), pregnancy rates were 17%, 25% and 48%, respectively. In group 2 the levels of AMH in serum of pregnant (n=12) and non pregnant (n=13) patients decreased throughout stimulation phase and reached a minimum on the day embryo transfer. In the post-retrieval days, from the day of ET, through implantation, to the day of confirmation of pregnancy, the AMH levels of those patients who did not became pregnant (n=13) increased and reached their highest level on the day of ET+2w. In pregnant patients the AMH levels increase slowly up to the early pregnancy time ET+4w.

Conclusion: Our results demonstrated a strong association between AMH and ovarian response to gonadotrophins. Serum AMH seems to result from the follicular pool and its production is independent of the gonadotrophin-dependent indicators of ovarian reserve. This makes AMH unique in providing a perspective, which is not possible with current serum markers. Moreover, for the first time, clinicians may have a reliable serum marker of ovarian response that can be measured independently of the day of the menstrual cycle.

Key words: *Serum anti-müllerian hormone, Predictive marker, Assisted reproduction technology.*

K-4
Blastulation and pregnancy rates after vitrified human zygote culture for 4 days: Preliminary results

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Introduction: Blastocyst culture has been introduced with the aim of increasing the efficacy of embryo selection. In this preliminary study, blastocyst culture was offered to patients, who had shown excessive ovarian response and thus had all 2 PN stage oocyte frozen by vitrification in order to prevent ovarian hyperstimulation syndrome (OHSS).

Materials and Methods: 29 patients were included in this study till now. These patients were stimulated with either corifollitropin alfa or recombinant FSH in a GnRH-antagonist protocol. Final oocyte maturation was triggered with GnRH agonist to avoid OHSS. The fresh embryo transfer was cancelled and all 2PN stage oocytes were vitrified by the Cryotop method (Al-Hasani *et al* (2007). Four to six zygotes were warmed per attempt to transfer and cultured in "Sage sequential media" for further 4 days under oil. A maxiumum of two blasotcysts were transferred in a programmed cycle and if more blastocysts were available they were re-vitrified.

Results: A total of 160 zygotes were warmed from 29 patients till now and 42 embryos reached the early and expanding blastocyst stage, while 9 reached the morula stage (32%). The scoring system used was according to Gardner et al. (1999). The implantation rate achieved in this study was 31.4% and the pregnancy rate was 34.5%.

Conclusion: These results show that blastulation rate after vitrification is high and thus can be offered to patients with a sufficiently high number of 2 PN stage oocytes. In combination with agonist triggering, OHSS can be avoided while efficacy is high.

Key words: *Blastulation, Pregnancy rates, Vitrified human zygote culture.*

K-5
Challenges of infertility surgery 2012

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Many technical developments and a better understanding of a combination of surgical and imaging techniques revolutionized the 20th century. The first laparoscopic surgery in the world was performed by Georg Kelling from Dresden (Germany) in 1901, when he performed an endoscopy on a dog. In the 21st century robotic endoscopic surgery with for example the Da Vinci Surgical System or the Telelap ALF-X and an increasing number of new instruments with multiple degrees of liberty, articulation (Terumo) and new hemostatic effects have enriched surgical endoscopic possibilities. Cameras with a range of settings from 0 to 120 (Endocameleon TM, Karl Storz, Tuttlingen, Germany) and improved optical systems (high-definition television; HDTV) give brilliant pictures. Today we differentiate the following endoscopic surgical techniques in the female reproductive tract.

Laparoscopic surgery: Fimbiolysis, fimbrioplasty,

salpingostomy tubal end to end anastomosis- all together with chromotubation.
Salpingolyis: Ovarian benign tumours- enucleation, ovarian cystectomies.
Ectopic pregnancy: salpingotomy and salpingectomy, Endoscopic surgery in pregnancy, Extragenital gynaecological surgery, Endometriosis surgery including bowel- shaving and- resection, Adhesiolysis and prophylaxis of adhesions, Pelvic infection surgery, Enucleation of subserous, intramural and partly subserous-partly intramural fibroids at singe and multiple locations.
Hysteroscopic surgery: Diagnostic and office hysteroscopy: adhaesiolysis, tubal canalization, enucleation of small fibroids.
Operative hysteroscopy: adhaesiolysis, myoma enucleation, septum division, polyp-excision. In many cases a combined laparoscopic and hysteroscopic approach is suggested. Transvaginal hydrolaparoscopy or fertiloscopy remains still the most simple, but in its diagnostic and therapeutic value limited, surgical procedure to primarily clarify the situation of an infertile female.
Key words: *Infertility, Surgical techniques.*

K-6
Endometriosis, secrets of symptoms and possible treatments with success

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Introduction: According to a global collaboration report through the Endometriosis research foundation in 2010 about 176 million reproductive-age women worldwide are affected and the cost of annual expenses is estimated to be for example in the U.S.A. more than 22 billion Dollars per year. While infertility associated endometriosis receives considerably clinical attention the symptom of pain is often chronic and even debilitating and receives less attention. From the surgical point of view excision of endometriotic lesions by laparoscopy stands still in the center of diagnosis and treatment. For symptomatic adenomyosis hysterectomy is currently considered the most and only effective treatment besides selective excision.
Objectives: Let me today concentrate on the surgical excision of endometriosis, focal adenomyosis and adenomatoid tumours, which often are connected to severe pain.
Materials and Methods: 1) Endometriotic lesions were biopsied and the pathohistological outcome was compared to the suspected diagnosis in 216 patients. 2) We performed histological diagnosis either by ultrasound guided needle biopsy or by endometrial resection or by needle biopsy during laparoscopy (n=15). 3) Two women of reproductive age with uterine adenomatoid tumours.
Results: 1) In black and red lesions, including endometriomas, the suspected diagnosis was confirmed in >90% of cases. In white lesions, however, the diagnosis could only be verified in 53% of cases. 2) In all patients we performed a laparoscopic resection partly combined with a resectoscopic resection in cases of menorrhagia. 3) Tumour excision is difficult because of the missing capsule. Adenomatoid tumours needs to be cut out of the myometrium, there is no clear plane of cleavage.
Conclusion: 1) Purely morphological criteria are not sufficient for the diagnosis of endometriosis but these laparoscopic findings are still our most reliable points of reference. 2) Vaginal ultrasound combined with transabdominal or transvaginal myometrial biopsy established the diagnosis of adenomyosis in 15 infertility patients. 3) The proper laparoscopic handling of these tumours is crucial, because malignancy exclusion is only possible by histologic work-up.
Key words: *Endometriosis, Symptoms, Treatments.*

K-7
Endometriosis and infertility, sclerotherapy in recurrent endometrioma

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Endometriosis is a common hormone-dependent gynecologic disease with a high recurrence. Pathogenic mechanisms in endometriosis-associated infertility are:

- Inflammatory changes in peritoneal fluid (proliferation of macrophages and phagocytic dysfunction, release of proinflammatory and angiogenic factors, changes in peritoneal fluid can affect sperm-oocyte interaction, increased E2 levels in the peritoneal fluid).
- Changes in steroidogenic factor such as production of estrogen in situ and resistance to progesterone that affect endometrium.
- Reducing ovarian reserve by endometriomas or surgery.
- Changes in response to ovarian stimulation.
- Increased peritoneal fluid concentrations of prostaglandins, interleukin-1, tumor necrosis factor and proteases.
- Increased PAPP-A and VEGF in the peritoneal microenvironment.
- Above changes may induce these situations:
- Impaired folliculogenesis and oocyte quality.
- pelvic anatomy distortion.
- immunologic dysfunction.
- Sperm dysfunction.
- Impaired fertilization.
- Impaired implantation.

One condition that put the patients in severe endometriosis is endometrioma. In endometrioma all of

above mechanisms are involved but the most important factors are impaired folliculogenesis and oocyte quality and decreased ovarian reserve.
Laparotomy or laparoscopy is the standard surgery for the large endometrioma, but in recurrent endometrioma repeated surgery is not recommended by many researches because of decreased ovarian reserve. Also, sclerotherapy is basically used to treat different diseases, one of which is endometrioma. In a clinical trial study, we compared 20 patients underwent transvaginal ethanol sclerotherapy for ovarian endometrioma with 20 patients with endometrioma who had no treatment by ethanol sclerotherapy. The result showed the recurrence rate of 20% after 6 months. Most patients undervent IVF after Sclerotherapy and pregnancy rate was increased in this group compared to control group (33.3% vs. 15%, p>0.05). According to these findings, ethanol sclerotherapy is an effective strategy for the treatment of recurrent endometrioma especially before IVF.
Key words: *Endometriosis, Alcohol, Sclerotherapy, Recurrent endometrioma.*

K-8
Ovarian slice freezing, *in vivo* and *in vitro* growth of follicles from ovarian slices and *in vitro* maturation of oocytes

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In-vitro maturation (IVM) of oocytes offers an alternative strategy to patients requiring clinical ART, particularly PCO patients and poor responders. The procedure avoids ovarian stimulation and reduces time and cost by avoiding the requirements for gonadotrophins, and greatly reduces risks such as ovarian hyperstimulation syndrome. Collection of immature oocytes in an unstimulated cycle, combined with vitrification of the resultant mature oocytes, also offers an effective method of fertility preservation for recently diagnosed cancer suffers. This technique can replace or can be combined with ovarian slice freezing, depending on resources and expertise available at the time of treatment. IVM protocols, ovarian slice cryopreservation protocols and the production of developmentally competent oocytes from thawed ovarian slices and in both human and animal species will be reviewed in this talk.
Key words: *Ovarian slice freezing, In-vitro maturation, Oocytes.*

K-9
Vitrification of oocytes and embryos; what's important?

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With the plethora of media and devices available on the market these days it is important to understand the basic principles and concepts of vitrification of oocytes, cleavage stage embryos and blastocysts. A particular media and device in one embryologist's or trainer's hands can work perfectly with '100% success, while in many others this is not the reality. Here we will discuss the key components of the various commercial vitrification media and the principles behind the various devices on the market, and discuss whether the same media can be used for the different stages of embryos and what temperature and equilibration times are acceptable. The concept of a universal thaw solution will also be discussed.
Key words: *Vitrification, Oocytes, Embryos.*

K-10
Embryo assessment and selection

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Over the years it has been an important goal to optimize the treatment of subfertility in order to obtain a better pregnancy rate and baby-take-home rate, usually combined with the goal of decreasing the rate of multiplet pregnancies. This implies optimizing the development of embryos through improved in vitro culture methods. And it also implies optimizing the methods of selection of embryos for fresh and frozen transfers, as well as the timing and location of the deposition of the embryos during transfer. This lecture will deal with embryo morphology and pre-implantation development. Automated time-lapse micro-cinematography is being used to make exact determinations of fertilization, cleavage pattern, and number of nuclei in the blastomeres, degree of fragmentation etc. As opposed to standard microscopy this method provides a continuous microscopy and can be done without interfering with temperature and pH – and without personal being present at critical times.
Another aspect of the present study is the investigation of metabolomics in connection with embryonic development. Our aim is to study the possibility of correlations between metabolomic profiles and morphological development. This study has just started.
Key words: *Embryo assessment, Embryo selection.*

K-11
Assessing the Sperm

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Assessment of sperm has over the years by many been regarded as something secondary to assessment of ova, oocytes and embryos. Often the most inexperienced of the laboratory staff have been asked to evaluate the semen sample. It is our belief that the outcome of

subfertility treatment could be improved considerably, if semen and sperm assessment would be taken more seriously. This may not be as simple as it may sound. This lecture will deal with subjective and objective semen analysis. We will discuss the mistakes, which can inadvertently be made during a subjective analysis, and the advantages-and disadvantages-of an automated CASA (Computer Aided Sperm Assay) system.
The total concentration of sperm is fairly easy to determine, but makes only sense, if we know the motility and morphology, both of which can be very hard to determine. If the motility is very poor, we still may be able to use the sperm for ICSI, if we can show that an immotile spermatozoon is actually alive. The presence of antisperm antibodies may prevent fertilization by IUI or IVF, but ICSI may still work. Severe sperm DNA fragmentation can make IUI and even IVF impossible, but again ICSI can maybe lead to success and a healthy baby. DNA fragmentation assays are relatively expensive, but in cases where the sperm sample has a good concentration, good motility, good morphology and good vitality, but does not bring about fertilization, it may be worthwhile to do a DNA fragmentation assay.
Key words: *Sperm, Assessment, Semen, CASA (Computer Aided Sperm Assay) system.*

K-12
Bio-molecular aspect of Embryo Implantation

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Implantation is an event that happens early in pregnancy in which the embryo adheres to the wall of uterus. At this stage of prenatal development, the embryo is a blastocyst. The fetus receives the oxygen and the nutrients from the mother to be able to grow. Implantation is an important step in establishing a pregnancy and is of major concern in the management of infertility. Failure at this step greatly limits the success of all approach to infertility treatments as well as assisted reproductive technology (ART).
Implantation is predominantly difficult to study, for it requires a blastocyst to interact with a receptive endometrium, which is an in vivo condition. Indeed, our knowledge of what happens during the first week of human life in vivo is limited to a handful of observations. The implantation window is started by preparations in the endometrium of the uterus, both structurally and in the composition of its secretions. The phenomenon of endometrial receptivity has been broadly studied. The endometrium increases in thickness, becomes more vascularized and its glands grow to be tortuous and boosted in their secretions. These changes reach their maximum about 7 days after ovulation. Furthermore, the surface of the endometrium produces a kind of rounded cells, which cover the whole area toward the uterine cavity. This happens about 9 to 10 days after ovulation. These cells are called decidual cells, which emphasizes that the whole layer of them is shed off in every menstruation if no pregnancy occurs. The uterine glands, on the other hand, decrease in activity and degenerate already 8 to 9 days after ovulation in absence of pregnancy. The endometrial epithelium consists of two types of cells that are easily distinguishable by scanning electron microscopy: The secretory and the ciliated cells. The morphology of ciliated cells does not change much during the cycle. In contrast, the secretory cells bear microvilli and develop dependent changes. The apical membranes of the secretory cells lose their microvilli and develop large ectoplasmic protrusions. These protrusions were found to be involved in pinocytosis and were thereafter termed pinopodes. These are abundant experimental evidence that pinopodes provide a specific marker for uterine receptivity in rats. Structures resembling pinopodes present at the time of implantation have been described in all mammals studied so far, including humans. The stromal cells originate from the stromal layers that are always present in the endometrium. However, the decidual cells make up a new layer, the deciduas. The rest of the endometrium, in addition, expresses differences between the luminal and the basal sides. Decidualization succeeds pre-decidualization if pregnancy occurs.
Implantation is characterized by the interaction of two immunologically and genetically distinct tissues. During implantation, local and systemic immune factors, and growth factors may interact with adhesion molecules and other matrix-associated proteins, glycoproteins, and peptides. The embryo differs from the cells of the mother, and would be rejected as a parasite by the immune system of the mother if it didn't secrete immunosuppressive agents. Thus, immunological rejection of the fetus due to recognition of paternal antigens by the maternal immune system, resulting in abnormal immune cells and cytokine production, is postulated to be one cause of unexplained pregnancy loss. Most of the recent investigations suggest differences in the expression of some immune cells and molecules in women with recurrent miscarriage such as CD56+, CD4+.
Most important mother immunosuppressive agents are Platelet-activating factor, human chorionic Gonadotropin (hCG), Prostaglandin E2, Interleukin 1-alpha, Interleukin 6, interferon-alpha, leukemia inhibitory factor (LIF) and Colony-Stimulating Factor (CSF). In addition, new studies have investigated the role of autoimmune factors in implantation in women undergoing in- vitro fertilization. Antiphospholipid antibodies are identified more frequently in women undergoing in-vitro fertilization, but their presence does not appear to influence the outcome of pregnancy, miscarriage, or live birth rates. Antithyroid antibodies are commonly found in women of reproductive age, but implantation rates and miscarriage rates are not altered when women have normal thyroid function. Antinuclear

antibodies may be a marker for underlying autoimmune disease when coupled with certain signs and symptoms, but low-titer antibodies do not influence in-vitro fertilization outcome. Antisperm antibodies are more often associated with fertilization failure when found in high titers in seminal plasma, in sperm, or in the mucosal immune system of women. Antisperm antibodies are uncommon but most often associated with ovarian hypo function.

Embryo implantation in the uterus involves the trophoblast cells apposing and adhering to, then invading across the epithelium lining of the endometrium. However, ethical concerns regarding experimentation with primary human tissue during this period of life necessitates creation of in vitro models for understanding the basic mechanisms involved. Toll-like receptors (TLRs) play a crucial role in defense against pathogens invading the female reproductive tract. Recently, we suggest a novel mechanism by which the presence of intrauterine infection through TLR5 activation may result in implantation failure. These data may provide a new opportunity in the management of infertility cases.

Consequently, understanding the roles of local and systemic immune factors, cytokines, growth factors, adhesion molecules and other matrix- associated proteins in uterine receptivity for implantation is necessary to develop approaches to enhance reproductive health and fertility in humans.

Key words: *Implantaion, Endometrial receptivity, Interleukin, Toll like receptor.*

Oral presentations

1- Infertility, Gynecology

O-1
Immunological modes of recurrent miscarriage

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Evolutionary development of immune system dates back to the emergence of life in the universe. It controls all aspects of the living organisms and grows up in parallel with development of tissues and organs. A tiny and small change in the normal physiological processes is concomitantly followed by immediate counter-regulatory mechanisms of the immune system. Ovulation, spermatogenesis, zygote evolution; implantation and development are among the processes which are under the tight control of immune system. Humoral and cellular arms of immune system not only have a strict control over placentation and embryo development, but act in a very supportive way as well. Immune deviation from finely tuned state may result in such pregnancy-associated complications as implantation failure and miscarriage. Although recurrent miscarriage (RM) affects only 1-3% of couples, it has a major influence on the wellbeing and psychosocial status of patients. Therefore, finding its etiology is a prerequisite for successful management of RM in most settings. A significant portion of these recurrent pregnancy losses is associated with immune etiologies, including autoimmune and cellular immune abnormalities. In most instances immunological imbalances, especially those with emergence of auto-antibodies, are associated with inflammatory process leading to pregnancy loss. The influence of thrombophilia in pregnancy is a popular research topic in recurrent miscarriage. Interestingly, inflammatory processes are the main causative factor for pregnancy loss in both acquired and hereditary thrombophilias. Indeed, based on extensive expression of different pattern recognition receptors (PRR) at the feto-maternal interface, local infections could potentially lead to the downstream signaling pathways of inflammatory reactions and thereby induce abortion. It is conceivable, therefore, that counter-regulatory mechanisms might exist at the female reproductive tract to counteract inflammatory cascade of potentially harmful cytokines. Among the others, the pivotal immunoregulatory role of vitamin D3 has been the focus of many recent researches. Most interestingly, immunologic mechanisms responsible for pregnancy loss are not solely imposed from maternal side, but paternal factors are also play a determining role in shaping the immune responses in the uterus, where the final decision on the fate of the developing embryo is to be made. In this review, we will have a brief look on the immune etiologies of RM mainly based on our extensive experiences in the past five years.

Key words: *Pregnancy loss, Miscarriage, Immunology, Auto-Immunity, Thrombophilia, Inflammation.*

O-2
Bilateral ovariectomy inhibits development of experimental endometriosis in rats

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Introduction: Endometriosis defined as functioning endometrium outside the uterine cavity and is found is peritoneum, ovary and rectovaginal septum. The disorder occurs mainly in women of reproductive age and regresses after menopause or under treatment with estrogen-suppressive substances. In women with completed families, removal of both ovaries as the main source of estrogen may be considered for disabling symptom.

Materials and Methods: In this study we evaluated whether ovariectomy as an estrogen-suppressive method is effective on the growth of established endometriosis lesions in the rat model? 22 adult female rats were selected. The surgical technique consisted to median laparotomy and resection of a 1cm segment of the right uterine horn. After endometrial detachment from myometrium, a 0.25cm^2 flap was removed and sutured to the abdominal muscle in peritoneum. The rats were randomly divided into 2 groups. Group 1 (n=10) was only transplanted with endometrial fragment and endometriosis was induced in 10 ovariectomised rats in group 2. 3 weeks after endometriosis induction, blood samples were collected to determine the concentrations of estradiol and progesterone and tissue samples were taken to histological studies using HE and PAS staining methods.

Results: indicated that serum estradiol and progesterone concentrations and histological thickness of implanted endometrial tissue, glands infiltration and vessel fields significantly decreased in group 1.

Conclusion: Bilateral ovariectomy as an estrogen-suppressive method effectively interferes with the maintenance of the disorder's symptoms and growth of endometriosis by inhibiting estrogen secretion from ovaries in completed family's women.

Key words: *Endometriosis, Ovariectomy, Estradiol, Rat.*

O-3
Infertility treatments and Islamic jurisprudence

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Introduction: Different Islamic religious schools in face of the permit or forbidden of the new infertility treatments have adopted different viewpoints. It's necessary to present a solution for those, who accept the forbidden approach in comparison with these treatments, with due attention to the subject importance and the challenge of the great percent of the Moslems milliard population with it. We are searching to find this solution, in this research, with regard to religious precepts on the one hand, and provide mind cicatrisation for barren couple to have generation that followed divorce in some case on the other.

Materials and Methods: This research is a review and library study.

Results: most jurisconsults permit AIH, either with IUI or IVF styles, and forbidden AID, either with IUI or IVF styles. They emphasis on the avoiding introductions forbidden such as the palpation and look except in the emergency cases. The Shiite and Sunni jurisconsults have diversities of opinions in use of the infertility treatments methods for example Mother Surrogacy.

Conclusion: Mahmud Shaltut, the great Sunni jurisconsult, recognized the Shiite beside the formal Sunni religions and permitted to follow this religion. We can solve our problem in infertility treatments by resorting to this method. In some of the infertility treatments, such as Mother Surrogacy and Embryo Donation, according to the Sunni juris consults opinion, can refer to the Shiite juris consults opinions and appoint it as the divine proof, consequently most of the barren couple problems can remove without the sacred law violation.

Key words: *Infertility treatment, Islamic jurisprudence, Mother Surrogacy, Embryo Donation.*

O-4
IVF implantation failure and hereditary thrombophilia

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Introduction: The objective of this study was to determine the prevalence of mutation in hereditary thrombophilia factors and its relation to in vitro fertilization (IVF)-embryo transfer failure in women who have had three or more previously failed IVF-embryo transfer cycles.

Materials and Methods: In a case-control study we enrolled 28 consecutive women with three or more previously failed IVF-embryo transfer cycles as case group (group 1). The control group included 35 women who conceived during at first IVF cycle. All women were tested for the presence of factor V Leiden, and methylenetetrahydrofolate reductase (MTHFR) mutations. Ofcoure we continue this study to complete participant in each group to reach 45.

Results: There were 4 mutations in factor V Leiden in case group and in control group no mutation was seen and significant difference($p<0.01$) was found between two group. MTHFR mutations were found in 46% (13) of case group and 45% (16) of control group with no significant difference. Association between repeated IVF failure and mutation in factor V Leiden was found statistically.

Conclusion: These data suggest that factor V Leiden have a significant role in IVF-embryo transfer implantation failure. methylenetetrahydrofolate reductase gene mutation do not has a significant role.

Key words: *Hereditary trombophilia, Implantation failure, IVF.*

O-5
Effectiveness of Metformin in treatment of infertility and recurrent pregnancy loss in polycystic ovarian syndrome

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Introduction: Polycystic ovary syndrome (PCOS) is the most common endocrinopathy in women of reproductive age. The prevalence of PCOS is approximately 5-10% in population. It can cause an increased risk of recurrent pregnancy loss; moreover, it is assumed that it may cause infertility because of low quality of oocyte. Two factors such as hyperinsulinism and hyperandrogenism play an important role in abortion and infertility. The main goal of this study is to investigate the effectiveness of metformin during pregnancy in a group of PCOS women.

Materials and Methods: In this randomized trial, we enrolled 1024 women who had a history of unexplained recurrent pregnancy loss and 152 IVF failure women. PCOS infected women diagnosed based on women's consultation and Rotterdam criterion. Then we assigned them to received Metformin (500-1500 mg daily) for at least three month before conception and after confirmation of a viable pregnancy to the first trimester of pregnancy. All women were followed during pregnancy to the end or were contacted by telephone every 3 months till the end of pregnancy.

Results: The success rate of pregnancy in women with PCOS who suffering recurrent pregnancy loss after Metformin therapy was 32.8% and in IVF failure women with PCOS was 21.4%.

Conclusion: Metformin consumption has shown is not effective in reducing number of abortion in PCOS women; moreover, it is ineffective in IVF failure reduction too.

Key words: *Metformin, Recurrent pregnancy loss, IVF failure, Treatment, Pregnancy.*

O-6

N-acetyl-cysteine as an adjuvant to clomiphene citrate for successful induction of ovulation in infertile patients with polycystic ovary syndrome

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Introduction: To evaluate the effect of oral N-Acetylcysteine (NAC) administration as an adjuvant to Clomiphene Citrate (CC) on induction of ovulation outcomes in patients with polycystic ovary syndrome (PCOS).

Materials and Methods: In this placebo-controlled double-blind randomized clinical trial, 180 PCOS infertile patients were randomly divided into two groups for induction of ovulation. Patients in group 1 received CC 100 mg/d plus NAC 1.2 g/d and patients in group 2 received CC plus placebo for 5 days starting at day 3 of the cycle. On the 12th day of menstrual cycle in the presence of at least one follicle with an 18-20 mm diameter in ultrasound evaluation, 10000U HCG was injected intramuscularly and timed intercourse was advised 36 hours after HCG injection. Serum β-hCG level was measured on the 16th day after HCG injection.

Results: The number of follicles >18mm and the mean endometrial thickness on the day of HCG administration were significantly higher among the CC+NAC group (p=0.001). The ovulation and pregnancy rates were also significantly higher in the CC+NAC group (p=0.02 and 0.04 respectively). No adverse side-effects and no cases of OHSS were observed in group receiving NAC.

Conclusion: NAC as a safe and well-tolerated adjuvant to CC for induction of ovulation can improve the ovulation and pregnancy rates in PCOS patients. It may also have some beneficial impacts on endometrial thickness.

Key words: *N-Acetylcysteine, Clomiphene Citrate, Polycystic Ovary Syndrome, Ovulation, Pregnancy Rate.*

O-7

The effects of bee venom on in vitro maturation of isolated preantral follicles in NMRI mice

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The bee venom contains amounts of peptides and biological active amines that their effects on accretion of ovulation have been augmented in rats. Moreover, injection of HBV used of laparoscopy into ovary led to significant increasing ovulation and pregnancy. So, unmatured follicles taken from 14day-old mice and cultured in α-minimal essential medium (α-MEM) with FSH for 12 days and divided into 3groups based on diameter, were treated with HBV (Honey bee venom). Then diameter of follicles and morphological appearances of oocytes s maturation was studied. In experimental group, diameters of follicles were increased significantly ($p<0.05$). In brief, it can be confirmed that HBV has led to significantly changes in invitro maturation of preantral follicles (IVM) and consequently, better performance for fertility. Moreover, preantral follicles with average diameter were better candidate ($p<0.001$) for HBV treatment.

Key words: *Honey bee venom, Mouse, Preantral follicles, In vitro culture, Maturation.*

O-8

In vitro culture of mouse preantral follicles following ovarian tissue vitrification by needle immerse and solid surface methods

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Introduction: Ovarian tissue cryopreservation in cancer patients is an efficient method for fertility preservation.

Materials and Methods: Ovaries of 13-day old NMRI mice were removed and randomly divided into control, needle immerse (NIV) and solid surface vitrification (SSV) groups. For vitrification, ovaries were transferred into equilibration medium [7.5% (EG & DMSO)] and vitrification medium [15% (EG & DMSO) and 0.5 M sucrose], then they immersed in liquid nitrogen after cooling on pre cooled steel surface in SSV group and directly in NIV group. Thawing was done in 2 steps (1 & 0 M sucrose solution). In all groups, some ovaries were analyzed histologically and then preantral follicles of other ovaries were isolated mechanically and cultured for 12 days. Follicle survival was assessed after 24 hour, 6 days, 10 days and 12 days in all experimental groups.

Results: The integrity of ovarian tissue was preserved after NIV and SSV vitrification. After 24 hours of in vitro culture, follicle survival showed no significant difference between different groups. Follicle survival was significantly different between control and SSV group (94.09±1.42 versus 63.14±11.51%) after 6 days,

and also between control and NIV with SSV group (92.82±1.78 and 85.27±3.7 vs. 62.67±9.27%) after 10 days. Finally, after 12 days of culture, the rate of this variant was different between control and NIV group with SSV group (93.16±2.84 and 85.1±10.53 vs. 58.4±12.726%) ($p<0.05$).

Conclusion: NIV is a better preservation method for immature ovarian tissue compared to SSV and it shows lower harmful effects on follicle survival and follicle development.

Key words: *Ovarian tissue, Preantral follicles, Vitrification, In vitro culture.*

O-9
Vaginal progesterone effect on pregnancy rate in polycystic ovary syndrome patients

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Introduction: To determine the effect of intravaginal progesterone on pregnancy rate in combination regimen with clomiphene or letrozole with gonadotropin for ovulation induction cycles in women with polycystic ovary syndrome (PCOS).

Materials and Methods: A single blind clinical trial was performed on 200 PCOS patients referred to Kashan infertility center in 2010-2011. 100 patients received 5mg letrozole from 3-7 days of cycle and 100 patient's 100mg clomiphene in the same days. 150 IU HMG was added to regimen in two groups from day 5-9. TVS was done on 10 or 11 day of cycles and HMG dose was adjusted based on follicle size. After HCG injection for trigger of ovulation, patients in each groups divided to two groups .One group received vaginal progesterone 400 mg daily for 14 days and another group received none. βHCG test was performed 2 weeks later. Pregnancy rate in 4 group's determined and statistical analysis with chi-square, t-test and ANOVA was performed.

Results: Pregnancy rate in clomiphene+HMG ovulation induction cycles with progesterone (16.7%) was more than cycles without progesterone (14%) but this difference was not statistically significant ($p=0.714$) pregnancy rate in letrozole+HMG cycles with progesterone (28%) was more than cycles without progesterone but this difference was not statistically Significant. pregnancy rate in progesterone received groups was 22.4% and 18% respectively ($p=0.436$).

Conclusion: Vaginal progesterone as luteal phase support in combination ovulation induction regimen with clomiphene or letrozole with gonadotropins in PCOS patients didn't significantly increased pregnancy rate.

Key words: *Pregnancy rate, PCOS, Clomiphene, Letrozole, Vaginal progesterone.*

O-10
Ovarian function preservation by GnRH agonists during chemotherapy with cyclophosphamide in breast cancer patients- A double blind randomized control trial clinical

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Introduction: The increased survival of patients with breast cancer has given rise to other problems associated with the complications of chemotherapy. One major complication is premature ovarian failure; an especially harmful outcome for women of reproductive age. This study is designed to evaluate ovarian preservation by GnRH agonists in young women with breast cancer during cyclophosphamide chemotherapy regime.

Materials and Methods: This is a double blind randomized controlled trial that was done on 42 patients with breast cancer who referred for chemotherapy to Shahid Sadooghi Hospital. Patients were asked as menstrual conditions and examined with vaginal sonography and also LH and FSH blood level at the end of 3 and 6 months. Finally data were analyzed by SPSS ver16 software for windows.

Results: Age average of samples was 36.5 year (from 30 to 45 year). After 3 months, 84% of cases maintained ovarian function while this rate increased up to 90.5% at the end of 6 months. In control group 14.3% maintained ovarian function after 3 months while this rate elevated to 33.3% after 6 months. This means that 33.3% had menopause symptoms like flashes, night sweats, fatigue and vaginal dryness. Finding showed that GnRH analogue can significantly preserve ovarian function ($p<0.001$).

Conclusion: GnRH administration before and during chemotherapy in patients with breast cancer seem to preserve post treatment ovarian function in young women in the fertility ages. So that more detailed study

with larger samples in long time period is suggested for more reliable results.

Key words: *Cyclophosphamide, Chemotherapy, GnRH agonist, Breast cancer.*

O-11

Half dose GnRH agonist versus one-third dose GnRH agonist protocol in patients undergoing ICSI; a randomized controlled trial

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Introduction: Using GnRH agonist in controlled ovarian stimulation for ICSI prevents premature luteinizing hormone (LH) surge, but its side effects on endometrial lining is considerable. Recently low dose of GnRH-a has been proposed for these patients. In the present study 1/2 dose (1.875 µg/ml) agonist and 1/3 dose (1.25 µg/ml) of GnRH-a was used for this propose in infertile patients and the pregnancy rate was compared.

Materials and Methods: This is a double-blind, randomized clinical trial on infertile patients referring to Mehr infertility center and 300 patients randomly allocated in two groups: half dose GnRH-a long protocol (group A, n=150) vs. one third GnRH-a (group B, n=150). After down regulation with 1/2 or 1/3 dose of GnRH agonist on day 20th; all patients were stimulated with HMG (2-3 ampules) at 3th day of next menstrual cycle.

Results: The numbers of total and metaphase II oocytes were 12.84±7.19 and 10.32±6.06 in group A and 10.93±6.62 and 8.82±5.86 in group B. There was no significant difference in endometrial thickness, chemical and clinical pregnancy rate between two groups. The chemical and clinical pregnancy rates were 55.3% and 45.3% in group A and 52% and 46% in group B.

Conclusion: there is no significant difference in ICSI success rate between half dose and one-third GnRH agonist protocol and further study is recommended.

Key words: *GnRH agonist, ICSI, Randomized controlled trial.*

O-12

Cytologic diagnosis of endometrial carcinoma, comparing with histologic grade and stage

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Introduction: Type 1 endometrial carcinoma may be occurred as an end result of unopposed estrogen exposure which commonly seen in patients with anovulatory cycles and infertility. In this research we evaluated the sensitivity, specifity of the new outpatient diagnostic tool (endometrial brush cytology) in diagnosis of endometrial malignancies and compare the cytologic grade with post hysterectomy grade and stage.

Materials and Methods: 23 cases of endometrial carcinoma with preoperative diagnosis of endometrial carcinoma made by cytologic examination were selected and grading was performed by modified Nottingham system for breast cancer. The results of cytologic grading compared with post surgical grades and stages.

Results: The sensitivity and specifity of endometrial brush cytology for diagnosis of endometrial carcinoma were 95.5% and 100% respectively. The tumor grade in cytology was a significant predictor of patient stage. Cytological grading was significantly correlated with histological grade also.

Conclusion: We concluded that the endometrial cytology is an efficient and rapid outpatient method for diagnosis, typing and grading of endometrial carcinoma for decision of surgical and adjuvant therapy.

Key words: *Endometrial Cytology, Type 1 Endometrial Carcinoma.*

O-13

Natural cycle frozen-thawed embryo transfer (FET) in patients with poor endometrium and repeated IVF failure (RIF): The observational study

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Introduction: The objective of this variable- control study was to compare pregnancy rate of FET on natural versus hormone replacement therapy (HRT) cycle endometrium in patients with RIF.

Materials and Methods: This cross-sectional 6 months observational study has been performed on 108 ovulatory 20-38 years old patients excluding sever male factor infertility. We analyzed the pregnancy rate after FET on natural endometrium in patients with RIF failure and previously thin endometrium on HRT (group 1, n=14) and patients with RIF with previously normal endometrium (group 2, n=42), comparing with patients with RIF and normal endometrium, in whom we transferred the frozen-thawed embryos on HRT cycle (group 3, n=52). Serial monitoring of ovulation has been done with human chorionic gonadotrophin (HCG) triggering, for timing of embryo transfer.

Results: Patients in group 1 and group 2, got pregnant in 35.7% (5 out of 14) and 42.2% (18 out of 42) respectively, compared with pregnancy rate of 36.5% (19 out of 52) in group 3.

Conclusion: The results suggest the superiority of the natural cycle as compared with the HRT cycle under certain conditions.

Key words: *Frozen-thawed embryo transfer (FET), Natural cycle endometrium, HRT, Poor endometrium, Repeated IVF failure.*

O-14
Effect of endometrial local injury on pregnancy rate in unexplained infertile patients undergoing intrauterine insemination (IUI)

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Introduction: Unexplained infertility is a diagnosis of exclusion when systemic evaluation fails to identify a cause. It may be truly no abnormality (lower end of couples natural fertility) or there is a specific cause but cant revealed by available diagnostic test. This study aims to evaluate a simple strategy for improving endometrial receptivity and the result of pregnancy in unexplained infertile patients undergoing IUI.
Materials and Methods: This is a randomized case-control study on 139 unexplained infertile women who were divided into two groups. After superovulation by clomiphen-citrate and gonadotropins and when the dominant follicles reached 18-20 mm, 10000 UI hCG was injected. Endometrial local injury was performed in the posterior wall of the uterus by Novak curette (in the same day of hCG injection) just in the experimental group. All the patients underwent single IUI after 36 hours.
Results: There were 16 pregnancies in 65 cycle of IUI group comparing to 11 pregnancies in 74 cycle of case group (endometrial injury+ IUI group). Clinical and ongoing pregnancy rate were significantly higher in the endometrial injury group as compared to the control group (24.6% vs 14.9%) (p-value=0.108).
Conclusion: As revealed by this study, local mechanical injury of the endometrium can increase uterine receptivity probably by provoking the production of molecules which improving the implantation of the embryo and in combination with IUI will increase ongoing pregnancy. This may help many couples to avoid the stress and cost of more invasive technologies.

Key words: *Unexplained infertility, IUI, Local injury, Pregnancy rate.*

O-15
Hyperprolactinemia in men with sperm disorders

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Introduction: Hyperprolactinemia (HPRL) in men, a condition that should not be neglected. The role of that in male infertility is still unclear.
Materials and Methods: To assess the clinical significance of PRL determination during infertility studies, serum hormones and semen samples from 150 men attending the Shahid Beheshti research center were analyzed, and PRL seric values were correlated with volume, sperm count, motility, viability, and morphology.
Results: The range of PRL levels (ng/mL) was 5.9±4.3 in the control group (n=50), 14.2±5.4 in asthenozoospermic (n=54), 11.8±1.6 in oligozoospermic (n=36), and 9.3±7.2 in azoospermic patients (n=10). Significantly higher ($p<0.001$) levels of PRL were found in the men with asthenozoospermia, oligozoospermia, and azoospermia. In the 115 infertile patients with abnormal semen analysis, serum PRL levels were below 12.0 ng/mL (normal mean+3 SD) in 78 (70.2%) and above this level in 35 (28.6%) cases. Serum FSH and LH concentrations in azoospermic men were significantly higher ($p<0.001$) when compared with those of the control group, which indicates some disturbance of the spermatogenic process, and estradiol was significantly higher ($p<0.001$) in oligozoospermic patients. hyperprolactinemia were treated with 2.5 mg of bromocriptine daily for 6 months, resulting in a nonmeasurable effect on their sperm analysis.
Conclusion: In conclusion, two-thirds of patients with oligozoospermia, asthenozoospermia, and azoospermia have normal PRL levels. Infertility in men due to moderate hyperprolactinemia could be associated with these sperm disturbances.

Key words: *Hyperprolactinemia, Sperm disorders.*

O-16
Relationship between melatonin nocturnal secretion and success of ART in infertile women

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Introduction: Assisted reproductive technologies are not only expensive but they also have low rats of success. This success rate varies among different seasons with the highest rate in seasons with longer days and the lowest in seasons with shorter days. Seasonal breading in mammals other than humans is controlled by the noct0urnal secretion of melatonin hence it has been suggested that while the seasonal changes seen in ART cycles are in concordance with the seasonal variability of melatonin, melatonin can be the influential agent. This research was conducted in order to study if the success rate of ART cycles is influenced by the melatonin secretion in different seasons.

Materials and Methods: 165 women who went on an ART cycle under the same induction protocol and micro injection followed by intra uterine transfer in Shariatie infertility center. Their urine was collected from 10 pm until 6 am after HCG injection. The number of retrieved oocytes, metaphase 2, embryos, freeze and transferred embryos was also registered.6-sulfatoxy melatonin (a metabolite of melatonin) and creatinin were measured in urine.

Results: A significant correlation was found between the number of freeze embryos and season (p=0.009) with the highest number in spring and the lowest in winter. Significant seasonal variability in mel/cr ratio existed (p=0.013) with the lowest amount in spring and highest in winter.

Conclusion: As the number of freeze embryos can be defined as the indicator of high degree embryos, we can conclude that in seasons with the lowest melatonin secretion (mel/cr) spring, the probability of retrieving high grade embryos are higher.

Key words: *Infertility, ART, Melatonin, Seasonal variability.*

O-17
Analysis of thrombophilic gene mutations among Iranian couples with recurrent pregnancy loss: East-Azerbaijan Experiences

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Introduction: Recurrent pregnancy loss (RPL) is a significant obstetrical complication that may occur during pregnancy. The contribution of inherited thrombophilias to the pathophysiology of RPL has remained controversial. This study therefore aimed to evaluate the ten thrombophilic gene mutations, that were identified related with RPL in previous literature: Factor V (1691G/A), Factor V HR2 (4070A/G), Prothrombin (20210G/A), PAI-1 (-675 I/D, 5G/4G), ACE (intron 16 I/D), Factor VII (Gln353Arg), Factor XIII (Val34Leu), β-fibrinogen (-455G/A), Glycoprotein Ia (807C/T), tPA (intron 8 D/I).

Materials and Methods: We investigated 200 women experiencing RPL and 50 women who had two normal pregnancies. Following DNA extraction, we used ARMS-PCR in the determination of the genotype.

Results: The comparison of the frequencies of mutant alleles between the case and control group indicated that the frequencies of mutant alleles for Factor V (1691G/A), Factor V HR2 (4070A/G), Prothrombin (20210G/A), PAI-1 (-675 I/D, 5G/4G), Factor XIII (Val34Leu) and β-fibrinogen (-455G/A) were higher in the case group compared with the control group; whilst the other studied genes were lower in the case in comparison to the control group.

Conclusion: Our findings indicate that whilst none of the specific thrombophilic gene mutations appear to be a risk factor for recurrent miscarriage on their own, when brought together, the total number of mutations carry a significantly increased risk. Thus, it appears that the risk for the termination of pregnancies might be related to the accumulation of thrombophilic mutations rather than to a single specific mutation.

Key words: *Recurrent pregnancy loss, Thrombophilic gene mutations.*

O-18
Do patients with unexplained and explained recurrent pregnancy loss suffer from diminished ovarian reserve?

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Introduction: Spontaneous recurrent pregnancy loss (RPL) is one of the complications of pregnancy, occurring in about 1% of couples. Even after a thorough evaluation, the potential cause remains unexplained in about one third to one half of the cases. This study is to compare the ovarian reserve of patients with unexplained and explained recurrent pregnancy loss.

Materials and Methods: This is a prospective case-control study, conducted in infertility research center of Shiraz University of Medical Sciences since 2009-2011 including 27 patients with unexplained pregnancy loss (≥3 consecutive pregnancy loss, less than 20 weeks of gestation) and 11 with explained RPL. Serum levels of the day 3 follicle-stimulating hormone (FSH), anti-müllerian hormone (AMH) and antral follicle count (AFC) were measured and compared between two groups.

Results: Elevated serum level of FSH was observed in 33.3% of patients with unexplained RPL and 27.3% of those with explained RPL (p=0.516). The prevalence of low serum levels of AMH (25.9% vs. 9.1%; p=0.245) and decreased AFC (55.6% vs. 72.2%; p=0.272) didn't differ significantly between patients with unexplained and explained RPL, respectively. Correlation analysis in those with unexplained RPL revealed a positive linear correlation between age and FSH and a negative correlation between age and AMH and also AFC. In the same way FSH was negatively correlated with AMH and AFC in those with unexplained RPL.

Conclusion: The results of this study reject the hypothesis that ovarian reserve diminishes in those with unexplained RPL compared with those with explained RPL.

Key words: *Ovarian reserve, Unexplained recurrent pregnancy loss, Follicle stimulating hormone, Anti mullerian hormone, Antral follicle count.*

O-19

The analgesic effect of gabapentin after total abdominal hysterectomy

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Introduction: Preliminary clinical studies have suggested that Gabapentin may produce analgesia and reduce the need for opioids in postoperative patients. The aim of the present study was to investigate the opioid-sparing and analgesic effects of Gabapentin administered during the first 24h after abdominal hysterectomy.

Materials and Methods: This is a double blind clinical trial study conducted in Shabih khani Hospital during 2011. 50 women candidate for hysterectomy (aged 35-50 years old) entered the study. Patients received oral Gabapentin 1200 or placebo 1 hour before surgery in case and control group, respectively. Pain was assessed on a visual analogue scale (VAS) at 2, 6, 12 and 24 hours after operation. Morphine need and drug induced complication such as nausea and vomiting were compared between two groups.

Results: Age, mean operative time, mean anesthesia time and body mass index were not significantly different between two groups. Mean pain score in 2, 6, 12, 24 hours after operation was significantly lower in Gabapentin group in comparison to placebo group ($p<0.001$). Morphin consumption was significantly lower in case group ($p<0.001$). First time to walk after operation was significantly shorter in Gabapentin group ($p<0.002$).

Conclusion: Preoperative oral Gabapentin decreased pain scores in postoperative period and morphine consumption in abdominal hysterectomy patients.

Key words: *Gabapentine, Post operative pain, Hysterectomy, Morphine.*

O-20

The prevalence of poly cystic ovary syndrome in Iranian women

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Introduction: This study aimed to determine the prevalence of poly cystic ovary syndrome among Isfahanian women, Iran.

Materials and Methods: This cross-sectional study was conducted in 2009 in Isfahan Iran among females referred to per-marriage clinic, women with menstrual irregularity and clinical hyper androgenism underwent blood sampling for measurement of progesterone and free testosterone on the 22-24 day of their cycle and abdominal sonography of their ovaries was done.

Results: The estimated prevalence of p cos was 7% based on NIH criteria.15.2% according to Rotterdam criteria and 7.9% under AES criteria.

Conclusion: The Rotterdam prevalence was double of those obtained with NIH criteria.

Key words: *Poly cystic ovary, Hirsutism, Menstrual irregularity, Hyperandorgenism.*

O-21

Comparison of the efficacy of letrozole-gonadotropins and clomiphene citrate-gonadotropins in ovarian hyperstimulation of infertile women undergoing intrauterine insemination procedure

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Introduction: Clomiphene citrate is the first-line treatment in patients with ovulatory dysfunction. Nowadays, it is considered to use letrozole for induction of ovulation. Current study compares the efficacy of letrozole-gonadotropins and clomiphene citrate-gonadotropins in ovarian stimulation in IUI cycles.

Materials and Methods: This clinical trial study was carried out on 80 infertile women with unexplained infertility. The patients were randomly divided into two groups: group 1 (40 patients) received clomiphene (100 mg/day) and group 2 received letrozole (5 mg/ day) on the 3-7th days of menstrual cycle. Both groups received (150 IU/im) HMG on the 7-9th days of menstrual cycle. On 10-12th days of menstrual cycle, transvaginal sonography was determined endometrial thickness, dominant follicle number and increase HMG dose, if required. HCG at a dose of 5000 IU was administered when at least one mature follicle was observed and 36-40 hours later IUI was conducted. B-HCG level was evaluated 18 days after IUI. The two groups were compared for mature follicles numbers, endometrial

thickness, gonadotropin consumption and pregnancy rate.

Results: Mean estradiol level and mature follicle was significantly higher in clomiphene group (646.38+454.21 and 2.0750) than letrozole group (142.85+64.85 and 1.1650) ($p<0.001$ and $p=0.002$). There was no significant differences between groups in endometrial thickness (8.75+1.52 vs. 9.30+1.60) and pregnancy rate (10% vs. 17.5%).

Conclusion: As there was no differences in endometrial thickness and pregnancy rate, if there is a possibility of twain pregnancies or clomiphene intolerance, letrozole choice.

Key words: *IUI, Letrozole, Clomiphene.*

O-22
Fertility and endometrial cancer: case series

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Introduction: Endometrial cancer can affect reproductive-age women who may desire fertility preservation. The aim of this study was to evaluate fertility-sparing management in young patients with endometrial carcinoma.

Materials and Methods: This case series prospective study was carried out on 8 patients with endometrioid adenocarcinoma with clinically stage of I, grade 1 with no myometrial invasion in MRI study and negative ultrasonography for synchronous ovarian malignancy. After detailed counseling about the risks and benefits of conservative management, informed consent was taken each eligible patient.

Results: The mean age of patients was 29±4.3 years old. The average duration of hormonal therapy was approximately 9 months. The average response time was 6 months. Seventy five percent of patients treated with hormonal therapy had a complete response and the other 25% never responded to treatment. Of those who initially responded, 72% didn't show recurrence of disease. The other 28% had a relapse. Of those with never response, one had ovarian metastasis and another was stage of III. There were 3 deliveries with 4 live births.

Conclusion: A conservative approach in these patients can offer reasonable oncological security and the opportunity of fulfilling their maternal desires in selected cases. However, consideration should be taken regarding the potential adverse outcomes.

Key words: *Fertility preservation, Endometrial cancer.*

O-23
Adjuvant growth hormone therapy in antagonist protocol in poor responders undergoing assisted reproductive technology

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Introduction: The incidence of poor ovarian response in controlled ovarian stimulation (COH) has been reported in 9-24% of cycles. Growth hormone augments the effect of gonadotropin on granulosa and theca cells, and plays an essential role in ovarian function including follicular development, estrogen synthesis and oocyte maturation. The aim of this study was to assess ART cycle outcome after addition of growth hormone in antagonist protocol in poor responders.

Materials and Methods: 82 poor responder patients who indicated for ART enrolled the study and randomly divided into two groups (group I and II). Group I (growth hormone group, n=40) received growth hormone/ gonadotropin/ antagonist protocol and Group II (antagonist group, n=42) received gonadotropin/ antagonist protocol.

Results: The number of retrieved oocytes was significantly higher in growth hormone group 6.10±2.90 vs. 4.80±2.40 in antagonist group ($p=0.035$) and the number of obtained embryos was significantly higher in growth hormone group 3.7±2.89 compared to 2.7±1.29 in antagonist group ($p=0.018$). There were no significant differences between groups regard to implantation, and chemical and clinical pregnancy rates.

Conclusion: Our study showed that cotreatment with growth hormone in antagonist protocol in patient with history of poor responder in previous ART cycles did not increase pregnancy rates.

Key words: *Assisted reproductive technology, Poor responder, Growth hormone, Antagonist protocol.*

O-24
The use of high- dose letrozol in ovaulation induction and controlled ovarian hyperstimulation

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Introduction: Letrozol is an accepted drug for induction of ovulation since 2001. The routine dose administration of the drug is 2.5-7.5mg daily for 5 days of menstrual cycle. However in this dose, there is no response in 9-10% of patients. This study is carried out to evaluate the effect of high-dose letrozol on ovulation induction and endometrium.

Materials and Methods: This clinical trial was carried out in infertility clinic of Kowsar Hospital in Qazvin

during 22 months. The 104 sum of infertile women, in 2 groups of polycystic ovarian syndrome and unexplained infertility, with no response to the regular dose of 7.5mg of letrozol were included in the study. 12.5 mg letrozol was administered for all patients from 3-7 days of cycle. In patients with appropriate follicle and no pregnancy the cycle is repeated for two or more. Ultrasonography was performed on the cycle 14th day of and the number and size of the follicles and the endometrial thickness were measured. In the presence of at least one follicle ≥18mm, 10000IU of HCG was administered. SPSS software was used for data analysis.

Results: Overall 104 patients were included in this study. Mean age, weight and infertility duration were 27.2±4.9 years, 70±9.6 kg, and 3.5±2.5 years, respectively. There was overall 183treatment cycles which 92 (50.5%) were ovulatory. Mean endometrial thickens was 9.9±1.7 mm raging from 5-13 mm. 8 (8.6%) were pregnant, which culminated in abortion in one of them.

Conclusion: In this study, ovulation induction with letrozol (12.5mg daily) resulted in ovulation in some patients resistant to lower dose ($p<0.05$). There was no adverse effect on endometrial thickness.

Key words: *Letrozol, Ovulation induction, Endometrial thickness.*

O-25

Cytogenetic and molecular screening of infertile female with premature ovarian failure: East-Azerbaijan Experiences

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Introduction: Infertility is an important health problem affecting 10-15% of couples. One of the major causes underlying female infertility is premature ovarian failure (POF). POF is a heterogeneous syndrome that characterized by premature dysfunction or depletion of ovarian follicles before the age of 40 years. Genetic defects such as X chromosome abnormalities and presence of the FMR1 gene premutation are responsible for the major cause of POF. Here, we investigate the contribution of chromosomal and molecular abnormalities in infertile women with POF.

Materials and Methods: This study included 100 infertile women aged from 20-45 years. Chromosomal studies using peripheral blood and G-banding technique and molecular expansion analysis of a CGG repeat in the 5' untranslated region of FMR1 gene are performing on all patients.

Results: Cytogenetic study revealed structural chromosomal abnormalities involving autosomes and sex chromosomes in 6% infertile women. Most of the women were in the normal range (7-44 CGG repeats)/ heterozygous alleles and remains were homozygous alleles for the CGG-repeat size of FMR1 gene.

Conclusion: Our study is consistent with those reported in the literature which is associated with a greater prevalence of chromosomal and molecular abnormalities in infertile women compared with the general population. However our results are preliminary and larger cohorts are needed for better understanding of the contribution of genetic alternations such as chromosomal and molecular abnormalities in female with POF. These findings show the importance of consider the cytogenetic and molecular study in the initial diagnosis protocol of infertile couples.

Key words: *Premature ovarian failure, X chromosome abnormalities, FMR1 gene.*

O-26

The effect of ultrasound therapy on folliculogenesis, angiogenesis and apoptosis on ovarian transplantation

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Introduction: one of the challenges in ovarian graft transplantation is overcoming the ischemia/ reperfusion injury. Low-intensity ultrasound treatment has been shown to increase mass transport, which could benefit tissue grafts during the immediate post implant period, when blood supply to the implanted tissue is suboptimal. The aim of this study is to investigate the effect of ultrasound on mouse ovarian tissue heterotopic transplantation.

Materials and Methods: 40 adult female NMRI mice were selected and divided to the two groups; control and experiment. in the experiment group, -left ovarian tissue underwent ultrasound exposure with intensity =0.3 w/cm^2, frequency =3MHz & pulse mode of 1:4 , after auto transplantation into the back muscle .The transplanted ovaries received same condition of ultrasound about 5 min daily for 14 days. Ovarian grafts were removed and immediately fixed for histological study. In another part, rate of angiogenesis and apoptosis were assessed by immunohistochemistry Cd31 and Caspase3 test.

Results: The results showed that in grafted ovary, the number of total types of follicles were significantly less than the non-grafted opposite ovaries. Despite this, the number of primordial, primary and preantral follicles significantly increased in the experimental group after exposure of ultrasound. There was significant reduction

in tissue apoptosis and increased angiogenesis in group treated with ultrasound.

Conclusion: The ultrasound therapy can improve the morphological structure and function of the grafted ovaries. This is probably due to acceleration of angiogenesis and increasing of growth factors production by low intensity pulse ultrasound.

Key words: *Ovarian transplantation, Low intensity pulse ultrasound (LIPUS), Angiogenesis.*

O-27

Screening of parent chromosomal anomalies and their roles in recurrent spontaneous abortion: East-Azerbaijan Experiences

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Introduction: Recurrent spontaneous abortion (RSA) represents a significant clinical problem which an estimated 1-5% of all women of reproductive age experience it. However, the pathogenesis of RSA is complicated and the cause in 40-50% of the cases is not well understood. Genetic, anatomic, endocrine, immunologic, infectious and environmental factors have been proposed as causes for RSA. Chromosomal anomalies are the most common cause of recurrent spontaneous abortion. In up to 7% of such cases, one partner carries a balanced chromosome rearrangement. The objective of the present study is to investigate the contribution of chromosomal abnormalities in women with RSA.

Materials and Methods: To investigate the ratio and types of chromosomal abnormalities in patients with recurrent spontaneous abortions we studied 160 couples (320 individuals). G-banded cytogenetic analysis was performed based on our standard laboratory protocols.

Results: Of the total 12 patients were found to have abnormal karyotypes, which were believed to cause RSA 3 of them were men (1%) and 9 were women (3%). The chromosomal abnormalities detected include reciprocal translocation (0.7%), Robertsonian translocation (0.3%), and inversion 9 (0.3%).

Conclusion: Chromosomal abnormality is an important cause of RSA. It is very important to provide chromosomal analysis service for patients with RSA, and it should be considered as a standard medical care.

Key words: *Recurrent spontaneous abortion, Chromosomal anomalies.*

O-28

Comparison of main semen parameters in IUI candidates and fertile individuals

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Introduction: The aim of this study was to evaluate the sensitivity and specificity of concentration, normal morphology and motility in semen analysis at cases which are candidate for IUI.

Materials and Methods: In this study 234 semen samples, from sub fertile couples which were referred to Infertility Laboratory of Shahid Beheshti Hospital were evaluated. These samples were obtained from individuals who were candidate for IUI procedure. And again 234 semen samples from individuals which were fertile and their wives were pregnant under 12 weeks. In order to assess the sensitivity and specificity of three main semen parameters, ROC curves were used.

Results: Our study shows normal morphology has higher sensitivity and specificity than concentration and fast motility respectively.

Conclusion: Mean of sperm concentration in couples who are candidate for IUI procedure is lower than fertile couples. Mean of percentage of normal morphology is the same as fertile couples and mean of percentage of fast motility before sperm processing is the same as fertile couples but after sperm processing is higher than fertile couples. Through these parameters normal morphology has higher sensitivity and specificity for pregnancy.

Key words: *IUI, Semen parameters, Pregnancy.*

O-29

GnRH antagonist versus GnRH agonist long protocol IVF cycle to avoid ovarian hyper stimulation syndrome (OHSS) - case reports

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Introduction: To describe five clinical cases involving PCOS patients suffered from OHSS during IVF stimulation.

Materials and Methods: Description of managing of IVF cycles and outcomes in high risk patients for developing OHSS. Setting: Reproductive medicine unites of Razavi Hospital. Patients: 5 infertile PCOS patients undergoing stimulation for IVF presenting high risk for OHSS. Intervention: IVF patients treated with long protocol GnRH Agonist representing developing OHSS symptoms, had their cycle, and replaced with an antagonist protocol and triggering ovulation with an agonist single dose. Main outcome measures: OHSS symptoms, pregnancy.

Results: 4 of 5 patients didn't develop OHSS.one patient got pregnant after fresh embryo transfer. 4patients didn't get pregnancy.
Conclusion: When a PCOS patient undergoing a long protocol IVF cycle is at risk of severe OHSS, it should be better to withdraw the agonist and replaced it with an antagonist and induction ovulation triggered with an agonist bolus to prevent of developing OHSS.
Key words: *Long protocol GnRH cycles, IVF, Antagonist protocol, Agonist trigger.*

O-30

Comparison of Recombinant HCG with urinary HCG during ovulation induction cycles in infertile women undergoing assisted reproductive technology treatment

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Introduction: With regards to side effects, complications and efficacy of different infertility treatment drugs, our study compared recombinant HCG with Urinary HCG for induction ovulation in patients who were candidate for assisted reproductive technology.
Materials and Methods: In this prospective randomized clinical trial 126 patients candidate for IVF or ICSI were recruited from 2 infertility treatment centers in Isfahan .they were divided to 2 groups, 63 patients in each group. Two weeks after IVF or ICSI, βHCG titration was done and pregnant women were evaluated for fetal heart rate, miscarriage, Ectopic pregnancy, and ovarian hyper stimulation syndrome 7, 14 weeks later.
Results: The rate of biochemical pregnancy in Recombinant. HCG group was 35% in spite of 65% in urinary HCG group. Clinical pregnancy rate in urinary HCG group comparing with recombinant HCG was (65-35%). Abortion ratio in recombinant HCG was 20% but 15% in urinary HCG. EP ratio was similar in 2 groups, and ovarian hyperstimulation was seen in only10% in recombinant HCG group.
Conclusion: According to our study results we had more biochemical and clinical pregnancy rate in urinary HCG group compared with recombinant HCG group, with less hyper stimulation syndrome in urinary HCG group.
Key words: *Recombinant HCG (Ovidrel), Urinary HCG, In Vitro Fertilization (IVF), Embryo Transfer (ET), Infertility.*

O-31

Does ovarian response decrease by increasing age in hypogonadotropic hypogonadism women undergoing ovarian stimulation?

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Introduction: Women with hypogonadotropic hypogonadism are the most obvious candidates for ovulation induction with exogenous gonadotropins. In a sense, gonadotropin therapy in women with hypogonadotropic hypogonadism may be viewed as hormone therapy intended to stimulate normal cycle ovulation once fertility becomes a priority. Follicular growth and oocyte maturation usually can be successfully stimulated. In practice we observed that in these patients for induction ovulation although need. To more gonadotrapin ampoules, the number of follicle growth oocyle retrieval (in Art cycle) decrease by increasing age of patients. There are great studies to establish the age effect on reproduction and decrease of fertility in normal hypothalamic. Pituitary-gonadal axis and mechanisms responsible for those changes but there aren't any study to show the effect of age on the ovarian response to induction ovulation in hypogonadotropic hypogonadism women. Therefore, this study was performed to evaluate this hypothesis.
Materials and Methods: In this retrospective case series study 60 cycles of induction ovulation in hypogonadotropic hypogonsdism (in IO, IUI, and ART cycles) were evaluated. Total dose of gonadotropin's ampoules, duration of stimulation and follicle growth >18, oocyte retrieval number per cycle were assessed by age statistically.
Results: By increasing age , total dose of gonadotropin and duration of stimulation, too increased but follicular growth, oocyte retrieval numbers declined ($p<0.05$).
Conclusion: Ovarian response to ovarian stimulation decrease by increasing age in hypogonadotropic hypogonadism women similar to normal cycle women but by mechanism other than follicular depletion, so this mechanism that has been one of major mechanism of ovarian aging for long years can be in doubt and question.
Key words: *Ovarian Stimulation, Ovarian aging, Hypogonadotropic hypogonadism.*

O-32

Protection by *crataegus monogyna* monogyna fruit aqueous extract against cyclophosphamide-induced apoptosis in rat testes

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Introduction: Induction of programmed cell death (apoptosis) is one of the earliest signs of genotoxic

damage to the mature testis by cytotoxic drugs like cyclophosphamide (CP). This study was conducted to assess the possible ameliorating action of *Crataegus monogyna* fruits aqueous extract, a medicinal plant with anti-oxidant property, on CP-induced apoptotic effects in rat testes.

Materials and Methods: Male Wistar rats were categorized into four groups. Two groups of rats were administered CP at a dose of 5 mg in 5 ml saline/kg per day for 28 days by oral gavages. One of the groups received *Crataegus monogyna* aqueous extract at a dose of 20 mg/kg per day orally four hours after CP administration. A vehicle-treated control group and a *Crataegus monogyna* control group were also included.

Results: After 28 days, rats treated with CP alone displayed increase of cleaved caspase-3 abundance, while *Crataegus* aqueous extract co-administration could effectively prevent nearly this abnormality.

Conclusion: These findings provide evidence that *Crataegus* would offset the apoptotic impact imposed by CP, and may attenuate the testicular toxicity of CP in clinical practice.

***Key words**: Crataegus monogyna, Cyclophosphamide, Apoptosis, Rat, Testes.*

O-33

Evaluation of morphology and apoptosis in vitrified-warmed immature mouse ovarian tissue

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Introduction: In this study, the efficiency of ovarian vitrification was investigated by several techniques including morphological, TUNEL and DNA laddering analysis.

Materials and Methods: 7 day old mouse ovaries were vitrified by solution containing 40% ethylene glycol (v/v), 30% ficoll 70 (w/v), and 1 M sucrose supplemented with bovine serum albumin (EGFS40). Ovaries were then placed in cryolock then plunged into liquid nitrogen and maintained there for 1day. Their morphology evaluated by hematoxylineosin staining and apoptosis assessment with TUNEL and DNA laddering technique and compared with fresh group.

Results: No statistically significant difference in normality follicles was observed between vitrified and nonvitrified ovaries. No sign of apoptosis was observed morphologically or by TUNEL technique and gel electrophoresis in either vitrified or nonvitrified ovaries.

Conclusion: Our results show that cryopreservation of the immature mouse ovary does not induce apoptosis just after warming and the normal histology of vitrified ovaries, suggest that vitrification is a promising method for preservation of ovarian follicles.

***Key words:** Vitrification, Ovary, Apoptosis, Mouse.*

O-34

Diagnostic value of prostate-specific antigen (PSA) in women with polycystic ovary syndrome (PCOS)

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Introduction: Polycystic ovary syndrome (PCOS) is the most common endocrine disorder in women; presentation is that of irregular menstruation associated with ovulation defects. Because of adverse outcome such as metabolic and cardiovascular disorder, so diagnosis and treatment is very important. Therefore the diagnostic value of prostate-specific antigen (PSA) in women with polycystic ovary syndrome was evaluated.

Materials and Methods: Total of 32 women with PCOS and 32 aged matched healthy females were recruited in this cross-sectional randomize. The subjects were compared by means of metabolic measures and serum PSA level. The correlations between these markers were evaluated. Sensitivity, specificity values and cut off level of PSA was established for diagnosis of PCOS.

Results: Mean PSA, ferriman Gallwey score (FGS), luteinizing hormone / follicle stimulating hormone ratio (LH/FSH), testosterone, dehydroepiandrosterone sulfate (DHEAS), 17 hydroxy progesterone (17 HP) level are significantly higher in PCOS ($p<0.001$, respectively). PSA level greater than 0.07ng/ml yielded a sensitivity of 91%, specificity 82%, helpful as a diagnostic tool for women with PCOS. Circulations androgen and hirsutism are associated with the degrees of PSA in PCOS women.

Conclusion: Our results showed that there was direct correlation between PSA, hirsutism and hyperandrogenism state. Therefore it is advised to use PSA level for detection of hyperandrogenism state in women.

***Key words:** Hirsutism, Prostate Specific Antigen (PSA), Polycystic Ovary Syndrome (PCOS).*

O-35

The alteration of sperm populace and motility in chronic phase of type 2 diabetes influence the normal fertility in males

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Introduction: Diabetes mellitus is a serious metabolic disorder with numerous complications. Uncontrolled diabetic high blood glucose is associated with structural

and functional complications of reproductive system. The present study was conducted to assess the relationship between the alterations of hormones involved in spermatogenesis and the ability of sperm production of reproductive system following long time period of diabetes.

Materials and Methods: Diabetes was induced in adult male rats by single intraperitoneal injection of streptozotocin (STZ) at 45 mg/kg body weight. A group of rats treated with metformin at 100 mg/kg body weight for reducing the elevated blood glucose level.

Results: The results revealed that, the blood glucose level increased significantly in untreated diabetic rats. The blood levels of testosterone, 17-β estradiol and progesterone were reduced in diabetic rats whereas, the blood levels of these hormones elevated to near normal after treatment with metformin. Same as abovementioned hormones, the levels of pituitary gonadotropins were reduced after induction of diabetes while, metformin treatment lead to elevation of these hormones to near normal levels in diabetic animals. Furthermore, untreated diabetic rats had lower epididymal sperm density nevertheless; the sperm motility was not altered significantly.

Conclusion: These findings indicated that uncontrolled diabetes and subsequently elevation of blood glucose, might be effective in alteration of pituitary-testis axis hormones and the production of spermatozoids as an outcome of functional status of reproductive system.

Key words: *Diabetes, Fertility, Males, Spermatozoids.*

O-36

Effect of vitrification on ATP content and developmental competence of immature mouse oocyte

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Introduction: Vitrification is one of safety methods for fertility preservation. It can affect on cytoplasmic maturation. One of the cytoplasmic maturation indexes is metabolic activity of mitochondria that is evaluated by ATP content.

Materials and Methods: Immature oocytes were recovered from 6-8 weeks old NMRI strain female mice. Some of the oocytes were vitrified by cryotop, and the others were considered as control group. Both of groups were cultured in maturation medium for 24h. IVM-MII oocytes after insemination were assessed to hatching stage. ATP content in GV and IVM-MII oocytes was measured and compared in vitrified and non-vitrified groups.

Results: The ATP content of GV oocytes in the control and vitrified groups was 0.2974×10^{-12} M, 0.2692×10^{-12} M respectively and the ATP levels for MII oocytes in those groups 0.2970×10^{-12} M, 0.3115×10^{-12} M respectively. There were no significant differences in this regards between two groups. There were no significant difference between vitrified and non-vitrified oocytes in the maturation (74.87 vs. 64.50), fertilization (72.72 vs. 64.36), and hatching rates (9.93 vs. 9.89).

Conclusion: Considering to the ATP content of oocytes after vitrification and in vitro maturation, it seems that these cryopreservation and culturing techniques have not affect on the mitochondrial function of oocytes.

Key words: *Oocyte, Vitrification, ATP, Development.*

O-37

The relationship between oxidative stresses in follicular fluid with fertilization rate in ART

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Introduction: The impact of oxidative stress in female reproduction is not clear. Contradictory reports on the effect of various oxidative stress markers on follicular fluid, oocytes and embryo quality and fertilization potential exist. The objectives of this study were to examine oxidative parameters levels in follicular fluid of women undergoing ART and to relate these levels to oocyts formation and quality.

Materials and Methods: In this study, 68 Women with infertility treated by ART were studied. Level of oxidative stress including GPx, MDA, SOD and CAT measured in follicular fluid and quality of oocytes and finally pregnancy results were checked in all of them. Eight women in period of study were excluded from study. They were divided in two groups according to pregnancy and compared levels of oxidative stress between them.

Results: Of the 60 women (mean age 31.8±4.7 year) were pregnant in 13 (21.6%) and in 47 (78.3%) pregnancy were negative. Levels of Oxidative stress were not significant statistical difference between two groups of women with or without pregnancy. Glutathion Peroxidase (GPx) was significant negative relation with oocytes quality ($p=0.02$, $r=-0.3$) but in others oxidative stress were not significant relation with oocyts quality ($p>0.05$). Comparison of oxidative stress levels with other study showed that they were low levels in women with positive pregnancy however they were not meaningful.

Conclusion: According to results of this study levels of oxidative stress were not difference in cases with or without pregnancy. But like others medical reports

levels of Glutathione Peroxidase (GPx) had negative correlation with oocytes quality.
Key words: *Oxidative stress; Infertility Oocytes quality.*

2- Embryology, Genetic, Stem cell

O-38
Assessment of morphological changes in neonate vitrified testis grafts after host treatment with melatonin

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Introduction: This study was conducted to assess the effect of melatonin on the ultrastructure of testis and spermatogenesis dynamics in neonate vitrified testis grafts.
Materials and Methods: Neonate vitrified testes, candidates for transplantation to experiment or control groups, were warmed in the thawing media which have or doesn't have the supplement of 100 μM melatonin, respectively. Following transplantation, melatonin (20 mg/kg/day) or saline was given in the treated and non-treated groups, respectively. The initiating spermatogenesis and ultrastructure of testis graft were examined. Cell apoptosis (TUNEL) and proliferation (Brdu) in germ cells were determined.
Results: Histological studies revealed dynamic of spermatogenesis process in the testis graft. However, Ultrastructural analysis of the testicular parenchyma revealed that the structural characteristics of interstitial space and germinal epithelium in non-treated group was get worse than treated group. Furthermore, the proportion of apoptotic germ cells together with a reduced proportion of proliferated germ cells was higher in non-treated group than treated. Overall, the number of seminiferous tubules in testes graft of both groups was stayed steady. However, non-treated testes graft contained more damaged seminiferous tubules, than treated ones. The thickness of seminiferous tubules was thicker in melatonin treated than non-treated group. Indeed, the thickness of germinal epithelium was higher significantly in treated group than non-treated.
Conclusion: The study showed a positive effect with melatonin resulting in more grafts restoring puberty. Furthermore, the associated increasing in healthy number of seminiferous tubules suggests that melatonin may has preventative ischemia/antioxidant role and in fact be useful to initiated spermatogenesis process.
Key words: *Melatonin, Testis allograft, Vitrification.*

O-39
Effect of vitrification on developmental competence of parthenogenetic activation in in-vitro matured ovine oocytes

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Introduction: Cryopreservation of in-vitro matured oocytes is a useful technique because the oocytes can be used for some assisted reproductive technologies. On the other hand, the cryo-preservation of oocytes is an open problem as a result of their structural sensitivity to the freezing process. The purpose of this study was to evaluate the effect of vitrification on in vitro development of vitrified in-vitro matured ovine oocytes after chemical activation.
Materials and Methods: Immature oocytes were collected from abattoir-derived ovaries, matured in vitro. Then, in vitro matured oocytes divided into two groups: (1) vitrified in cryotop (VTR); (2) without treatment as a control (CTR). 407 matured ovine oocytes were cryopreserved by vitrification. oocytes were exposed to 7.5% EG+7.5% DMSO for 3 min and then 15% EG+15% DMSO+0.5 M sucrose for 25 sec, loaded in cryotops and immersed into liquid nitrogen. After warming, oocytes were cultured in vitro for 30 min and then parthenogenically activated using ionomycin for 1 min and subsequently incubated in 6-dimethylaminopurine (6-DMAP) for 2 hr.
Results: When vitrified-warmed oocytes were activated, blastocyst rates in VTR (10.21%) group was significantly lower ($p<0.05$) than in CTR (39.50%).
Conclusion : Vitrification procedures affect on the structural components and biochemical and molecular events such as spontaneous parthenogenetic activation that could be a reflection of injuries to cytoplasmatic biochemical components leading to abnormalities in the cell cycle control, degeneration and low developmental competence of vitrified MII ovine oocytes.
Key words: *Vitrification, Ovine oocyte, Chemical activation, Developmental competence.*

O-40
Association between insulin receptor gene and adiponectin gene polymorphism with polycystic ovary syndrome in Iranian population

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Introduction: Polycystic ovary syndrome (PCOS) is the most common gynecological endocrinopathy. Studies on homozygote twins or sisters suggested a genetic origin for this disorder, but the genetic components of PCOS have not been entirely illustrated.

We aimed to compare the frequency of insulin receptor (exon 17 and 8) and adiponectin (exon and intron 2) genes polymorphisms in Iranian women. Two polymorphisms for each of these genes were selected based on their commonly use in previous genetic epidemiology studies.

Materials and Methods: Two groups of women were enrolled among women presenting to a gynecologic clinic; case group included women with diagnosed PCOS and control group were non hirsute normo-ovulatory women. Genomic DNA was isolated from peripheral blood leukocytes of women with PCOS and controls using the salting out/proteinase K method. They were genotyped. Data analysis was performed using the SPSS 15.0 PC package. The Chi-square test, Kruskal-Wallis test followed with Mann-Whitney test and one-way ANOVA analysis, with Bonferroni correction were performed. $p<0.05$ was considered as significant point.

Results: The distributions of genotypes and alleles of both polymorphisms were not different in women with PCOS and controls. There were no significant differences on the anthropometric and hormonal profiles of various adiponectin and insulin receptor genes polymorphisms among both groups.

Conclusion: In conclusion, in this case-control study, we found no significant associations between the insulin receptor and adiponectin gene polymorphisms and PCOS risk. Further studies with larger sample sizes are warranted to confirm these findings.

Key words: *Iranian population, Insulin receptor gene, Adiponectin gene, Polycystic ovary syndrome.*

O-41
Encapsulation of human gametes: encouraging technique for fertility preservation

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Cell encapsulation is a technique for coating of cells in semipermeable membrane. This technique has had multiple applications in nanobiotechnology, and particularly in drug delivery, the first experience in the realm of reproductive science; however, it had been carried out in encapsulation of bovine sperm. In the past two decades, gametes and embryos of various mammals have been encapsulated for various experiments including controlled releasing of sperm, In vitro gamethogenesis, embryo culture, cryopreservation of gametes and even stem cell cultivation.

Alginate sodium (which consists of Mannuromic and Guluronic dimers) is the most natural polymer in encapsulation of stem cells and gametes and variety of its compounds such as Barium Alginate, Alginate-chitosan and Alginate-Fibrin have been investigated and tested. It has been widely used in embryology for its biocompatibility, biodegradability and non-toxicity properties.

In recent decades, efforts to design a suitable system for cultivation, and in vitro growth (IVG) and maturation of oocytes (IVM) and primary follicles as well as the amalgamation of tissue engineering with the mentioned technique have led to innovative 3D- cultivation techniques. This approach has created much hope for treatment of infertility problems and fertility preservation in cancer patients. Recently successful application of sodium alginate has been reported in In vitro spermatogenesis for the treatment of non-obstructive azoospermia (NOA) to create semi-solid 3D matrix for bovine embryo cultivation. In this article emphasis is placed on clinical aspect of this technique and its benefits in ART methods.

Key words: *Microencapsulation, Oocyte, Sperm, Embryo, In vitro fertilization, Sodium alginate.*

O-42
Follicle development of transplanted sheep ovarian tissue to immunodeficient rat

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Introduction: Ovarian cortex xenotransplantation into immunodeficient rats is a method for follicles protection of rare animals and investigation on folliclogenesis. The aim of this study was: 1) to assess follicle survival after xenografts transplantation of sheep ovarian tissue to male and female immunodeficient rats and 2) evaluation of the effects of gonadotropin treatment on follicular development in the transplanted tissue.

Materials and Methods: Sheep ovarian cortical strips were transplanted into the back muscle of neck of castrated 10 male and 10 female immunodeficient rats. Only 7 male and 7 female rats survived. 14 days after surgery, each rat was treated with human menopausal gonadotropin (HMG) for 9 weeks. One day after the last injection, ovarian tissues were removed and fixed for histology assessment. Histology analysis was done before and after grafting. The rate of E2 was measured before and after gonadectomy and also once at the end of experiment.

Results: In all grafted tissues, follicular growth was decreased. The number of primordial follicles decreased after transplantation in male and female rats as compared to control (25.97%, 24.14% vs. 37.51% respectively), whereas the preantral follicles were increased (19.5%, 19.49% vs. 11.4%, respectively). E2 secretion increased in grafted male and female rats as compared to control groups and had a significant

differences with each other (34.44 vs. 23.26 pg/ml respectively, p<0.01).
Conclusion: Male rats are better candidate for follicle support after transplantation compared to female rats.
Key words: *Rat, Ovarian tissue, Sheep, Xenotransplantation*

O-43
Evidence for dynamic role of NF-Y histone substitute family members in epigenetic regulation of human embryonal cells

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Introduction: Chromatin structure is a major player in the regulation of gene expression. The dynamics of this structure is itself regulated by a variety of complex processes, including histone post-translational modifications, chromatin remodeling, and the use of non-allelic histone variants and substitutes. In higher eukaryotes several histone substitutes have been identified, with lines of evidence suggesting their functional significance under this heterogeneity. NF (Nuclear Factor)-Y, is a histone substitute family protein, which specifically binds to the CCAAT box, an eukaryotic promoter element present on the upstream regions of several genes including the ones involved in embryogenesis and development.
Embryonal carcinoma (EC) cells, the pluripotent stem cells of teratocarcinomas, show many similarities to embryonic stem (ES) cells. Since EC cells are malignant but their terminally differentiated derivatives are not, understanding the molecular mechanisms that regulate their chromatin structure through differentiation maybe of value for diagnostic and maybe therapeutic purposes in embryology.
Materials and Methods: In this study, a human EC cell line named NT2/NTERA2 was used as an embryonal model system, and the mRNA expression levels of *NFY* member genes were evaluated by qRT-PCR before and after retinoic acid (RA)-induced differentiation of the cells.
Results: Quantitative real-time PCR analysis data showed a differential expression profile for the three NF-YA, NF-YB and NF-YC histone substitute coding genes in pluripotent NT2 cells and after their RA-induced differentiation.
Conclusion: Current finding implies the dynamic epigenetic role of NF-Y family members in gene activation/repression of the CCAAT regulated genes involved in embryonic development.
Key words: *NF-Y, Embryonic development, Epigenetics.*

O-44
Celecoxib effect on normal human endometrium cultured in three–dimensional model

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Introduction: Endometrium is a unique tissue with central role in reproductive events. Endometrial culture in three-dimensional condition was used as a suitable model for endometriosis research. Cyclooxygenas II plays important role in inflammation, angiogenesis and cell proliferation. The aim of present study was to investigate celecoxib effect on normal human endometrium in three-dimensional (3D) culture model.
Materials and Methods: Normal human endometrium (n=10) from reproductive age women were taken. Endometrial tissue were cut into 1×1mm. Culture were done in 24 wells culture dish. 0.5 ml of fibrinogen solution (3mg/ml in M199) were pour in each well and added 15 µlit thrombin enzyme for fibrin jell formation. Endometrial fragments were placed in the center of wells and covered with second layer of fibrinogen solution. One ml of Medium 199 supplement with FBS (5%) and l-Glutamine (2µM) were added to each well. Media of experimental wells contain one of 1, 10 or 50 µM celecoxib concentrations, and the culture period was three weeks. At the end of study, growth changes of endometrial tissue were calculated by scoring methods. Also their angiogenesis were determined. Data were analysis by Kruskall-Wallis method and p<0.05 were considered significant.
Results: The growth scores of control, 1, 10 and 50 µM celecoxib were 1.37, 1.96, 2.01, 1.17 respectively and their difference was significant. There is no significant difference in endometrial angiogenesis and the highest angiogenesis percent (42.67%) was belong to 10 µM concentration.
Conclusion: Lower Celecoxib concentration had growth stimulation effect on normal endometrium.
Key words: *Human endometrium, Celecoxib, Three dimensional culture.*

O-45
Evaluation of germ cell induction from mouse embryonic stem cells by assay for CDH1 expression

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Introduction: Presence of specific growth factors is thought to be important for differentiation of embryonic stem cells (ESCs) in culture. In this study, the effect of bone morphogenetic protein 4 (BMP4) on germ cell differentiation from mouse ESCs was evaluated.
Materials and Methods: One day old embryoid body (EB) from CCE mouse ESCs was cultured in dulbecco's modified eagle medium (DMED) containing 20% fetal bovine serum (FBS) for 4 days both in the presence or absence of 5 ng/mlBMP4. The Expression of CDH1, the late premiotic germ cell specific marker, was evaluated immunocytochemically.
Results: Data of immunocytochemistry showed no significant difference in the mean percentage of CDH1 immunostaining cells in BMP4-treated cells compared with BMP4 free group. Meanwhile, CDH1, the late premiotic germ cell marker, showed no significant difference between these two groups.
Conclusion: In spite of positive effects of BMP4 in primordial gem cell (PGC) differentiation, the results suggest that the employment of this inducer has no apparent effect on the late premiotic germ cell derivation.
Key words: *Embryonic stem cell, CDH1, Germ cell, BMP4.*

O-46
In vitro culture of mouse preantral follicles after cryotop vitrification

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Introduction: Survival assessment of vitrified-warmed mouse preantral follicles after in vitro culture is the first step for efficiency evaluation of used vitrification method.
Materials and Methods: Preantral follicles isolated mechanically from the ovaries of 12-14 days old NMRI mice and divided into vitrification and control groups. In the vitrification group, follicles were washed in equilibration and vitrification solutions which were contained of ethylene glycol and dimethylsulfoxide as cryoprotectants, then immersed in liquid nitrogen after loading on cryotop tip. Vitrified-warmed and fresh control follicles were cultured for 12 days and their survival rate was assessed after 3 hours, 4, 8 and 12 days. Oocytes maturation rate was also compared in 13th day of culture in both groups.
Results: 3 hours after culture, 100% of follicles were viable in both experimental groups. The survival rate of follicles was 95.7%±2.4 and 88.2%±3.3 in 4th day, 93.8%±3.0 and 87.3%±2.7 in 8th day and 90.2%±3.2 and 84.2%±2.8 in 12th day of culture in control and vitrification groups, respectively. This variant didn't show any significant difference between two groups. In the 13th day of culture, the percentage of GV, GVBD, MII and degenerated oocytes were 11.0%±2.4, 61.4%±2.9, 26.0±3.8, 1.7%±0.96 in the control group and 3.6%±1.2, 59.8%±5.7, 33.8%±7.0, 2.1%±0.6 in vitrification group, respectively. Only the percentage of GV oocytes in vitrification group was significantly lower than control group ($p<0.05$).
Conclusion: Cryotop vitrification didn't have any detrimental effect on follicle survival and it seems that causes more meiotic resumption in oocytes compared to the non-vitrified fresh ones.
Key words: *Mouse, Preantral follicle, Vitrification, Cryotop, In vitro culture.*

O-47
Two step in vitro maturation of mouse GV oocytes with a PDE3 specific inhibitor in the presence or absence of cumulus cells

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Introduction: This study aimed to investigate the effect of (Cilostamid) on the *in vitro* maturation and on subsequent oocyte developmental competence.
Materials and Methods: Mouse Germinal vesicle (GV) oocytes were considered in cumulus-denuded oocytes (CDOs) and cumulus-oocyte complexes (COCs) groups. The oocytes were cultured in Tissue Culture Medium 199 with or without cilostamid in two or one step manner respectively. In the two step manner, immature oocytes were arrested meiotically in TCM 199 containing 10uM cilostamid and then were matured in medium without cilostamide for 24h. In control groups, GV oocytes were culture without forskolin only for 24h (one step manner). In vitro fertilization of obtained MII oocytes and embryo development were evaluated.
Results: Significantly different MII rates were observed between COCs (59%) and CDOs (42.4%) control groups. The MII rates of 60.9% for COCs and 57.5% for CDOs were obtained in two step manner which were significantly higher in CDOs as compared to its respective control group, while, there was no significant difference between treated COCs and control COCs groups. The fertilization and two cells embryo rates of COCs (58% and 71.3%, respectively) were higher than those of CDOs (45.4% and 53.3%, respectively) control groups. The rates of tow cells embryo in the presence of cilostamid in COCs (81.5%) and CDOs (75.6%) were significantly higher than respective control groups. Also, there was no significant interaction between presence or absence of cumulus cells and cilostamid.
Conclusion: Two steps in vitro maturation of mouse oocytes with cilostamide could improve the rates of oocyte maturation and their embryo development.
Key words: *In vitro maturation, Oocytes, Cumulus Cells, Cilostamid.*

O-48

Parthenote embryos as a source of histocompatible cells for cell-based therapy

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Introduction: The generation of embryonic stem cells (ESCs) from parthenogenetically activated oocytes can provide histocompatible cells for cell-based therapy and generates an important tool for studying epigenetic effects in ESCs. In spite of their potential therapeutic utility, ESCs raise significant, religious, ethical and legal concerns due to destruction of viable embryos. In an attempt to solve these problems, extensive efforts have investigated alternative sources of pluripotent cell lines.
Materials and Methods: Parthenogenetic embryonic stem-like cell (pESC) lines were established from *in vitro* produced blastocysts following parthenogenetic activation of bovine oocytes. Four putative pESC lines were expanded for more than 16 passages (>150days) and characterized by histochemical and immuno-fluorescence staining, RT-PCR and karyotyping. They were differentiated as embryoid bodies (EBs) in suspension culture and analyzed by RT-PCR. Imprinted gene expression was investigated to examine differences with IVF-ESC lines and confirm the evidence of the parthenogenetic origin of these lines.
Results: The cell lines demonstrated typical ESC morphology and expressed ESC markers including alkaline phosphate, Oct4, Nanog and either stage-specific embryonic antigen SSEA1 or SSEA4. The cells all expressed *OCT4, REX1, SSEA1 and ALP*. All the cell lines except one had a normal karyotype of 60, XX. EBs expressed the markers of three embryonic germ layers. In addition, IVF cell lines were similar to pESC lines.
Conclusion: It can be concluded that ESCs which express pluripotent markers can be derived from parthenogenetic blastocysts and they have the ability to form EBs and differentiate into cells of the three embryonic germ layers and provide histocompatible cells.
Key words: *Embryo, Parthenote, Embryonic stem cells.*

O-49
Comparison of the developmental competence of mouse preantral follicles derived from vitrified whole ovaries and vitrified preantral follicle using the cryotop method

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Introduction: Based on the high-efficiency vitrification cryotop, this study aimed to compare the developmental competence of isolated preantral follicles from vitrified whole ovaries and vitrified preantral follicles using cryotop.
Materials and Methods: Whole ovary tissue and 3-5 group of preantral follicles of 14-day old NMRI mice were exposed to equilibration solution (7.5% ethylene glycol (EG) and 7.5% dimethyl sulfoxide (DMSO) in DPBS+20% FBS) for 10 and 5min respectively and then exposed to vitrification solution (15% EG, 15% DMSO and 0.5M sucrose in DPBS +20% FBS) for 2min and 30sec respectively. Finally, the samples were immersed in LN2 using the cryotop method. After thawing, preantral follicles from each group were cultured individually in 20-µl droplets of α-MEM culture medium for 12 days. The ovulation was induced by 1.5 IU/ml HCG. The rates of follicle development and growth were assessed.
Results: The survival rate of vitrified preantral follicles (68.3%) was significantly greater than those which were isolated from vitrified ovaries (57.3%; $p<0.05$), while were significantly lower than fresh follicles (85%; $p<0.05$). The mean diameter of follicles on day 2 (189.6 175.3µm) and day 4 (290.5 264.2µm), the percentage of antral-like cavity formation (76.8%) and MII oocytes (42.9%) were significantly higher in fresh follicles than vitrified preantral follicles and isolated preantral follicle from vitrified ovaries($p<0.05$). Also, vitrified preantral follicles showed higher antral-like cavity formation and maturation rates when compared to isolated preantral follicle from vitrified ovaries (62.8% and 28.3% vs. 46.0% and 15.0% respectively; $p<0.05$).
Conclusion: Vitrification of preantral follicles is more effective to preserve of follicle viability and developmental competence than vitrification of whole ovarian tissue.
Key words: *Preantral follicles, Ovary, Vitrification, Cryotop.*

3- Urology

O-50
Expression levels of Septins 14 in testes of patients with normal spermatogenesis and spermatogenic failure

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Introduction: Septins are an evolutionary conserved group of GTP-binding proteins. They polymerize to form filamentous structures and have diverse cellular roles. Septins are the major constituents of the annulus,

a submembranous ring that separates the middle and principal pieces of the mammalian spermatozoa. An increasing body of data implicates the septin family in the pathogenesis of diverse states including neoplasia, neurodegenerative conditions, sporadic breast cancer, Parkinson and infertility. In this study we evaluate the expression pattern of Septin 14 in testis tissue of men with and without spermatogenic failure.

Materials and Methods: The samples retrieved from patients who underwent diagnostic testicular biopsy in Royan institute. 10 patients with obstructive azoospermia and normal spermatogenesis and 20 patients with non-obstructive azoospermia were recruited for real-time reverse transcription (RT)-PCR analysis of the testicular tissue. Total RNA was extracted with trizol reagent. Septin expression level was normalized to expression of the housekeeping gene.

Results: Comparison of the level of Septin RNA revealed that in tissues with partial (n=10) or complete spermatogenesis (n=10), the expression of septin 14 were significantly higher than Sertoli cell only (SCO) tissues.

Conclusion: The testicular tissues of men with hypospermatogenesis, maturation arrest and Sertoli cell only had lower levels of Septin 14 transcripts than normal men. This data indicates that Septins expression levels are critical for human spermatogenesis.

Key words: *Andrology, Male infertility, Septin.*

O-51
Sperm DNA fragmentation in couples with unexplained recurrent spontaneous abortions

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Introduction: Recent studies have indicated the role of sperm parameters especially sperm DNA abnormalities in pathogenesis of recurrent spontaneous abortion (RSA). The objective of the present study was to evaluate the degree of sperm DNA fragmentation in couples with idiopathic recurrent spontaneous abortion and couples with no history of infertility or abortion.

Materials and Methods: In this cohort study, Thirty couples with recurrent spontaneous abortion and 30 fertile couple as control group completed the demographic data questionnaires and their semen samples were analyzed according to WHO standards (September 2009 to March 2010). Sperm DNA fragmentation was evaluated using Sperm chromatin dispersion (SCD) technique.

Results: In this study, When sperm quality of the control group was compared with that of the RSA group, a significant difference was observed in percentage of morphologically normal sperm (51.50±11.60 vs. 58.00±9.05, p=0.019), but not in other parameters, and abnormal DNA fragmentation level in RSA group was significantly higher than control group (43.3% vs. 16.7%, p=0.024). Our results indicate a negative correlation between the number of sperm with progressive motility and DNA fragmentation (r=-0.613; p<0.001).

Conclusion: Sperm from men with a history of RSA had a higher incidence of DNA fragmentation and poor motility than sperm from a control group, therefore this finding indicate a possible relationship between RSA and DNA fragmentation.

Key words: *Recurrent spontaneous abortion, DNA Fragmentation, Sperm, Infertility.*

O-52
Large scale deletions of mitochondrial DNA in asthenoteratospermic and oligoasthenoteratospermic men

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Introduction: Mitochondria facilitate the sperm's rigorous demands for energy through oxidative phosphorylation (OXPHOS) via the electron transport chain. The human mitochondrial genome codes 13 polypeptide subunits of the respiratory chain complexes, along with the 22 tRNAs and 2 rRNAs. Mutation rates of mtDNA are generally 10-100 times higher than those of nDNA because of the mtDNA is compact (intron-less) and lacks an efficient DNA repair mechanism, That DNA damage causes sperm dysfunction and result in diminish male infertility. The purpose of this study is investigation of mitochondrial DNA deletions in asthenoteratospermic and oligoasthenoterato-spermic men.

Materials and Methods: 45 semen samples including: 15 asthenoteratospermic, 15 oligoasthenoteratospermic as the case groups and 15 samples normospermic as control group were collected from IVF center. Routine semen analysis was performed within 1h according to WHO (1999) guidelines. After separating the sperm cells by swim up method and DNA extraction with phenol/chloroform, Long PCR technique was used for multiple large scale mtDNA deletions.

Results: Analysis of PCR products were shown multiple deletions; 4977 bp, 4.8 and 7.4 Kbp in mtDNA spermatozoa of asthenoteratospermic, oligoasthenoteratospermic and control group. The frequency of multiple mtDNA deletions in asthenoteratospermic and oligoasthenoterato-spermic

patients (65%) were significantly higher than control group (42%).
Conclusion: These results suggest that mtDNA mutations cause infertility through an effect on sperm motility. Therefore, identification of mtDNA mutations and large scale deletions in the pathophysiology of human spermatozoa dysfunction is considered to be important to better understanding of the etiology of idiopathic infertility.
Key words: *Astenoteratospermic, Oligoasthenoteratospermic, mtDNA, Large scale deletions.*

O-53
Semen parameters improvement following varicocelectomy

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Introduction: Varicocele is one of the infertility causes in men population. Varicocele has adverse affect on semen parameters. After varicocelectomy these abnormal parameters will improve significantly. This study is designed to evaluate semen parameters before and after varicocelectomy.
Materials and Methods: This study was evaluated 64 varicocele patients with abnormal semen parameters who were visited in Urology clinics in Tabriz. After excluding the patients that had one or more excluding criteria, all patients underwent a semen analysis before surgery and then that monthly sperm analysis were done. One year after surgery all data were analysed by SPSS version 16.
Results: 64 varicocele patients with abnormal semen parameter, 47 married men and 17 single men, with mean age of 32.5±14 years (18-47 years old) were evaluated in this study. After varicolcelectomy sperm count had a statistically significant increase (18.83±1.2 million in ml), semen volume also increased statistically significant (0.64±0.2 ml) and sperm motility (9.9%) and morphology (4.62%) increased statistically significant. Sperm count, semen volume, motility and morphology raised to platue in months forth, third, forth and fifth respectively after varicocele surgery.
Conclusion: The majority of varicocele patients with abnormal semen parameters showed significant improvement after varicocelectomy.
Key words: *Varicocele, Varicoceleectomy, Semen parameters.*

O-54
The role of sex hormonal deficiency in male infertility

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Introduction: Normal hormonal activity is necessary for testicular function and spermatogenesis. The male hormonal deficiency leads to delayed puberty, testicular insufficiency and lack of spermatogenesis.
Materials and Methods: In period of 10 years, among the patients referred us as infertility, About 100 patients suffered from hypogonadism. In this group, the testicular size, spermatogenesis and male hormonal values were evaluated and all of patient underwent to hormonal treatment with testosterone.
Results: Among 100 cases of hypogonadism, 60 of them were referred after puberty age as delayed puberty. All of these patients were azospermic as well as small testis and incomplete musculinization. The other 40 cases were referred as infertility. Both of these groups had the degrees of erectile dysfunction. All of these patients underwent hormonal replacement therapy. The aim of hormone replacement is the induction of puberty at the first step and spermatogenesis for treatment of fertility at the second. The delayed puberty is managed with male Androgen hormones. But for induction of spermatogenesis administration of gonadotropin hormones is necessary. The result of treatment for delayed puberty was successful in all of the patients. But spermatogenesis was happened in 30% of patients and only one of them get child with normal pregnancy. The rest of patients referred to ART centers.
Conclusion: Normal male hormonal activity is essential for male fertility. Early diagnosis of hormonal insufficiency helps for hormonal replacement. Most of these patients can get child with hormone therapy with few amount of sperm count.
Key words: *Hormonal deficiency, Male infertility.*

O-55
Bilateral diagnostic testis biopsy; Is it necessary in all azoospermic patients?

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Introduction: Diagnostic testis biopsy is necessary for evaluation and treatment of infertile men with azoospermia. There is no consensus that it must be done in one or both side. So in this study we evaluated the results of bilateral testis biopsy in male patients with azoospermia.
Materials and Methods: All infertile patients with azoospermia referred to our center for the past three years were selected. In patients who were candidate of testis biopsy it was done on one or both side. It was done on one side in patients who had only one palpable testis or in whom the result of first sample were positive. For all other patients it was done bilaterally.
Results: Overall 326 Patients were selected. Bilateral testis biopsy done in 170 and unilateral testis biopsy has done in 156 Patients. In the first group 85.88% (146) men had no sperm in their samples. In 5.88% (10) patients sperm was found in both testis, but only in

8.23% (14) patients testis sample was negative for one side and positive from other side.

Conclusion: According to our data it seems not necessary to do bilateral testis biopsy in every patient with azoospermia, but we must consider it in selected patients who have significant discrepancy in their testis volume.

Key words: *Azoospermia, Testis biopsy, Bilateral.*

O-56

Co-culture of spermatogonial stem cells with Sertoli cells in the presence of testosterone and FSH improved differentiation via up-regulation of post meiotic genes

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Introduction: Spermatogonial stem cells (SSCs) maintain spermatogenesis throughout the life of the male. Maintenance of SSCs and induction of spermiogenesis in vitro may provide a therapeutic strategy to overcome male infertility. This study investigated in vitro differentiation of mouse SSCs in the presence or absence of Sertoli cells, hormones, and vitamins.

Materials and Methods: The authors sorted spermatogonial populations from the testes of 4-6-week-old male mice by MACS according to the expression of a specific marker, Thy-1. On the other hand, isolated Sertoli cells from 6-8-week-old testes were enriched using lectin-DSA-coated plates. Isolated SSCs were cultured in the presence of LIF for 7 days in gelatin-coated dishes and then dissociated and cultured for 7 days in media lacking LIF in both the presence and absence of Sertoli cells and with or without FSH, testosterone, and vitamins. After one week, the authors evaluated the effects of Sertoli cells and supplementary media on SSC differentiation by microscopy and expression of meiotic and postmeiotic transcripts (RT-PCR).

Results: SSC colonies enjoyed limited development after the mere removal of LIF, exhibiting low expression of meiotic (Scp3, Th2b) but not postmeiotic transcript and loss of Stra8 and Dazl expression.

Conclusion: SSCs co-cultured with Sertoli cells, hormones, and vitamins developed spermatid-like cells expressing postmeiotic markers (TP1, TP2, Prm1) at levels over twofold greater than Sertoli cells or hormone/vitamins alone.

Key words: *Spermatogonial stem cell, Sertoli cell, Differentiation, FSH, Testosterone.*

O-57

Evaluating the rate of DNA fragmentation in processed human spermatozoa after incubation at different time intervals

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Introduction: One of the causes of failure in ART is sperm DNA fragmentation which may be increased by incubation of spermatozoa in 37°C. The objective was the evaluation of sperm DNA fragmentation using the sperm chromatin dispersion (SCD) test in spermatozoa after swim-up at different time intervals prior to use.

Materials and Methods: In this prospective study, we analyzed twenty one normozoospermic specimens. Semen analysis was performed according to WHO guidelines. The sperm morphology was evaluated by with Papanicolaou staining. The samples were incubated in 37°C after preparation by direct swim-up. DNA fragmentation were assessed at different time intervals (0, 1, 2 and 3h) using SCD test.

Results: There was an increasing trend in sperm DNA fragmentation after incubation. No significant difference in percentage of sperm cells with fragmented DNA was seen after 1h compared to 0h (6.14±0.89 vs 4.38±0.8), also 2h compared to 1h (p=0.15) and 3h compared to 2h (p=0.4). However, there was significant increase in sperm DNA fragmentation after 2h (8.81±.93, p=0.004) and 3h (10.76±89, p<0.0001), also 3h compared to 1h (p=0.002). The normal morphology was 49±3.10 and 72.33±2.53 for before and after processing, respectively. Also Progressive motility was 63.71±1.83 and 90.10±1.02 for before and after processing, respectively.

Conclusion: It seems that incubation of prepared normozoospermic samples at 37°C prior to use in ART should be less than 2h.

Key words*: Sperm DNA fragmentation, SCD test, Normozoospermia.*

O-58

Study of HSPA5, ATP5D and SOD1 proteins expression in men with and without varicocele

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Introduction: To compare the sperm protein profile between men with and without varicocele.
Materials and Methods: This work designed as a case-control study. The research patients were recruited at The Infertility Unit of Royan Institute in 2009. Twenty sperm samples from normozoospermic men without varicocele (C) and twenty sperm samples from oligozoospermic patients with varicocele grade 3 (V) were included in this study. Sperm protein profile in two groups was characterized using two dimensional gel electrophoresis (2-DE). Differences in protein expression were established using gel analysis software and protein identification was performed by Mass Spectroscopy (MS) analysis.
Results: In V samples, we have noted 15 consistent differences in protein expression (1 spots missing, 12 less abundant and 2 more abundant) compared with C ($p<0.01$).
Conclusion: The identified proteins demonstrated that heat shock proteins (HSPA5), mitochondrial proteins (ATP5D) and antioxidant proteins (SOD1) are the proteins mainly affected by varicocele disease. To our knowledge this is the first report describing the correlation between sperm proteins in men with and without varicocele obtained by 2-D proteomic approach. It can be an important prerequisite to the development of diagnostic tests to predict varicocelectomy outcomes in patients with varicocele and abnormal spermogram in a clinical environment.
Key words: *Varicocele, Sperm, HSPA5, ATP5D, SOD1.*

O-59
Y chromosome microdeletions in infertile men with azoospermia and severe oligospermia: East-Azerbaijan experiences

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Introduction: Approximately 10-15% of married couples have problems. Some infertile men with azoospermia or severe oligospermia have small deletions in three non-overlapping regions on the long arm of the Y chromosome (AZFa, AZFb and AZFc). We sought to determine the prevalence of Y-chromosome microdeletions amongst infertile men.
Materials and Methods: Screening of the Y chromosome micro deletions was done in 100 infertile men who reported to the infertility center of Kashan and infertility centers in Tabriz for ICSI. Genomic DNA was extracted, Y-chromosome micro-deletions were then studied with the use of PCR to amplify specific regions of the chromosome using 7 STS markers based on EAA/EMQN guideline and 11 STS markers which were used in Iran and neighboring countries.
Results: Within the participants from Kashan, none of the patients were found to have these deletions, however, in Tabriz; four infertile men (8 percent) had micro-deletions of the Y chromosome who had azoospermia, whilst not having oligospermia. The size and location of the deletions varied and did not correlate with the severity of spermatogenic failure.
Conclusion: A small proportion of men with infertility have Y-chromosome micro-deletions, however, the size and position of the deletions correlate poorly with the severity of spermatogenic failure. Males who have Y chromosome deletions which are followed by ICSI should undergo screening for these deletions to prevent from transmission to their male offspring. Male infertility can also be related to the ethnicity and geographic region of the patients.
Key words: *Infertility, Micro deletions, Y chromosome.*

O-60
Enzymatic digestion improves testicular sperm retrieval in non-obstructive azoospermic patients

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Introduction: In non-obstructive azoospermia (NOA) patients, besides the mechanical treatment, vital spermatozoa from the tissue obtained from testes by biopsy can be enzymatically prepared. The objective is to increase the sperm recovery success of testicular sperm extraction (TESE), with enzymatic digestion if obtain no sperm from testis tissue by mechanical method.
Materials and Methods: In 150 men who presented with clinical and laboratory data indicating NOA, tissue samples were obtained by microdissection TESE method. Initially, mature spermatozoa were searched for by mechanical extraction technique shredding the biopsy fractions. In cases with no spermatozoa was observed after maximum 30 min of initial searching under the inverted microscope, the procedure was then followed by enzymatic digestion using DNaseI and collagenase type IV.

Results: Of 150 cases with NOA, conventional mincing method extended with enzymatic treatment yielded successful sperm recovery in 13 (10%). Comparison of parameters revealed that level of FSH and LH were significantly different ($p<0.05$) between two groups that response negative and positive to enzymatic digestion.
Conclusion: Combination of conventional TESE and enzymatic digestion is an effective method to recover spermatozoa. The benefit of the mincing combined with enzyme to sperm retrieval for NOA is firstly to shorten the mechanical searching time, thus minimizing further cellular damage as well as exposure to external conditions, and secondly to reduce the number of cases with sperm recovery failures. Also, the serum level of FSH and LH are factors that influence the chance of sperm retrieval.
Key words: *TESE, Enzymatic digestion, Non-obstructive azoospermia, FSH, LH.*

4- Nursing and Midwifery

O-61
Exploring the aspects of couples interactions in reproductive health: a qualitative study

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Introduction: It is known that effective interactions are valuable for personal relationships. Marriage, as a long-lasting personal relationship, needs some interactive behaviors; especially in reproductive health matters. This study was conducted to explore the aspects of couples's interactions in reproductive health in contemporary family lives in Tehran, Iran.
Materials and Methods: This was a qualitative study with a purposeful sampling using individual interviews and FGDs in 2010-2011. The participants were 21 married individuals, aged 20 years or more, who had maximum variance in age, educational, and job categories, length of marital life, and number of children they had. We used open-ended questions in the sessions which lasted an average of approximately 45 minutes. All the interviews were tape recorded, verbatim transcribed, and prepared for content analysis.
Results: On the basis of the participants' perceptions and experiences in the reproductive health matters, five different categories emerged as the aspects of couples interactions: Care and nurturance, trust, supervision and control, directing and decision making, and cooperation. Results showed that in the reproductive health matters, the largest part of couples' interactions belongs to "Directing and Decision making" category.
Conclusion: It seems that reproductive health matters need a variety of couples' effective interactions; and to achieve the optimum level of reproductive health, couples empowerment for effective interactions must be considered; especially in directing and decision making area.
Key words: *Couples interaction, Reproductive health, Qualitative study, Iran.*

O-62
Domestic violence in infertile women and its risk factors analysis; A mixed methods study

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Introduction: In Iran, the lifetime prevalence of primary infertility was reported to be 24.9% in 2004. Although the causes of infertility in man and women are similar, it appears that the women are consistently held responsible for a couple's infertility, and she is often punished socially and economically as a consequence. Violence affects the lives of millions of "infertile women "worldwide regardless of their socioeconomic or educational levels.
Materials and Methods: This study was a mixed method study. in the quantitative section, 400 women with infertility (in each case a female factor had been recognized) that referred to the Valiasr Reproductive health Research Center in Tehran, Iran were interviewed using the Revised Conflict Tactics Scales (CTS2) questionnaire. After completing quantitative section, the qualitative section was started. We interviewed deeply with women that suffered domestic violence and after saturation the data; we analyzed them by content analysis.
Results: A total of 247 participants (61.8%) declared having experienced domestic violence. there were associations between the husbands being unemployed , husband's education level and coercive marriage and domestic violence ($p<0.05$) .the analysis of the part of qualitative study showed four main themes including abuse, marital instability, social isolation and loss of self esteem.
Conclusion: Although infrequently reported, domestic violence against infertile women is a problem that should not be ignored. Clinicians ought to identify abused women and provide them with supportive counseling as well as appropriate care.
Key words: *Domestic violence, Infertility, Mixed Method.*

O-63
Correlation between history of Cu-IUD using and secondary infertility

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Introduction: Appropriate type of contraception methods has been located in the core of reproductive health. Intra Uterine Device (IUD) has been introduced as one of the most effective contraception method in worldwide but the relation between using of IUD and secondary infertility has not been well known. This study was conducted to determine correlation between history of Cu-IUD using and secondary infertility.
Materials and Methods: A case-control study was carried out from December 2010 to September 2011 in Fertility and Infertility Research Center of Yazd. 750 married women in reproductive age (15-45 years old) were selected as participants. They divided into two groups (case and control) based on previous history of inserting Cu T-IUD, 380- A and were matched according age (±2 years). The inclusion criteria were length of IUD using at least for six month, without history of primary infertility or infertility treatments and without systematic diseases. Using of additional contraception method and occurrence of STD were determined as exclusion criteria. Data were gathered by structured questionnaire and were analyzed with X2 and Fisher-Exact tests.
Results: There were not any significant statistical differences in age and occupation between case and control groups. There was not any correlation between history of Cu T-IUD using and secondary infertility (3.5% in case group versus 2.7% in control group, p=0.63).
Conclusion: This study confirmed safety of Cu T-IUD, 380-A without any unpleasant and serious consequence such as infertility. So it could be used as an effective and safe contraceptive method.
Key words: *Intra Uterine Device, Secondary infertility, Case control study.*

O-64
Developing an ethical framework for privacy in sexual and reproductive health care

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Introduction: Privacy in Sexual and Reproductive Health (SRH) services is one of the most global concerns in the world. In the new trend of SRH service delivery system new ethical issues regarding privacy have been emerged. Although professional codes of ethics have emphasized on clients' right to privacy, but clients' right abuse demonstrates a gap in providers practice and what they have trained regarding privacy. Illegal breach of clients' right to privacy is considered as a criminal action and acts as a barrier for providing correct information. It also interferes with quality of care promotion and creates unwanted health consequences. This study was designed to develop an ethical framework for privacy in SRH services.
Materials and Methods: A modified three rounds Delphi study was conducted with 45 Iranian academics and clinicians as expert panel members, who were selected through purposeful sampling. Data were collected in round 1 Delphi through sending electronic questionnaires containing open-ended questions and participants' responses were analyzed using content analysis approach. After calculating face and content validity index in round 2, final consensus was achieved in round 3.
Results: Emerged categories towards privacy according to the experts' views were 1) visual and auditory privacy 2) providing appropriate services and spaces of health care centers to protect privacy and 3) legal considerations.
Conclusion: This study introduces an exact and clarified practical framework towards all dimensions of privacy for SRH care providers in particular and other health care providers who serve men, women and adolescent's health in general.
Key words: *Sexual and reproductive health, Privacy, Ethical framework.*

O-65
Passive smoking damaged women's sexual satisfaction

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Introduction: Tobacco use damaged women's reproductive life. Although previous studies showed that active cigarette smoking is associated with an important anti-estrogenic effect, few have examined the impact of passive smoke exposure on it. This study was aimed to determine the relation between passive smoking and sexual satisfaction among women.
Materials and Methods: This study was a cross-sectional study in which sexual satisfaction score among 110 reproductive age women in Sari, in 2010 were indicated and analyzed. The study sampling method was

random sampling. Two questionnaires including socio-demographic and Larson standard questionnaire were used for data gathering. Data were analyzed using descriptive statistical methods and chi-square.

Results: there was no significant difference associated between sexual satisfaction and age, Body Mass Index, educational level, delivery type, marriage age, duration of marriage, husband age, husband educational level. However, a statistically significant association between sexual satisfaction score and contraception methods ($p<0.01$), and passive smoking ($p<0.05$) was showed.

Conclusion: The present findings suggest that passive as well as active smoking may be associated with a decreased sexual satisfaction. Therefore, reproductive health promotion programs should be focused on passive tobacco use prevention interventions.

Key words: *Passive smoking, Women, Sexual satisfaction.*

O-66

Domains of decision making in reproductive issues: a qualitative study in Iranian families

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Introduction: Reproductive issues are major aspects of the couples' interactions; and decision making in these matters would be a crucial and challenging process. To help the couples in this process, there is a need to explore important domains of decision making according to their own viewpoints. This study was conducted to explore the domains of decision making in reproductive issues in the contemporary Iranian families, in Tehran, Iran.

Materials and Methods: This was a qualitative study with a purposeful sampling using individual interviews and FGDs in 2010-2011. The participants were 21 married individuals, aged 20 years or more, who had maximum variance in age, educational, and job categories, length of marital life, and number of children they had. We used open-ended questions in the sessions which lasted an average of approximately 45 minutes. All the interviews were tape recorded, verbatim transcribed, and prepared for content analysis.

Results: Nine different categories emerged as the main reproductive decision making domains: Marriage and divorce, sexual matters, conception and pregnancy, delivery, breastfeeding, family planning, gender preference, infertility, and gynecological surgeries. Most of the codes were emerged in family planning, and sexual matters domains, respectively; which shows that these areas contains the most optional issues in the couples' lives.

Conclusion: The results showed that it seems better to focus more empowerment programs on the most optional domains of decision making in reproductive issues, in order to empower the couples for logic, beneficent, and equitable decisions.

Key words: *Decision making, Reproductive issues, Qualitative study, Iran.*

O-67

Infertile couples experiences of assistant reproductive treatments: A phenomenological study

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Introduction: Infertility is considered a severe cause of stress and disappointment with attendant risks for mental health and other psychiatrics problem. In this research we can become more aware of experiences and emotions of infertile couples in different stages of treatment through qualitative method.

Materials and Methods: This study is qualitative and has been done by phenomenological method. Collecting the samples was done by a method based on the goal and its number was based on reaching quorum. Reviewing and coding the interview papers was done by three researchers with the Colaizzi method and this method was also used for analyzing datum.

Results: Seventeen couples were interviewed and mean age was 58.29 and all of them were women the achieved topics include 7 major and 22 minor topics. The main issues were: Participants' feelings toward infertility, Spouse's relationships with each other, infertile couples' familial relationships and their relations with own families and in-laws, assisted reproductive treatments, Couples' sexual relationships, Couples' dreams and aspirations and financial problems.

Conclusion: The results of this research show couples struggling with infertility are hopeless and disappointed in their lives. They've a vast collection of negative feelings simultaneously, such as anxiety, which obligates us to present them more specialized medical and psychological supports regarding their vast social and emotional disorders.

Key words: *Infertility, ART, Phenomenology.*

O-68
The impact of psychological consultation on mental health of infertile couples referring to Alzahra Educational Centre, Tabriz-2008-2009

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Introduction: Infertility has social, mental and biological dimensions that affects different aspects of infertile couple`s life as stressful crisis. Expensive treatments, continuous stressful situations, society pressure, fear of family breaking – up, loosing partner's attention and love, the effect of hormonal manipulations and leads to extreme anxiety & depression in infertile couples. So it requires multidimensional interventions for promoting mental health of them by specialists.
Materials and Methods: This was a semi-experimental study. Data gathering was done using *Goldberg general health questionnaires* answered by infertile couples referred to educational courses. Ninety four couples who obtained high scores were selected. Forty seven couples (experimental group) participated in consulting sessions (2 sessions for each couple). No Intervention was done for the control group. Then mental health of the two groups (experimental and control) were evaluated again using the test after a week.
Results: Results showed, in pre-test there were no significant difference between men groups Score (E=42.5±1.4 and C=43.2±2.0) and women groups score (E=46.4±2.1 and C=47.5±2.0) ($p \leq 0.05$). But there was significant difference in post-test scores in men's groups (E=25.4±1.0 versus C=45.0±1.1) and also women's (E=23.9±3.5 versus C=44.6±2.0) (p=0.000). Data were analyzed by SPSS version 15 using T test.
Conclusion: Psychological needs of infertile couples especially infertile women cannot be denied and should not be ignored. Unfortunately there are limited Researches in this field in Iran. On the basis of cognitive approaches, people`s thoughts, attitude and believes about events cause personal negative emotions and reactions. By professional counseling as a midwife and care giver we can help them cope with their anxiety and get positive, attitude and believes which will helpful of the person by means of psychological methods because range of person`s cooperation with the therapist increases via this way very much too.
Key words: *Infertile couple, Consulting, Mental health, Psychology.*

O-69
Association of central fat distribution with sexual dysfunction in women

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Introduction: There has been an alarming progressive worldwide increase in the prevalence of Obesity. Sexual dysfunction is a prevalent condition and is an important public health. Reduced sexual quality of life is a frequently reported yet rarely studied consequence of obesity.The relationship between female sexual function and obesity is unclear. This study aimed to investigate the relationship between Central fat distribution and sexual dysfunction in women.
Materials and Methods: 77, otherwise healthy women with abnormal values of female sexual function index (FSFI) score (≤28) were compared with 64 control women (FSFI >28). Central fat distribution, as evaluated by the waist-to-hip ratio. (WHR) was calculated as waist circumference in centimeters divided by hip circumference in centimeters. All women were free from diseases known to affect sexual function.
Results: Central fat distribution, showed correlation with FSFI score ($p<0.05$). Of the six sexual function parameters, lubrication (p=0.22), orgasm (p=0.76) and desire (p=0.65) did not correlate with Central fat distribution; on the other hand, there was a correlation between arousal (p=0.05), pain (p=0.04) and satisfaction (p=0.03) with Central fat distribution.
Conclusion: Obesity affects several aspects of sexuality in otherwise healthy women with sexual dysfunction. Interventional studies aimed at reducing body weight in women with FSD are needed to disclose a cause and effect relation between obesity and FSD.
Key words: *Central fat distribution, Female sexual function, FSFI, Obesity.*

O-70
Pregnancy and childbirth as a point between the life and death

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Introduction: Despite the fact that birth is a joyful event, it can be associated with physiological trauma and for some women it can be very fearful. Birth is regarded as a violent incident with the fear of destroying the mother or baby by some women. This feeling varies in different cultural, social, economic and environmental contexts and on the other hand, the perception of the mothers from pregnancy and childbirth is completely subjective. This means that reviewing of mothers medical records is not helpful for recognition of the mother's perception.
Materials and Methods: This descriptive study is part of a mixed method research, carried out in 2012, aimed to investigate the mothers` feeling of pregnancy and birth in 2 large provinces of Iran. Data were collected from a convenience sample of 305 mothers admitted to post partum ward of Public and private hospitals (194

women from a province and 111 women from other province) and were assessed through the revised fourth edition of Psychiatric Standard Questionnaire DSMIV.

Results: A large percentage of participants (59.2%) felt serious danger to themselves and their children during pregnancy and birth. There was a significant difference between the mothers feeling between two provinces ($p>0.05$).

Conclusion: According to mothers' feelings of danger and death during pregnancy and birth, supportive programs to protect them should be designed. Also, regarding to a significant difference in mothers' feelings between two provinces, impact of the culture on fear of pregnancy and childbirth should be explored.

Key words: *Traumatic labor, Pregnancy, Mothers feeling, Mothers perception.*

O-71
Preterm delivery and plasma fibronectin

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Introduction: Due to the fact that preterm delivery is regarded as the most prevalent reason of fetus mortality, and that it has considerable social and psychological effects for the family and the society, the susceptible factors and the state of predicting and preventing it is not profoundly realized. Recognizing women who are at risk is the first effective step in preventing that. This study is designed to determine the diagnostic value of plasma concentration of fibronectin in preterm diagnose of delivery.

Materials and Methods: The comprised sample of 79 primigravida women who were in their 24-34 weeks was divided into three groups in our case-control study. Medical, demographic and midwifery information were studied along with the measurements of fibronectin plasma level. Data collected were analyzed using SPSS 19. Appropriate statistical tests (Kroscalvalis, ManWitney and ROC diagram) in significance level of 0.5 were employed.

Results: The average plasma level of fibronectin was 1320 ml/ng 547 in women with preterm deliveries and it was 708 301 ml/ng in women with term delivery which has significant statistical difference ($p<0.001$). The best cutting spot for fibronectin concentration in predicting preterm delivery is determined as 700. Sensitivity, characteristic, positive predicting value and negative predicting value for this test are as follows: 100%, 54.3%, 61.1%, 100%.

Conclusion: Findings illustrated that the fibronectin plasma level in women with preterm delivery is significantly higher than those with term delivery. Considering the high sensitivity of the cutting spot of 700, this test could be regarded as a screening test to diagnose the preterm delivery.

Key words: *Fibronectin, Plasma fibronectin, Preterm delivery, Preterm diagnosis.*

O-72
Effect of a sex educational package on sexual function in pregnant women: a multicenter randomized controlled trial

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Introduction: Pregnancy is a major change in life and may directly affect sexual function due to psychological and biological changes. We aimed to determine the effect of a sex education package on sexual function in pregnant women.

Materials and Methods: We recruited 88 women in their 8-14 weeks of pregnancy from the four selected public health centers (22 from each) in Karaj, Iran, in 2011. We individually randomized the subjects into intervention and control groups. A midwife with special short education in sexual health in pregnancy educated the participants at the interventional group in two sessions (approximately sixty minutes each, once a week) using an educational booklet. The booklet was given to the women at the end of the first session. The subjects and their husbands could also get telephone counseling about sexual health. The women in the control group got nutritional education. All participants completed a self-administered questionnaire, just before and 4 weeks after intervention and put them into a sealed box. Sexual function was assessed using female sexual function index (FSFI). Data were analyzed using Student's-t and ANOVA and chi-square tests.

Results: At the baseline, there were no significant difference between the groups in terms of mean sexual function score and rate of sexual dysfunction. After education, mean (SD) of total score of sexual function was significantly higher in the intervention compared with the control group (26.8 (4.0) vs. 19.2 (8.7), $p<0.001$) and the rate of sexual dysfunction was significantly lower (41.5% vs. 83.3%, $p<0.001$). The education had positive effect on all six domains of sexual function (desire, arousal, lubrication, orgasm, satisfaction, pain).

Conclusion: The educational package improved the pregnant women sexual function. Therefore, it is recommended to use it during prenatal care.
Key words: *Sex education, Sexual function, Pregnancy.*

O-73
Health-related Quality of life and its predictive factors in infertile women

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Introduction: There is inadequate knowledge regarding health-related quality-of-life (HRQoL) of infertile women. The present study aimed to determine HRQoL of infertile women and predictive factors of their quality of life in physical and mental health components.
Materials and Methods: In this cross-sectional study, 1012 infertile women referring to Majidi infertility center were examined. The data were collected through a self-administered questionnaire including clinical and demographic characteristics and SF-36. One-sample T-test, independent T-test, one-way ANOVA and logistic regression were used for analysis.
Results: The QoL score of the infertile women in all eight studied aspects was significantly lower than normative data (general Iranian people stratified by gender and corresponding age). The differences were substantial in vitality, bodily pain, social functioning and physical functioning (Z score <-0.4). Mean (SD) of physical and mental health component scores (PCS, MCS) in women were 46.8 (7.2) and 41.1 (9.9), respectively. Based on results of logistic regression, low PCS score was more frequent in those who were younger, less educated or had low income and less income was significantly associated with low MCS score.
Conclusion: Results of the study indicated low QoL in infertile women. Therefore, necessary supports about infertile couples should be done, especially for those at risk such as those with lower education level or low income.
Key words: *Quality of life, Infertility, Predictive factors, Women.*

O-74
A survey of medical and paramedical group awareness and attitude toward fertility preservation techniques in mashhad-2009

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Introduction: Technological development in tissue and gamete cryopreservation (along with ART) have provided the chance of fertility not only to sub-fertile couples, but to the young men and women whose cancer treatment .radiotherapy or chemotherapy may prevent their fertility in future. Therefore, it is importance for everyone to be aware of the current fertility preservation methods. Surveying the knowledge and attitude of Medical and Paramedical Group on fertility Preservation methods was the main purpose of this research.
Materials and Methods: The current descriptive research was done in summer 2009 in Mashhad.190 subject (including 30 gynecologists, 34 general practitioners, and 88 midwifes and 38 nurses), who were employed in different hospital of Mashhad, completed the related questionnaire and participated as sample group in this research. The results of study have been reported by the use of K.Square test based on frequency and percentage.
Results: The study endorsed 88.9% of subjects had low to average information about different methods of fertility preservation. 92.1% subjects recommended low to relative application of these methods. Lack of enough information in this field was the main reason which all the participants were agreed on.
Conclusion: Due to the importance of fertility preservation methods in cancers, impotencies, belated marriage and etc, it is quite necessary that therapeutic personnel do learn these methods and teach them to patient and those benefiting from their application.
Key words: *Fertility preservation.*

5- Psycology

O-75
The baby doesn't belong to me: The experience of interviews with surrogate mothers

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Introduction: Surrogacy is a treatment option available to women with medical problems. Many health issues arise for the surrogate mother. There is a lack of scientific proof, while many psychologists, and psychiatrists believes that there are a special tie that develops between a pregnant mother and a child in her uterus. Research has shown that surrogate mothers are less attached to the fetus, which is most likely due to encouragement by others to feel detachment toward the fetus during pregnancy. Also many surrogate mothers are trying to not dependent on the fetus inside their uterus. The purpose of this study was to evaluate

surrogacy mothers' emotional experiences in their pregnancy in Isfahan city.
Materials and Methods: This was a qualitative, phenomenological study. We selected 6 surrogate mothers in Isfahan. We used convenient sampling method and in-depth interview for collection of information. Data analysis was done via Colaizzi seven-stage method.
Results: Findings of these interviews were classified in 45 codes and 3 themes including "Psychological issues associated with family, relatives and friends", "Feelings towards pregnancy" and "Psychological consequences of surrogacy" and 2 main concepts.
Conclusion: Surrogate pregnancy should be treated as a high-risk psychological experience because many of these surrogate mothers could have negative experience in this period. In addition, it is recommended that surrogates receive professional counseling before, during and after pregnancy.
Key words: *Surrogate mothers, Emotional experiences, Phenomenological study.*

6- Ethics and miscelaneous

O-76
Effect of body mass index on pregnancy rate in infertile women through of IVF cycle in Razavi

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Introduction: Obesity has become a major health problem across the world .Obese women experience longer times to conception, even if they are young and cycling regularly. Today there are contradictory finding about the effect of obesity on quality of oocyte, number of matured oocyte, growth of embryo and rate of pregnancy in assisted reproduction technology (ART). The purpose of this study is evaluation of the relation between BMI and pregnancy rate through IVF cycle in infertile women.
Materials and Methods: This analytic cross-sectional study included of 130 infertile women who referred to Razavi IVF center for treatment.168 patient records were studied and finally 130 subjects were selected. The required data were collected through providing questionnaire. Patient divided to three groups based on the BMI: normal weight, overweight and obese. All women underwent controlled ovarian hyper stimulation (COH), using long agonist protocol .The data were analyzed by Pearson correlation test, Spearman test, and one-way analysis of variance.
Results: Regarding their LH and FSH levels (3^{th} day), number of follicles and oocyte there are any significant difference in three groups .According to the results, pregnancy rate was affected by BMI levels. Percentage of fertility in women with normal weight was 43.3, whereas this percentage was 27.9 and 4.5 in women with overweight and obese respectively (p=0.003).
Conclusion: BMI had significant effects on IVF outcome, so weight reduction is suggested in women with obesity in preconception consultations to increase pregnancy rate.
Key words: *BMI, IVF, ART.*

O-77
Assisted reproductive technology (ART) treatment in HIV couples from ethical aspects

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Introduction: A major increase in the life expectancy and life quality of HIV infected persons has resulted from treatment improvements. Use of assisted reproductive techniques, the possibility of having a healthy child for many couples HIV has provided. However, almost all of infertility centers do not accept these couples that this problem leads to isolation of these people from the society and decreases their quality of life.
Materials and Methods: It is a multidisciplinary study of review literature, expert opinion and law review. The references varied from Iranian constitution, civil law, Islamic texts, the Holy Quran and scientific papers.
Results: Pregnancy is the natural right of every person. If having healthy children without transmitted HIV to the partner is possible, the infertility centers shouldn't avoid of using assisted reproductive techniques (ART). Therefore, the rejection of couples by infertility treatment centers seems to be unethical. Acceptance of patients with other chronic or end stage diseases despite of not accepting HIV patients confirms discrimination between the patients. Estefta of Jurists voted that treat these couples by ART.The welfare of the child is not only physical, but also includes a psycho-social. i.e. the risk of being orphaned at a vulnerable age and of growing up in a family which is confronted with a serious illness. Also called Stigma associated with HIV in Iran and it seems that families with children from the socially not perfect. However, the life expectancy of HIV-infected parents, comparable to parents that suffer from cancer or genetic diseases, especially if the family (positive-negative) that have at least one parent will have normal lifetime. Attempts to remove social stigma with support by the community of all chronic patients should be taken that step. The risk of transmission of HIV in Infertility treatment centers, like hospitals and clinics likely contamination to sample of other patients and to the equipment and laboratory personnel involved. Fortunately, international and national guidelines for effective prevention of other patients and staff involvement are developed centers. It is considered good practice to have a separate laboratory and well informed and trained personnel to treat cases.

Conclusion: No strong evidence for rejection couples with HIV, and there seems to be lack of acceptance of new methods for people with the possibility of having healthy children are immoral and violate the natural rights of individuals.

Key words: *Ethics, Islam, Research, HIV, Reproductive.*

O-78
Exploring the necessity of sexual health education to female adolescents in Iran: A qualitative content analysis

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Introduction: There is evidence that Iranian adolescents, particularly females have many unmet needs in terms of sexual health education (SHE); nonetheless there are controversies about necessity and appropriateness of SHE for adolescents mainly due to the socio-cultural challenges in the Iranian society. This study therefore aimed to explore experiences and perspectives of adolescents and key adults regarding the necessity of SHE to female adolescents in Iran.

Materials and Methods: The design was a qualitative content analysis in which qualitative data were collected through 13 in-depth individual interviews and seven focus group discussions with female adolescents, one FGD and five interviews with mothers, one FGD with health care providers and interviews with authorities in provincial organizations of health and education, teachers and school counselors, and male and female clergies in Ahvaz and Mashhad. Purposeful sampling was adopted until data saturation was achieved. Data were analyzed adopting conventional content analysis using MAXqda software.

Results: The main emerging reasons for necessity of SHE to adolescents were categorized in five themes consisted of: lack of accurate sexual knowledge and attitudes, existence of inaccurate sources for sexual knowledge, social status influences on adolescents' vulnerability to sexual disorders, increased sexual health disorders, and religious obligations.

Conclusion: Findings showed that many adolescents and key adults had the same opinion that SHE is an essential issue, so this fact should encourage policymakers to go forward to the next step which is designing and implementing such educational programs instead of being in doubt about whether adolescents need to be provided SHE.

Key words: *Sexual education, Reproductive health, Female adolescents, Qualitative content analysis.*

O-79
Fertility motivation in diferent situation

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Introduction: Transition of reproduction in the four recent decades in Iran, refers to reproductive behavior changes. A deep perception of family reproductive motive and behavior, particularly in women, clears the effective factors on the changes up. This study was performed to explain the reproductive motive in Iranian women.

Materials and Methods: This study was conducted with qualitative research approach and content analysis method in 2011. It included 21 fertile women and 5 with history of infertility. Purposive sampling began and continued up to data saturation. Deep semi-structured interview was the main method for data collection. The data were analyzed using qualitative content analysis method and constant comparative method.

Results: In content analysis process, finally five main themes emerged that indicated women's reproductive motive. Also the detail concepts were defined as subgroups of the main concepts. These themes include: 1-Natural and inherent characteristic, 2-Social norms and pressure 3- Need to social and emotional support, 4-Continuation of generation, 5-Assurance and hopefulness for future. These concepts in women with the history of infertility differ from fertile women.

Conclusion: The use of these concepts for helping infertile people, couples and the women at the age of marriage, can be effective on making decision for curative methods and or family planning programming. The motive of reproduction is affected by different factors such as: marriage age, parity, history of infertility, women's age, socio-economic conditions.

Key words*: Motive, Reproductive behavior, Infertility, Qualitative research.*

O-80
Relationship between androgens with anthropometric indices in women with polycystic ovary syndrome

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Introduction: Polycystic ovary syndrome (PCOS), the most common endocrine disorder in premenopausal

women, is characterized by chronic ovulatory dysfunction and hyperandrogenism. Clinical studies have shown that hyperandrogenism is linked with insulin resistance in PCOS women. Androgen excess, as a central defect in PCOS patients, is triggered by obesity. This study aimed to evaluate serum testosterone and dehydroepiandrosterone sulfate (DHEA-S) levels in women with PCOS and their correlations with anthropometric indices.

Materials and Methods: This cross-sectional study investigated 185 women with PCOS;39 normal weight, 40 overweight as 38 women as obese grade I, 35 as obese grade II and 33 as obese grade III. Body mass index was defined as weight in kilograms divided by the square of the height in meters. Serum levels of testosterone and DHEA-S were measured by commercially available enzyme immunoassay kits.

Results: There was a positive and significant correlation between serum testosterone level and waist circumference in the normal (r=0.41, p=0.005) overweight (r=0.51, p=0.02) obese I (r=0.40, p=0.01) obese II (r=0.41, p=0.02) and obese III (r=0.38, p=0.04) groups, respectively. Also a positive and significant correlation was found between serum DHEA-S level and waist circumference in overweight(r=0.42, p=0.01), obese grade I (r=0.48, p=0.005) and obese grade II (r=0.41, p=0.02) groups respectively. We found a positive and significant correlation between testosterone and waist to hip ratio in individuals of the Obese I, Obese II and Obese III groups, and also a positive and significant correlation between DHEA-S and waist to hip ratio in individuals of these three groups.

Conclusion: In PCOS women, serum levels of DHEA-S and testosterone increase with increasing grades of obesity.

Key words: *Obesity, BMI, DHEA-S, Testosterone, Anthropometric Indices.*

O-81
Critical decisions field in developed methods for Iifertility treatment

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Introduction: Hiding the true identity of the gamete donator in the course of different infertility treatment methods is in fact, hiding the true origin of the new born person in question. But do we really have the right to deny any human being's origin? Especially as the mistreated information has a close and inevitable effect on matters such as heritage and inter-family relations.

Materials and Methods: Different conflicts occur on matters such as the moral definition of guardians, genetically, biological and social parents, and the precedence of the mentioned in relation to the surrogate child. Severe ethical issues such as the genetical manipulation of the ovum and sperm cells, DNA transfer, genetically doping, gene selection and etc are seriously undermined. Freezing the gametes, reproductive cell's ownership, decision making about the reproductive cells in the occurrence of the partners death, research use and etc have their own ethical, legal and religious problems.

Results: Matters such as birth after death, the actual value and the potential human personality of the fetus, determining the actual time when the fetus must be considered as a human being and therefore the dominance of personality over property and actual values over potential ones, the definition of property and rights in relation to child abortion in such cases have serious religious and legal complications.

Conclusion: Agreements on the use of reproductive cells, the gonads and their biological use are of different legal values in different legal systems and cultural structures. The possible responsibilities of the agreement stewards are also matters of discussion. Matters such as the human value and it's collation on the fetus will always be questioned.

Key words: *Critical decisions, Infertility treatments, Ethics, Origin and Dignity.*

O-82
The multi-layered complications of recent infertility treatment methods

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Introduction: The different methods of infertility treatments, although effective, have seriously complicated conceptual aspects that must be taken into consideration. These aspects include the ethical and religious standards, the ownership rights and the social acceptance of the matters in question. If neglected, these issues may cause severe psychological discomforts, emotional conflicts and personality losses in the surrogate, guardians and even the society.

Materials and Methods: The modern infertility treatment procedures, fertilization and fetus production acts should follow a systematic definition and plan in order to minimize the conflicts and reduce the amount of hazardous criteria. An example of the systematic definitions mentioned is that both partners must be alive and within the reproductive age. They should also be in a socially accepted relation with each other and they must be aware of, and accept, the technical, ethical, legal and social consequences of the circumstance.

Results: The definition presented above has: 1) Emphasized on the legal, social and ethical status of the partners. 2) Noticeably limited, but not altogether eliminated, the subject of reproduction after death. 3) Eliminated the possibility of pregnancy in women after menopause. 4) Emphasized on the acceptance of the

different aspects introduced by newly formed medical techniques.

Conclusion: An acceptable and carefully thought out scheme must rigidly be followed in order to guarantee the ethical, legal and social values of the infant to be born but matters such as fertilization with the gamete of a dead person, substitute womb, the precedence of the biological or social parents etc are still open for discussion.

Key words: *Ethics, Law, Fertilization, Modern techniques.*

O-83
Infertility treatments and Islamic jurisprudence

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Introduction: Different Islamic religious schools in face of the permit or forbidden of the new infertility treatments have adopted different viewpoints. It's necessary to present a solution for those, who accept the forbidden approach in comparison with these treatments, with due attention to the subject importance and the challenge of the great percent of the Moslems milliard population with it. We are searching to find this solution, in this research, with regard to religious precepts on the one hand, and provide mind cicatrisation for barren couple to have generation that followed divorce in some case on the other.

Materials and Methods: This research is a review and library study.

Results: most jurisconsults permit AIH, either with IUI or IVF styles, and forbidden AID, either with IUI or IVF styles. They emphasis on the avoiding introductions forbidden such as the palpation and look except in the emergency cases. The Shiite and Sunni jurisconsults have diversities of opinions in use of the infertility treatments methods for example Mother Surrogacy.

Conclusion: Mahmud Shaltut, the great Sunni jurisconsult, recognized the Shiite beside the formal Sunni religions and permitted to follow this religion. We can solve our problem in infertility treatments by resorting to this method. In some of the infertility treatments, such as Mother Surrogacy and Embryo Donation, according to the Sunni jurisconsults opinion, can refer to the Shiite jurisconsults opinions and appoint it as the divine proof, consequently most of the barren couple problems can remove without the sacred law violation.

Key words: *Infertility treatment, Islamic jurisprudence, Mother Surrogacy, Embryo Donation.*

O-84
ART technologies; real treatment or no?

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Introduction: Infertility is one of the problems that many people are directly or indirectly concerned and disturbed. Reproduction is one of the main indexes in the Maslow's hierarchy of needs at the adult stage. Different medical groups in all over the world have done various efforts to remove this disturbed. So this question is brought up:"Are ART technologies really treat the infertility?" and "Can they respond human needs in reproduction?"

Materials and Methods: This research is mainly based on an analytic methodology and library study.

Results: Famous psychologists such as Ericson, Cox, and Maslow have accentuated production as human needs in fertility process not only have any baby from any one. When the production in human reproduction surely has been that the pair, themselves, reproduced a baby from their sperms and ovules, nor accepted embryo from others, nor broth other child, nor adopted other child. Holy Koran admonishes human infertility need to child in different verses such as "Progeny", "Ally to inherit from me" and "descendant", that show real human need is in reproduction from him. So ART technologies that help other sperms, ovules, womb or embryo for reproduction, don't respond human need and we can include them such as attractive medicines.

Conclusion: Since human need in reproduction responds until he has a baby from himself, ART technologies that help infertility pair to breed from their sperms and ovules, really treat infertility and the others don't respond the need of infertility treatments.

Key words: *Reproductive psychology, Infertility treatment, Human needs, ART technologies.*

O-85
Effect of metformin on lipid profile in women with polycystic ovarian

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Introduction: polycystic ovarian syndrome (PCOS) affects 7-10% of women in reproductive age. Metabolic disorders are insulin resistance, excessive androgen and hyperlipidemia. The aim of this study was to investigate the effect of metformin on lipid profile.

Materials and Methods: 86 Women aged less than 30 years with PCOs were identified on the basis of oligomeorrhea or amenorrhea from outpatient's clinic. Plasma total cholesterol, triglycerides, HDL, LDL measurement was performed in 86 patients in first day

three and six months later. Metformin was administered at a dosage of 500mg every 8 hours except for the first week that were given twice daily. Randomization was effected in a double blind fashion; patient received either metformin or placebo.

Results: 32 patients in metformin group and 26 patients in placebo group were following up in three and six month the remaining subjects were either pregnant or lost to fellow up. The results shows that 6 months treatment with metformin there is no significant difference in cholesterol, triglycerides and LDL level in metformin and placebo groups. But HDL level in metformin group was more than that of the placebo group (p=0.01) cholesterol LDL and HDL level before and after treatment with metformin were not significantly different (p=0.004). However thtriglycerides was reduced after treatment. In placebo group LDL, HDL and triglycerides were not significantly different. But cholesterol level was increased (p=0.047).

Conclusion: the present study shows that metformin treatment was not effective in reducing total cholesterol and triglycerides. But metformin was improved HDL.

Key words: *Metformin, PCOS, Lipid profile.*

Poster presentations

1- Infertility, Gynecology

P-1
Exposure of semen parameters in oxidative stress result in glutathione reduction produced by buthionine sulfoximine on testis development

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Introduction: Glutathione is a ubiquitous tripeptide in mammalian and other living cells. It has several important functions, including protection against oxidative stress. Glutathione depletion leads to increase reactive oxygen species (ROS) and an oxidative stress state that it is harmful for gametogenesis and embryonic development. The aim of the present study is to investigate the effect of oxidative stress produced by injection of buthionine sulfoximine (BSO) on semen parameters in mice.
Materials and Methods: In this study 20 adult female mice and 10 adult male mice are used. The mice divided into 2 groups (10 in each group), including adult experimental and adult control. From the 2nd day of pregnancy the mice in experimental group received 2 mMol/Kg BSO as ip for 15 days. The newborns kept becoming adult Then semen parameter were studied.
Results: Result of semen parameter showed that In experimental group of adult mice, the number of sperms with quick motility were less than the control group but the number of sperms with slow motility and or abnormal morphology were higher than the control group ($p<0.05$). The diameters of seminiferous tubules in experimental group were also decreased.
Conclusion: Fetal exposure to oxidative stress induced by buthionine sulfoximine could affect fertility in adulthood with interfere sperm quality.
Key words: *Stress oxidative, Glutathione, Bouthionine sulfoximine, Sperm.*

P-2
The effect of buthionine sulfoximine on glutathione level in pregnant and non-pregnant mice

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Introduction: Buthionine sulfoximine is an agent that reduces intracellular glutathione and anti-oxidant enzymes and by this means is involved in pathology of some disease. Since low glutathione level may affect embryonic development, the aim of the present study is to investigate glutathione reduction in pregnant and non-pregnant mice.
Materials and Methods: In the present study, the mice were divided into 4 groups (10 in each group). The groups include: pregnant and non-pregnant groups each of them consisting of a control and an experimental groups. The experimental groups received 2 mmol/Kg buthionine sulfoximine (in the pregnant group on the 10th day of pregnancy), 12 hours after buthionine sulfoximine injection, the mice in all control and experimental groups were killed and blood obtained from their heart and glutathione level were determined and compared with each other.
Results: Glutathione level in experimental pregnant group were reduced significantly ($p<0.05$) in comparison with control pregnant. In non-pregnant group, also the level of glutathione were reduced significantly ($p<0.05$) in comparison to controls.
Conclusion: The results indicate that buthionine sulfoximine injection could reduce glutathione level both in pregnant and non-pregnant mice. Also the effect of buthionine sulfoximine in pregnant group was more extensive than that of non- pregnant group.
Key words: *Glutathione, Buthionine Sulfoximine, Pregnant, Balb/c Mice.*

P-3
Fertility preservation in men after cancer treatment

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Some cases of male infertility are due to the destructive side-effects of anticancer treatment methods such as chemo and radiotherapies on germ cell lines. The increase in the survival rate of cancer patients who undergo treatment, especially children, has drawn attention to fertility preservation. The most common and effective technique in preserving male fertility is sperm freezing and its subsequent IVF. Children cannot efficiently produce sperm because of their spermatogonial immunity. One of the strategies to maintain fertility in these patients is to preserve the testes or the germ cells by freezing them for their later maturation and production of fertile sperm, although the state in which the spermatogonia may not undergo maturation is one of the main obstacles faced in this method. Therefore, scientists have attempted to transplant cryopreserved testis tissues or produce in vitro-matured spermatozoa in this group of patients upon anticancer treatment. In this study we reviewed the germ cell biology, the side-effects of chemo and radiotherapies on germ cells and fertility preservation

techniques in adults and children undergoing anticancer treatment.

Key words: *Chemotherapy, Cryopreservation, Fertility preservation, Germ cell transplantation.*

P-4
Comparison of sexual problems in fertile and infertile couples

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Introduction: Infertility is a phenomenon that effect on sexual and familial status and dimensions of life in couples. The study indicated that infertile women had lower psychosocial status and high sexual problems. This survey was done to comparison of sexual problems in fertile and infertile couples.

Materials and Methods: In this review article, we tried to study 23 related articles and express their results.

Results: The results of many studies show that infertile women had lower psychosocial status, higher sexual problems, psychological dimension in infertile women was poor and there was positive relation between infertility and sexual problems variable.

Conclusion: By considering result of studies that consist of relation between infertility and sexual problems variable, Politicians should applied attention in health planning for women especially in sexual problems.

Key words: *Infertility, Women, Infertile couple, Fertility.*

P-5
Comparison of intrauterine insemination with timed intercourse method in controlled ovarian hyperstimulation

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Introduction: This study is designed to compare the outcome of pregnancy following intra uterine insemination (IUI) versus timed intercourse (TI) after controlled ovarian hyperstimulation (COH) in patients with unexplained infertility and polycystic ovarian syndrome (PCOS).

Materials and Methods: This is a prospective comparative study, conducted in infertility research center of Shiraz University of medical sciences since 2009-2011. The study was performed on 148 Asian infertile patients diagnosed as PCOS or unexplained infertility that underwent completed cycles of controlled ovarian hyperstimulation. The patients were randomized into two groups consist of timed intercourse and IUI. Data was analyzed with Chi-square and t-student tests using SPSS software version 18. P-value less than 0.05 were considered as statistically significant.

Results: Patients of both groups had similar status of age and duration of infertility (p>0.0.5). Pregnancy rate (PR) in TI and IUI groups was calculated as 24.6% and 14.9%, respectively. (p=0.197). The success rate in patients with primary infertility was significantly more in TI group compared with IUI group (29% vs. 10.3% in sequence, p=0.045).

Conclusion: On the basis of multiple possible mechanisms, this study showed better outcomes of pregnancy with TI following superovulation in couples treated for unexplained infertility and PCOS especially in primary infertile cases. Thus, we propose that the use of TI in combination with gonadotropins will help many couples to avoid the stress and cost of more invasive techniques.

Key words: *Intrauterine insemination, Timed intercourse, Unexplained infertility, Polycystic ovarian syndrome, Controlled ovarian hyperstimulation.*

P-6
Different medication for heavy menstrual bleeding

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Introduction: To determine efficacy and safety of tranexamic acid in women with heavy menstrual bleeding.

Materials and Methods: This was a randomized study for three menstrual cycles (n=30). Women with menstrual bleeding ≥80 ml/cycle were assigned to receive either 1gr/d or 2gr/d tranexamic acid or 2gr/d mefenamic acid for up to 7 days of menstrual bleeding. Primary outcomes were mean blood loss decreasing from baseline which introduced >50 ml/cycle.

Results: Only 2gr/d tranexamic acid group was effective for menstrual bleeding reduction. No adverse effect was found in all groups.

Conclusion: It seems 2gr/d tranexamic acid is more effective and well tolerated for excessive bleeding.

Key words: *Heavy menstrual bleeding, Mefenamic acid, Tranexamic acid.*

P-7
Treatment of recurrent pregnancy loss by levothyroxine (LT4) in women with high anti-TPO antibody

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Introduction: Recurrent pregnancy loss (RPL) is defined as two or more consecutive pregnancy losses before twenty week of gestation. It is caused by variety of genetics and environmental factors. There is evidence that thyroid autoimmunity is associated with pregnancy loss.in this study we want to investigate the association between auto-thyroid antibodies and recurrent pregnancy loss and also to evaluate the efficacy of Levothyroxine treatment.
Materials and Methods: In this randomized trial, we enrolled 900 women who had a history of unexplained recurrent pregnancy loss. Then we assigned them to received Levothyroxine for two month before pregnancy and after two month anti-TPO were tested again and follow up until the end of pregnancy.
Results: The success rate of pregnancy in women with abnormal anti-TPO with Levothyroxine therapy was 82.85%. Mean of anti-TPO in women with treatment before taking medication was 394.18 and after that was 186.75 the differences was significant.
Conclusion: According to this study, after Levothyroxine the incidence of spontaneous abortions was decreased and anti-TPO level has been reduced.
Key words: *Recurrent pregnancy loss, Levothyroxine, Anti-TPO antibody, Autoimmunity, LT4.*

P-8
The impact of number of oocytes in outcome of in vitro fertilization

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Introduction: In-vitro fertilization (IVF) is a process by which egg cells are fertilized by sperm outside the body. Several procedure-related factors can affect the success of IVF; woman‘s age, quality of oocytes, past reproductive-obstetrical history. We investigate the effect of number of oocytes in outcome of treatment.
Materials and Methods: A retrospective study was performed on 476 patients who were treated with IVF in the research and clinical center for infertility of Yazd. The numbers of oocytes obtained per cycle were classified in to group A, B, C, and D with 1-5, 6-10, 11-15 and upper than 15 retrieved oocytes, respectively. We have determined that the pregnancy rate has a direct relationship with the number of oocytes.
Results: There was a statistically significant increase in pregnancy rates in group D when compared with other groups. The number of embryos transferred in group A observed the lowest and the highest in group D. The more oocytes obtained per cycle, the more embryos transferred. Mean age in group A was 32 and 28 years old in group D. This result proved that the younger patients had bigger chance of pregnancy.
Also, percentage of fertilization in group A was less than other groups.
Conclusion: Generally, ovarian hyper stimulation has positive effect on success rates in IVF. One of the most important factors is the number of oocytes retrieved. The highest range of oocytes has the most pregnancy rate and the most successful in IVF treatment.
Key words: *Number of oocytes, Pregnancy rate, Age, In Vitro Fertilization, Fertilization rate.*

P-9
Recurrent abortion complications

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Introduction: Miscarriage is a relatively common occurrence of pregnancy that can be caused by a wide range of factors. It is the spontaneous loss of the concepts before 20 weeks' gestation.
Materials and Methods: Recent articles and text books.
Results: Recurrent abortion cause is elusive or multifactorial; a majority of miscarriages that occur before 10 weeks' gestation are due to chromosomal aneuploidies arising from noninherited, new nondisjunctional events. Other possible causes for miscarriage are as follows: The Inherited thrombophilia; thrombophilias such as the factor V Leiden mutation and the prothrombin G20210A mutation, antiphospholipid syndrome , Acquired or congenital anatomic malformations of uterine cervix and body, potentially Endocrine disorders, Reproductive tract infections with viral, bacterial, parasitic, zoonotic fungal organisms, Environmental factors; With medications and inhalation agents, ionizing radiation exposure, prolonged exposure to organic solvents and exposure to environmental toxins, especially heavy metals. Current treatment options that are currently available for many patients included: oocyte and sperm donation, preimplantation genetic

diagnosis (PGD) which has been considered an option for couples who have structural chromosomal abnormalities or unexplained recurrent miscarriage, aspirin and heparin intake for the prevention of recurrent miscarriage in women with the antiphospholipid syndrome, antithrombotic interventions, anatomical repair by hysteroscopy, laparoscopy or other useful surgeries, modification of any endocrine disorders, infections treatment, and immunological interventions.

Conclusion: Progress in the treatment of patients with recurrent spontaneous abortion is very low, despite of rapid growth in our knowledge about small molecules in the molecular mechanisms in maintaining implantation and early pregnancy.

Key words: *Miscarriage, Pregnancy, Recurrent abortion.*

P-10
Histological studies on the PCO ovaries treated by aqueous fennel extract

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Introduction: Polycystic ovary syndrome (PCOS) is a complex endocrine metabolic disorder and one of the most common causes of ovulation women in their reproductive age. There are several chemical medicines for treatment of PCOS. Using herbal medicines is better because of dangerous symptoms which can come from utilizing the chemicals. Fennel is one of the herbals that contain phytostrogen with a protection effect on metabolic disorders.

Materials and Methods: In this research, after preparing the aqueous fennel extract, fifty six female rats divided into five equal groups were categorized in: 1) Control group: rats received just food and water, 2) Rats were gavaged by high dose fennel extract for thirty days. 3) Rats were injected with Estradiol-Valerate for induction of PCOS, 4) Rats were injected with Estradiol-Valerate and treated with high dose fennel extract, 5) Rats were injected by Estradiol-Valerate and treated with low dose fennel extract. After one month, ovaries were removed and prepared for microscopic studies. Histological characteristics of ovaries were observed after hematoxilyne-eosin staining.

Results: Results showed that fennel extract could treat PCOS effectively. Also, high dose fennel had more effect in comparison of low dose fennel. Fennel can treat PCOS and suggests for treatment of other metabolic and hormonic disorders.

Key words: *Fennel, Female rats, PCOS, Ovary.*

P-11
The effect of progesterone and ovarian stimulation on ultrastructure of endometrial pinopodes immediately before implantation in mouse

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Introduction: Endometrial epithelial pinopodes, generally considered as a marker of endometrial receptivity, seem to be directly involved in the adhesion of the blastocyst to the endometrial surface. The aim of this study was to assess the effects of ovarian stimulation and progesterone injection on pinopode expression in the mice.

Materials and Methods: Thirty female mice were divided into 3 groups as: control, superovulated and superovulated-progesterone injection. In experimental groups the mice received 7.5 I.U human menopausal gonadotropin (HMG) and later human chorionic gonadotropic (HCG) hormones. Then every two female mice with one male mouse put in one cage for mating. Superovulated-progesterone group were injected with progesterone (1mg/mouse) in 24, 48, 72 hours interval, after HMG injection. Animals were sacrificed by cervical dislocation 96 hours after HMG injection or mating, and their uterine specimens were prepared for transmission electron microscope studies.

Results: The electron microscopy observations showed that in most of the control and hyperstimulated-progesterone groups 4 days after HMG injection, there were long and short microvilli and had no pinopodes, while in hyperstimulated group, well developed pinopodes were expressed 4 days after HMG injection.

Conclusion: The results show that hyperstimulated of mice without progesterone injection may be more helpful in formation of pinopodes and implantation.

Key words: *Ovarian stimulation, Progesterone, Pinopode, Transmission electron microscopy.*

P-12
Comparative study of medical and laparoscopic treatment of patients with ectopic pregnancy

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Introduction: Ectopic pregnancy is the implantation of fertilized ovum on any tissue out of the endometrial lining of the uterus. The aim of this study was to compare the systemic methotrexate (medical) with laparoscopic treatment of patients with ectopic pregnancy.

Materials and Methods: This cross-sectional, analytic study was carried on 55 patients with ectopic pregnancy at Alzahra teaching hospital in 2008-2019. The patients were divided in two groups. Group one (25 patients) received systemic methotrexate and group

two (30 patients) was treated by laparoscopy. T-test and Chi-square test used for analysis and p-values of 0.05 or less were considered as statistically significant.
Results: The results of chi-square analysis indicated that there was no significant difference in the treatment success rate between two groups. The effect of the previous ectopic pregnancy on failing of treatment in the medical group was significant (p=0.005). The time of obtaining normal level of BHCG in laparoscopic group was faster than medical group (p=0.0005). The effect of the previous infertility on the laparoscopically treatment failure rate was significant (p=0.01). Size of the mass did not have any effect in medical group success rate but in laparoscopic group, smaller sizes were confronted with more success rate in treatment. Gestational age and History of previous abortion did not have any effect on treatment rate of both groups.
Conclusion: Medical treatment by methotrexate is recommended for selected patients with Ectopic Pregnancy as a noninvasive method.
Key words: *Ectopic Pregnancy, Laparoscopic surgery, Systemic methotrexate, Salpingectomy.*

P-13
Gestational surrogacy complication

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Introduction: Clinically a couple is considered to be infertile after at least one year without contraception and without pregnancy. Third party reproduction involves using gametes or the uterus of a third person to achieve pregnancy by their own genetic children. The indications for treatment include absent uterus, recurrent miscarriage, repeated failure of IVF and certain medical conditions. Treatment by gestational surrogacy is straightforward and follows routine IVF procedures for the commissioning mother, with the transfer of fresh or frozen-thawed embryos to the surrogate host.
Materials and Methods: We study 106 infertile couples and 78 volunteers Surrogacy referred to Royan Institute from early 2009 until the end of November 2010. This includes examining issues such as indications of surrogacy, medical precedence of ART, wife's age, and education and for the genetic parent and age, number of deliveries, number of healthy children, education, employment status, location, donation records, and donation motivation for volunteers of surrogate host.
Results: 33 volunteers were approved in the screening process. 31 treatment cycles successfully complete of 60% as well as seven healthy babies were born from 5 pregnancies till now and the remaining cycles are being followed.
Conclusion: The wright to be a parent, although not constitutional, is intuitive and deeply rooted. The results of treatment are satisfactory and the incidence of major ethical or legal complications has been limited. IVF surrogacy is therefore a successful treatment for a small group of women who would otherwise not be able to have their own genetic children.
Key words: *Surrogacy, Pregnancy, Donation.*

P-14
The effect of electromagnetic field on microstructure of placenta

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Introduction: One of the most important issues regarding low frequency electromagnetic field (EMF) is their accepted capacity to affect reproductive tissues. The increasing use of EMF in new technologies by pregnant women need to investigated. Since there is no report about effects of EMF on placenta tissue, this study aimed to explore the possible effect of EMF exposure on mice placenta.
Materials and Methods: For this purpose 20 pregnant mice were selected and 10 of them were kept under normal condition till delivery as an control group. Experimental group were exposed to 50 Hz non ionizing radiation during pregnancy. Immediately after delivery, placentas were fixed and processed for histological staining by H&E and PAS.
Results: In experimental group, the amount of embryonic part was less than controls ($p<0.05$). Our results showed nuclei alteration in trophoblastic, decidual, stromal and glandular cells and plenty of cystic cells in maternal part. The contents of cystic cells were PAS positive.
Conclusion: Our study is the first to indicate that EMF can change microstructure of placenta.
Key words: *Electromagnetic field, Placenta, Microstructure.*

P-15
Effects of Kerack used in Iran on sperm parameters and testis structure in adult mice

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Introduction: Kerack is emerging illicit substance which its use is rising up in Iran. It has harmful effects on body organs. The aim of this study is to investigate the effects of Iranian Kerack on sperm parameters and testicular structure of mice.
Materials and Methods: In this study, 25 male mice (Balb/c) were divided into five groups (control, sham and three experimental). Experimental groups of Kerack-dependent mice (received ascending dose of Kerack for seven days twice daily) were divided into three categories, experimental I, II and III were given Kerack at a dose of 5 mg/kg, 35 mg/kg and 70 mg/kg respectively, intraperitoneally twice a day for a period of 35 days. The sham group received normal saline and lemon juice whilst the control group just received water and food. Mice were then scarified and sperm removed from cauda epididymis and analyzed for sperm count, motility, morphology (normal/abnormal) and viability. Testes were also removed, weighed and processed for light microscopic studies.
Results: The results showed that epididymal sperm parameters were significantly decreased in experimental groups (dose-dependent) compared with sham and control groups ($p \leq 0.01$). Gonadosomatic index and diameters of seminiferous tubules were significantly reduced with high dose Kerack (70 mg/kg) injected in comparison with control testes.
Conclusion: It is concluded that Iranian Kerack has the destructive effects on reproductive system in male mice.
Key words: *Kerack, Illicit substance, Sperm.*

P-16
The effects of BSO-induced oxidative stress on sperm fertility in mice

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Introduction: Infertility is a major clinical problem, affecting people medically and psychosocially. Antioxidants and reactive oxygen species (ROS) are in balance in the body. Whenever the balance between these molecules is disrupted towards an overabundance of ROS, oxidative stress (OS) occurs. There are evidence that gluthatione as an intracellular antioxidant plays an important role against ROS in male reproductive system. The aim of the present study was to investigate BSO induced OS on fertility of sperm.
Materials and Methods: In this study, 60 male mice (balb/c race) were divided into three groups: control, sham and experimental group. The experimental groups received 2 mmol/kg BSO daily for 35 days as IP injection. After sperm gathering and preparation, oocytes were obtained from stimulated female mice oviduct. After 24-48 h exposure of oocytes with sperms in culture medium (Hams F-10), for inspection an invert microscope were used and formation of conceptus was a criterion for determination of fertilization ability of sperm. So Blood samples were taken for antioxidant enzymes investigation and Semen parameters were evaluated for sperm counting and motility.
Results: The results showed that the percent of embryo formation in experimental group comparing to control and sham groups were significantly reduced ($p<0.01$). Also results of semen parameter showed that in experimental group of adult mice, the number of sperms were less than the control group ($p<0.05$).
Conclusion: The result indicates that BSO-induced OS could affect the fertility of sperm.
Key words: *Buthioninesul foximine, Glutathione, In Vitro Fertilization (IVF).*

P-17
Polycystic ovaries, psychopathology and body mass index (BMI)

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Introduction: To investigate the relationship between pscychologic disorders and BMI in patients with polycystic ovary syndrome (PCOS) compared to controls.
Materials and Methods: A case-control study was conducted in the clinics of Tabriz University of Medical Sciences, Iran, from February 2005 to November 2010. BMI of 330 PCOS women with known psychopathologic disorders were compared according to the severity of psychopathology. Suspected psychopathology was found by a questionnaire and a psychiatrist consultation and the appropriate diagnosis was made according to the OSM-IV criteria. Statistical analyses were carried out using the SPSS, 15.0.
Results: Overall, 480 participants were included in the study (330 PCOS subjects and 150 control subjects). There was no significant difference in the mean age (23.09±4.32 and 25.07±3.78, respectively) (p=0.29), marital status ($\chi 2=56.5$, p=0.45), and BMI (27.4±8.2 kg/m^2 and 26.8±7.1 kg/m2, p=0.43) of the studied groups. There was a significant difference in the severity of disorder type and BMI in cases (p=0.001). In subjects with severe chronic anxiety, severe depression, and anxiety disorders, compared to non-severe disorders, BMI's were as follows; (34.4±3.9 kg/m^2, 30.8±5.0 kg/m^2, and 35.1±8.6 kg/m^2) and

(22.1±2.6 kg/m^2, 21.8±3.3 kg/m^2, and 24.1±2.0 kg/m^2), respectively.

Conclusion: The results showed that compared to controls, PCOS subjects with more severe psychological disorders had lower BMI than those with non-severe disorders (≤25 kg/m^2 vs. ≥30 kg/m^2, respectively). Factors other than metabolic derangements may be involved and induce psychological disorders in these subjects.

Key words: *PCOS, Psychological disorders, BMI.*

P-18

Protective role of garlic (Allium sativum L) on lead-induced oxidative stress and suppressed reproductive health in male rats

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Introduction: Garlic is versatile vegetables often used as ingredients in many dishes for flavor, aroma and taste enhancement. Some researchers were isolated and identified several flavonoides, and sulfur-containing compounds in garlic plant. These are likely to play an important role in the widely demonstrated biological effects of garlic, which include anti tumor, hypo lipidemic, hypo cholesterolemic, anti atherosclerotic, antioxidant and immunomodulatory.

Materials and Methods: The objective of the present study was to investigate the beneficial effects of garlic on lead-induced oxidative stress and suppressed reproductive performance in male rats. After an acclimatization period of one week, 15 Male rats were divided into 3 groups of 5 rats each. Animals within different treatment groups were maintained on their respective diets for 6 weeks as follows: group 1, untreated control; group2, treated orally with lead acetate (1000ppm); group 3 treated orally with A. sativum extract (400mg/kg) plus lead acetate(1000 ppm).

Results: Significant decrease in the weights of testes and epididymis were observed in lead treated animals. Exposure to lead acetate significantly increased malondialdehyde levels with a significant decrease in the superoxide dismutase and catalase activities in testes of rats. Epididymal sperm count, viable sperms, motile sperms decreased significantly in lead-exposed rats. Co-administration of aqueous extracts of garlic to lead exposed rats showed a significant increase in the weights of reproductive organs, reduction in lead-induced oxidative stress in the tissues and improvement in selected reproductive parameters over lead-exposed rats indicating the beneficial role of garlic to counteract lead-induced oxidative stress and to restore the suppressed reproduction in rats.

Key words: *Garlic, Lead, Oxidative stress, Rat, Sperm.*

P-19

The effect of treatment with eicosapentaenoicacid on expression of PPARG and COX-2 in human ovarian granulosa cells

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Introduction: Peroxisome proliferator activated-receptor gamma (PPARG) can be activated by fatty acids and activation of PPARG improves ovulation in women with polycystic ovary syndrome (PCOS). The purpose of this study was to in vitro evaluation effect of treatment with eicosapentaenoicacid on gene expression of PPRG and cycloxygenase2 (COX-2) in human granulosa cells.

Materials and Methods: We collected follicular fluid from PCOS subjects undergoing in vitro fertilization (IVF),and isolated granulosa cells with Ficoll-paque therefore we cultured cells in medium DMEM f12, Media were replaced after 24h ,and incubations were continued for an additional 5day,then after 24 h serum free cells treated with different doses eicosapentaenoicacid in 6,12,24 and 48 h.

Results: Total RNA was extracted from granulosa cells using Trizol reagent and cDNA synthesized. We finished real time-PCR set upping and as soon as we will evaluate expression of PPARG and COX-2.

Conclusion: We hope that the result of this study can be point started to more investigation and be helpful to improve the treatment of infertility in PCOS women's.

Key words: *PPARG, PCOS, COX-2, Eicosapentaenoic acid.*

P-20

Uterine cavity-myoma fistula after hysteroscopic myomectomy mimicking uterine perforation on hysterosalpingography: a case report

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Fistula formation between the uterine cavity and the cavity of a subserosal myoma was diagnosed on laparoscopy/hysteroscopy in 39 year old woman with primary infertility. She had undergone two previous hysteroscopic resections for removal of a submucosal

myoma as part of her infertility treatment. Hysterosalpingography demonstrated leakage of contrast from the uterine cavity, a characteristic feature for uterine perforation. On hysteroscopy/laparoscopy there was a hole in the posterior wall of the uterine cavity with connection to the cavity of a subserosal myoma without any tract to the peritoneal cavity. Laparoscopic myomectomy with repair of uterine wall defect at the site of the fistula was performed. Subsequently, the patient has conceived in an office gonadotropin cycle, currently with an ongoing normal 20 week pregnancy.

Key words: *Uterine cavity-myoma fistula, Hysteroscopic myomectomy, Complication.*

P-21
Sexual satisfaction in Iranian married men and women

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Introduction: Marital satisfaction is affected by many factors. One of the most important factors is safe and pleasurable sexual relationships. In Iran, like some other controversial societies, sexuality issues involve socio-cultural obstacles as well as limiting policies which make research difficult, so that inadequate information is made available in the area. The aim of this research was to determine sexual satisfaction level in Iranian men and women.

Materials and Methods: This descriptive study was conducted in 2008 in Tehran; continued sampling was used to recruit 292 married males and females from selected hospitals in Tehran while visiting their hospitalized relatives. They were all literate and had been married for at least one year. Hudson scale was used for data collection. Also test and SPSS software was used for data analysis.

Results: The results showed that, of the participants, 63.4% were completely satisfied, 28.8% relatively satisfied, 7.2% slightly satisfied, and 0.7% unsatisfied. Also, the results of test showed that there is a significant association between sexual satisfaction and the following factors: age difference of couples (p=0.04), duration of married life (p=0.05), and drug abuse by the participants (p=0.007), but there was not a significant association between sexual satisfaction and other factors tested in this study.

Conclusion: According to the results, we suggest the practical strategies to improve people's awareness about sexuality matters and its vital influences on marital happiness. More work is suggested to be done in order to provide research based information in this field.

Key words: *Sexual satisfaction, Sexual relationship, Marital satisfaction, Married.*

P-22
Evaluation of the effect of levonorgestrel IUD vs oral medroxyprogesterone acetate on abnormal uterine bleeding and fertility preservation in simple endometrial hyperplasia

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Introduction: The aim of this study was compared of effect of levonorgestrel IUD and medroxy progesterone acetate on simple endometrial hyperplasia as a precursor of endometrial cancer in young women.

Materials and Methods: 40 women with AUB that endometrial biopsy was reported simple hyperplasia was selected, patient divided two groups, incidentally, design special checklist and fill with satisfaction, complete history and physical exam, bimanual vaginal exam and transvaginal sonography was done. In first group, treatment with medroxy progestron acetat (MPA) drug regime was 20mg/daily for10 days and in other group levonorgestrel IUD was used. After 3 month transvaginal sonography and biopsy of endometrium was done, status of AUB and side effect of two methods evaluated and rate of satisfactory of two groups was asked.

Results: This study showed significant difference in two groups according to treatment of simple hyperplasia in levonorgestrel IUD group than MPA group ($p<0.047$). Improvement of AUB in the group of IUD levonorgestrel was better ($p<0.047$). In none of two groups endometrial thickness was reduced ($p<0.001$) but reduction of endometrial in IUD group was more. Tolerance of IUD was more than MPA while side effects of MPA was more and showed significant difference ($p<0.003$). The rate of patients satisfactory of IUD was more than medroxy progesterone acetate with significant difference ($p<0.048$).

Conclusion: The result showed levonorgestrel IUD is more effective than MPA in treatment of simple endometrial hyperplasia without need of hysterectomy. We also can treat young infertile patients with endomtrial hyperplasia hormonally and doing hysterectomy will be considered for the patients who do not answer hormonal therapy in next curettages.

Key words: *Simple endometrial hyperplasia, Levonorgestrel IUD, Medroxyprogesterone (MPA), Abnormal uterine bleeding.*

P-23

Protective roles of Spirulina extracts on cadmium-induced changes in sperm characteristics and testicular oxidative damage in rats

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Introduction: Spirulina is cultivated extensively as a protein rich material for application as a human food, feed supplement for animals of economic importance. Spirulina is 60-70% protein by weight and contains a rich source of vitamins, especially vitamin B12 and provitamin A (β-carotene), and minerals, especially iron. One of the few sources of dietary, linolenic acid (GLA), it also contains a host of other phytochemicals that have potential health benefits. The objective of this study was carried out to investigate the potential protective effects of Spirulina algae extract against cadmium (Cd) toxicity.

Materials and Methods: For this purpose fifteen adult male rats were treated with three different regimens: Animals within different treatment groups were maintained on their respective diets for 5weeks as follows: group 1, untreated control; group2, treated with Cadmium chloride (CdCl2) (200 ppm) and group 3, treated with Spirulina extract (500mg/kg BW) plus Cadmium chloride (200 ppm).

Results: Co-administration of aqueous extracts of Spirulina algae with cadmium chloride prevented the changes in sperm and biochemical parameters. Exposure to Cadmium chloride significantly increased malondialdehyde levels with a significant decrease in the superoxide dismutase (SOD), catalase (CAT) and glutathione peroxidase (GSH-Px) activities in testes of rats. Supplementation of aqueous extracts of Spirulina to Cd-induced rat groups declined lipid peroxidation, increased sperm motility and viability and increased the activity of antioxidant enzymes.

Conclusion: These studies suggest that administration of extracts of Spirulina protects against cadmium-induced and testicular oxidative stress.

Key words: *Cadmium, Oxidative damage, Spirulina extracts, Sperm characteristics.*

P-24

Subcellular localization of L-Selectin ligand in the endometrium reveals a novel function for pinopodes in endometrial receptivity

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Introduction: Apical surfaces of human endometrial epithelium and endothelium are key elements for the initiation of molecular interactions to capture the blastocyst or leukocyte, respectively. The L-selectin adhesion system has been strongly proposed to play an important role in the initial steps of trophoblast adhesion and promotion of integrin-dependent processes, ultimately culminating in the establishment of the embryo-maternal interface. On the basis of these facts, we hypothesized a novel role for pinopodes as the first embryo-fetal contact sites to contain the highest subcellular expression of L-selectin ligand suggesting its role in early adhesion as predicted.

Materials and Methods: Endometrial biopsies of were studied using several approaches, including scanning electron microscopy (SEM), immunostaining for light microscopy and transmission electron microscopy (TEM), and immunoblottingas as well as statistical analysis of the area-related numerical densities of immunoreactive MECA-79-bound nanogolds.

Results: The SEM images of the mid luteal phase specimens revealed that fully developed pinopodes were abundant in our samples. HRP-immunostaining and immunoflouresent staining as well as immunoblotting revealed that MECA-79 was expressed in the mid luteal phase specimens. The results of immune gold TEM illustrated the expression of MECA-79 in human pinopodes in the mid luteal phase and a higher area-relate numerical density in pinopodes compared to that of the uterodome-free areas.

Conclusion: This is the first demonstration of the subcellular localization of MECA-79 in the human pinopodes which may indicate a novel role for pinopodes to be capable of shear-stress-dependent tethering-type adhesion in the initial phases of human embryo implantation.

Key words: *Endometrium, Uterodome, Implantation, MECA-79, L-selectin Ligand, Pinopode.*

P-25

The value of negative chlamydia trachomatis antibody in prediction of normal tube in infertile women

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Introduction: To evaluate the value of Chlamydia trachomatis Antibody testing in prediction of at least one normal tube in infertile women.

Materials and Methods: 80 infertile women without history of abdominal or pelvic surgery, pelvic

inflammatory disease and endometriosis were recruited in this cross sectional study from 2009-2010. The patients were underwent histrosalpingography, laparoscopy and Anti Chlamydia Trachomatis immunoglobulin G antibody testing (CAT). We compared laparoscopy findings and CAT regarding sensitivity, specificity, accuracy and predicting value of tubal conditions.

Results: The CAT was positive in 50 patients (62.5%) and laparoscopy was in 32 patients (40%). The CAT was significantly higher in women with tubal disease (1.88±0.34) versus in normal tubes group (1.21±0.28) (p=0.003). Five out of 30 seronegative women had unilateral tubal abnormality and none of them had bilateral tubal obstruction or severe pelvic adhesion. The sensitivity, specificity, positive and negative predictive value and accuracy of the CAT in prediction of one normal tube were 100%, 42.25%, 18%, 100% and 48.75% respectively.

Conclusion: The negative predictive value of CAT to predict at least one normal tube in infertile women without history of abdominal or pelvic surgery, pelvic inflammatory disease and endometriosis was 100%.

Key words: *Chlamydia Trachomatis Antibody, Fallopian Tube evaluation, Female Infertility.*

P-26

Case report of a partial hydatiform mole in the fallopian tube

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Introduction: Molar pregnancy is an uncommon phenomenon occurs in approximately one to two cases per thousand. It is characterized by complete or partial abnormal proliferation of trophoblastic tissue. An ectopic pregnancy is a phenomenon that occurs in one percent of pregnancies and in most cases is in the fallopian tubes. Occurring of these two phenomena together is a rare even that had been reported in less than 40 cases until 2004. In this report a 32 year old patient with a history of primary infertility for five years with a tubal molar pregnancy is introduced.

Case report: The patient was a 32 year old woman who was obese and hirsute, with a five years history of primary infertility that had been under ovulation induction therapy with a diagnosis of PCO for a long time. She had not received any medication, and had no medical visit for six months. Patient was referred to the clinic with a 15 day cycle delay and mild lower abdominal pain. Her βHCG was 1400. Ultrasonography of the uterus and the appendices was normal. The patient was suspected for ectopic pregnancy and went under supervision. After seven days, the βHCG and ultrasonography were repeated. βHCG was 4500 and the ultrasonography reported adnexal mass. The patient complained about more pelvic pain, but had no acute abdomen. In examination, cervical motion was painful, and the uterine size was not palpable because of the obesity of the patient. Vital signs were stable. The patient underwent laparatomy and salpingectomy. Salpingectomy was done because of the presence of molar tissue. After 35 days, the extent of βHCG reached to normal level, and remained normal within one year after the surgery.

Key words: *Tubal pregnancy, Hydatiform mole.*

P-27

The prevalence and factors associated with preterm delivery in pregnant women referring to the hospitals of Birjand in 2010

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Introduction: Premature labor is one of the great difficulties endangering the health of society and the more constant factor for determining neonatal mortality. However, the permanent disabilities in living neonates is very important undoubtedly, and existence of people with neurological or physical defects from the consequence of prematurity is one of the tragedies of the world. The aim of this study is to determine prevalence and known causes of premature labor.

Materials and Methods: This descriptive-analytic Cross sectional study performed on pregnant women delivered in Valiasr Maternity hospital from June-December 2009. Data were taken by a questionnaire including age, occupation, place of living and level of education in both term and preterm labors. Data were analyzed by using Chi square and T-test in SPSS software.

Results: The incidence of preterm labor was 7.6%. There was no significant statistically difference between individual characteristics of pregnant women with term and preterm labor. However, Chi square test showed significant statistically relationship between previous history of infertility, and use of pregnancy-induced drugs with preterm labor and previous history of preterm birth and prematurity in this recent labor ($p<0.001$).

Conclusion: Our results showed that control and treatment of maternal systemic disease specially UTI, anemia and HTN, increasing the mothers knowledge and information about dangers of prematurity, the importance of prenatal care and avoidance of premature labor are very important factors in decreasing the incidence of prematurity.

Key words: *Preterm labor, Risk factor, Hypertention, UTI.*

P-28

Self-esteem infertile women referred to the Research and Clinical Center for Infertility of Yazd

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Introduction: Self-esteem, a positive regard of oneself, is a universal need for every human being and is a key component in restoring and maintaining mental and physical health. According to Rosenberg, means that individuals respect themselves, consider themselves worthy, recognize their limitations and expect over time to grow and improve. The aim of this research was determine self-esteem infertile women referred to the Research and Clinical Center for Infertility of Yazd.
Materials and Methods: This is a descriptive and cross-sectional study that conducted among 151 infertile women referred to the research and clinical center for infertility of Yazd in 2012. The data collection tools in this study was questionnaire included demographic characteristics with 12 questions and Rosenberg self-esteem measuring scale. The results were analyzed by SPSS (version 16) by using ANOVA, Regression and T test.
Results: The mean and standard deviation of participant age was 28.55±4.97, and 20.5% had background infertility in their families. The mean and standard deviation of Self-Esteem score was equal 19.04±4.1 (total score 30) that showed their Self-Esteem were in average level. There were significant relationship between mean of Self-Esteem and their husbands educations (p=0.004) and their husbands jobs. Also there was a significant correlation between mean of Self-Esteem and age of participant (p=0.014 and r=0.2*).
Conclusion: Self-Esteem Infertile women were in average level due to mental and spiritual situation dominant their life that seem family support among their husbands have an important and effective role in improve and promotion their mental health.
Key words: *Self-Esteem, Infertile women, Yazd, Mental health, Rosenberg.*

P-29
Malignant endometrial disorders are a therapeutic dilemma for young women with infertility

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Introduction: Type I endometrial carcinoma is associated with a predisposing history of hyperestrongenism, anovulation with or without PCO as promoters of endometrial carcinoma. The relationship of infertility endocrinology and endometrial adenocarcinoma has become clear in recent years. PCO increase the risk of endometrial carcinoma. We followed 6 young infertile women with malignant endometrial disorders who treated with conservative hormonal therapy.
Materials and Methods: Six young women presenting for infertility were diagnosed as having endometrial hyperplasia or endometrial carcinoma (grade 1). A second endometrial biopsy was performed after they have treated for 3 months with high dose of progesterone.
Results: Curettage of endometrium at the end of treatment revealed no evidence of malignant endometrial disorder in four cases but 2 cases had persistent disease after treatment.
Conclusion: This case series indicates that medical therapy for young women with endometrial cancer (grade 1) who wish to preserve their fertility is a choice before hysterectomy. In young women with infertility and PCO, prolonged amenorrhea should be prevented by using cyclic progestrogens. Regular withdrawal bleeding will protect the endometrium from long term unopposed estrogen stimulation.
Key words: *Infertility, Endometrial disorders, PCO.*

P-30
Infertility is associated with increased risk of ectopic pregnancy

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Introduction: Ectopic pregnancy is a major event in a woman's reproductive life. It complicated infertility treatment. It is the common cause of maternal mortality in the first trimester of pregnancy. The purpose of this study is to evaluate any association between the history of infertility and risk of ectopic pregnancy.
Materials and Methods: In a cross-sectional study we compare the history of infertility and infertility treatment between 159 patients with ectopic pregnancy who hospitalized in Alzahra hospital affiliated to Tabriz University of Medical Sciences, Tabriz, Iran and 200 cases of normal intrauterine pregnancies between March 2007-2008.
Results: The incidence of ectopic pregnancy was 1.26 per 100 live births. The mean age of patients was 28.4±6 years. The rate of infertility in patients with ectopic pregnancy was higher than normal groups (10% vs. 3%). Other risk factors included: history of previous ectopic pregnancy. Cigarette smoking, current intrauterine device usage (11% vs. 7%) pelvic inflammatory disease (19% vs. 13%).
Conclusion: Our results support other studies. Identification of risk factors is important in the prevention and early diagnosis of ectopic pregnancy.

History of infertility and invitro fertilization, tubal damage due to surgery and infection and smoking are the major risk factors for ectopic pregnancy.

Key words: *Infertility, Ectopic pregnancy, Risk factor.*

P-31

The effects of intravenous hydration on amniotic fluid index in pregnant women with preterm premature rupture of membranes

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Introduction: Preterm premature rupture of membranes (PPROM) is a frequent obstetrical incident which can result in maternal and fetal complications.This study aimed to determine the effects of intravenous fluid bolus on amniotic fluid index (AFI) in pregnant women with PPROM.

Materials and Methods: 24 women with PPROM during singleton live pregnancy of 28 to 34 weeks whose AFI was ≤5 were randomized into two groups. Baseline AFI was measured in all women. The study group received a 1 liter intravenous fluid bolus of isotonic serum over a 30-minute period. The control group received routine management. A particular examiner blinded to the groupings repeated the examination 90 minutes and 48 hours later.

Results: AFI decreased at 90 minutes in both groups. However, this decrease was statistically significant only in the control group ($p<0.05$). The difference in ΔAFI (90 minutes and baseline) between the two groups was not significant ($p=0.18$). AFI decreased at 48 hours after hydration in both groups. This decrease was not statistically significant in any group. The time between mean baseline measurements and delivery were 196.41 and 140.58 hours in the study and control groups, respectively. This difference was not statistically significant ($p=0.49$). Intravenous fluid bolus prevents substantial decreases of AFI.

Conclusion: However, mean difference in AFI between the two groups was not statistically significant. Therefore, the procedure cannot be advised as a routine treatment for PPROM.

Key words: *Maternal hydration, Amniotic fluid index, Preterm premature ruptured membranes.*

P-32

Inflammatory changes in preeclampsia: current understanding of the maternal innate and adaptive immune responses

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Introduction: Preeclampsia is a hypertensive and multiple system disorder unique to human pregnancy. Although the etiology of preeclampsia remains unknown, there are many proposed theories regarding the pathogenesis of the preeclamptic disease processes: oxidative stress; abnormal trophoblast invasion; vascular endothelial dysfunction; genetic predisposition; dietary deficiencies, and defective immunological adaptation to pregnancy. Several lines of evidence also support the concept that preeclampsia is an excessive maternal inflammatory response to normal pregnancy.

Materials and Methods: In this review, the immunologic state of the PE is reviewed in context of innate and adaptive immunity.

Results: The cytokine profile in preeclampsia shows that the production of Th1 cytokines, which induce inflammation, is dominant while the production of Th2 cytokines, is suppressed. Maternal cytokine and chemokine levels TNF-α, IL-6, and IL-8 are also either increased or decreased during preeclampsia.

Conclusion: Cytokines have major roles in the pathogenesis of preeclampsia. It is seen circulating placental microvesicles that shed from placenta influence on immune cells to increase inflammatory cytokines such as IL-1, IL-2, IL-6, IL-8, IL-12, IL-17, G-CSF, IFN-γ, MCP-1, MIP-1, RANTES and TNF-α. Consistent with elevated cytokine levels in the maternal circulation, placental tissue cytokine levels are also altered, which implies inflammatory responses that may occur both in the maternal and the placental compartments. Therefore there are two approaches about increasing of inflammatory cytokines in pregnant and preeclamptic patients; the first is intervention to switch of inflammatory responses to anti-inflammatory immune responses in patients. In addition, we can use inflammatory biomarkers as noninvasive predictors in starting of diseases.

Key words: *Pre-eclampsia, Inflammation, Anti-inflammatory response, Pregnancy.*

P-33

Comparing of letrezole and clomiphen citrate on induction of ovulation in infertile patients with polycystic ovarian syndrome

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Introduction: Polycystic ovarian syndrome (PCOS) is the most common endocrine illness in women at Reproductive Ages, causing anovlation and infertility. Recent studies demonstrate the effective role of the aromatase inhibitors (letrozol) on ovulation induction. Monofollicular oval induction is one of its advantages that are more effective on PCOS patients. The aim of this study was to compare effects of Letrozole and

Chlomiphene citrate on ovulation induction in PCOS patients.

Materials and Methods: This controlled clinical trial study was done on 220 patients with PCOS, aged 20-35, during 2010-2011 in Urmia Medical Sciences University (Kowsar Infertility Center). The samples were divided into two Chlomiphene citrate (CC) and Letrozole groups. 110 patients were chosen as Letrozol group, that used (CC) for at least 4 months without pregnancy before. 5 mg Letrozole and 100 mg Chlomiphene were prescribed for them for 5 days. Then results were statistically analyzed by SPSS software.

Results: Endometrial thickness mean size in the study group was 8.7+-1.18 mm and in control group was 7.30+-1.20 mm (p=0.001). βHCG was positive for 30 patient in study group (27.3%) and also for 20 patients in control group (18.2%) (p=0.1); it is higher but not significant.

Conclusion: Whereas the letrozole is used for patients that were unresponsive to CC, but the occurrence of pregnancy in patients who receive letrozole is higher and multiple pregnancy probability is lesser. So in PCOS patients Letrozole can be offered as an effective and first-line alternative option for Chlomiphene citrate

Key words: *PCO induction ovulation, Letrozole, Infertility, Chlomiphene citrate.*

P-34
Effect of rosmarinic acid on estrogen, FSH and LH in female rats

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Introduction: Rosmarinic acid from the plants quenched super oxide radicals fromxanthine oxidase and inhibitedcxlo oxygenase 1 and11 enzymes. Anti oxidants have essential effect on diabetes. Enhanced oxidative stress and changes in anti oxidant capacity are considered to play an important role in the pathogenesis of chronic diabetes mellitus. Diabetes is associated with gender specific changes in sex steroid hormones. The aim of this study was to see antioxidative effect of rosmarinic acid on hormonal changes in diabetic female rats.

Materials and Methods: 40 adult Wistar albino female rats were 8 weeks old and weighed 250+10 gr. After induction of diabetes by injection of sterptozocin, one group underwent to treatment by rosmarinic acid while the control group did not. At the end the level of sex steroids and LH and FSH was assessed between two groups.

Results: Statistical analysis showed significant difference between experimental groups in comparison to control group about the level of serum estrogen.

Conclusion: Rosmarinic acid via increasing tac levels caused antioxidant protective effects in diabetic female rats in comparison with untreated group. It will be suggestion that using rosmarinic acid has beneficial effect in diabetic patients.

Key words: *Rosmarinic acid, Diabetic, Female sex hormones, Streptozocin.*

P-35
Men involvement in reproductive health: challenges and strategies

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Introduction: Nowadays, most of decisions relating to women are made by men who are in power and decision making positions and seems they have little information in field of reproductive health. In addition, little attention is paid to men reproductive health needs. It has been proved that it is impossible to gain some aims such as reducing unwanted pregnancy, STD, family planning and etc. without men involvement, because men are both part of the problem and part of the solution. The purpose of present study is to assess men involvement in different aspects of reproductive health in national and international level.

Materials and Methods: Present study was prepared by searching scientific websites- google scholar, sciencedirect, pubmed and using key words such as men involvement, gender equality, reproductive health and women health. In total 20 national and international articles plus bulletins of WHO were studied.

Results: Present article discusses about: Why involve men, International commitments for men involvement, the aims of involving men in reproductive health programs, men's knowledge of involvement in women's health (present situation), men s responsibility as sex partners, challenges of men involvement, evaluation of men involvement programs and remaining obstacles, advocacy and implications for collaborating agencies and governments. Finally, applying of these men involvement programs in Iran has been discussed.

Conclusion: "Men for Change, Health for All" is a key sentence in reproductive health; in other words, if we want to have healthy men, women, family and society, it is time to work on men involvement.

Key words: *Men involvement, Reproductive health, Women health, Gender equality.*

P-36
Routine and rapid prenatal diagnosis of aneuploidy by QF-PCR on fetal samples from mothers at high risk for chromosome disorders: East-Azerbaijan experiences

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Introduction: The most common chromosomal abnormalities are aneuploidies of chromosome 21, 18, 13, X and Y. Prenatal diagnosis of fetal aneuploidies is routinely done by traditional cytogenetic culture, which is expensive to run, requires technical expertise and takes a long period to reach a diagnosis. We report the first assessment of QF-PCR, introduced during the last few years, performed in the Azeri population.
Materials and Methods: Thirty amniotic fluid samples were taken from patients with advanced maternal age, abnormal biochemical markers, abnormal ultrasound or previous history of an abnormal child. DNA from prenatal samples was analyzed with 20 micro-satellite markers located on the chromosomes 13, 18, 21, X and Y.
Results: The results were obtained within 48-72 hours after sample collection and compared with their respective karyotypes. All the QF-PCR results were successful. Twenty nine samples showed normal patterns, whilst one sample showed trisomy 21. These were successfully detected by both techniques with one sample showing a normal pattern by QF-PCR which could not be compared to the cytogenetics due to culture failure.
Conclusion: QF-PCR is a reliable and rapid method for detection of common numerical chromosome disorders. In a group of older women, the results of QF-PCR can be used alone without karyotyping. In cases with higher risk, especially those with pathological ultrasound, analysis only with the QF-PCR method isn't enough. However, this rapid technique relieves the anxiety of most parents within 48 h from sampling with therapeutical interventions being possible without waiting for the result of cytogenetic analysis.
Key words: *Chromosomal abnormalities, Aneuploidies Amniotic fluid, QF-PCR.*

P-37
Histopathological study in testis of male rat asthma has been treated with theophylline

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Introduction: Asthma is a chronic inflammatory disease that causes excitability duct respiratory air ways are due to various factors. Because impairment in decrease of testosterone secretion and biosynthesis has been reported in lung diseases, therefore the purpose of this study was the effect of asthma on the testis.
Materials and Methods: 24 adult male rats were randomly selected and divided into two equal groups. The control group received only saline during the study. The next two groups of rats were sprayed by citric acid with fogging nozzles for a week to get asthma. And the second group with asthma was treated by theophylline. After 32 days the animals were anesthetized, testis fixed in 10% formalin the histopatological studies of testis after preparing cross sections and coloring with H&E was done by light microscope.
Results: In the asthmatic group there was disruption and disorder arrangement of Ssermatogenic Cells. Significant reduction in the coefficient of spermiogenesis.
Conclusion: The presence of mast cells in testicular interstitial tissue and reduction in amount of connective tissue Leydig mice treated with theophylline shows improvement compared to asthma rats but compared with control healthy group showed reduction.
Key words: *Testis, Rat, Theophylline, Asthma.*

P-38
Diagnostic features and therapeutic consequences of hysteroscopy in women with abnormal uterine bleeding, infertility and abortion

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Introduction: Hysteroscopy is a procedure in which the endometrial cavity is observable and subject of manipulation via transcervical route. Hysteroscopy is a minimally invasive process in diagnosis and treatment of many intrauterine conditions. myiomectomy and endometrial ablation could be easily manageable by this procedure.This study aimed at evaluating the diagnostic and therapeutical efficiency of hysteroscopy in managing of common conditions including abnormal uterine bleeding, abortion and infertility.
Materials and Methods: In a descriptive cross-sectional setting, 277 women underwent hysteroscopy were evaluated in three groups: with uterine bleeding 236 cases, with infertility 34 cases and with recurrent abortions 7 cases. This study was conducted during a 15 month period. The main causes of the complaints were determined in each group. Six months after treatment, the overall success rate was recorded.
Results: Hysteroscopy was the sole diagnostic procedure in 16.5, 8.8 and 14.3 percent of the patients in groups with abnormal uterine bleeding, infertility and abortion, respectively. In the group with infertility, myomectomy, curettage, polypectomy and ovarian puncture were the main diagnostic-therapeutical approaches along with the hysteroscopy in descending. In the group with abortion, laparoscopy, curettage and myomectomy were the main diagnostic-therapeutical

approaches along with the hysteroscopy in descending. There was not any major complication. The diagnostic-therapeutical measures accompanying with the laparoscopy were successful in 73.5% of the bleeding group and 33.3% of the infertility group in follow-up period.

Conclusion: Based on our results, hysteroscopy is a safe, accurate and highly-efficient procedure in managing women with abnormal uterine bleeding, abortion and infertility.

Key words: *Hysteroscopy, Abortion, Infertility, Uterine Hemorrhage.*

P-39

Comparison of easy and difficult embryo transfer outcomes in intra cytoplasmic sperm injection (ICSI) cycles

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Introduction: The aim of this study was to compare the effect of easy and difficult embryo transfer (ET) on implantation and pregnancy rates.

Materials and Methods: The results of 706 embryo transfer procedures were analyzed over a 12 month period. An easy ET was defined when it took place smoothly, without the use of any force and other instrumentation. ET was considered difficult if placing catheter required force and/or necessity to use other instruments and/or manipulation. Pregnancy rate was compared between patients who had easy or difficult ETs.

Results: The implantation was significantly higher in easy group compare to the difficult group (21.7%, vs.12.1%, respectively, $p<0.05$). The easy group also had higher pregnancy rate (38.1%) compared with patients who had difficult ET (21.4%) ($p<0.05$).

Conclusion: Any uterine manipulation during ET has adverse effect on IVF result and precaution should be taken to identify possible difficult ET cases in advance.

Key words: *Embryo transfer, Pregnancy outcomes, ICSI cycles.*

P-40

Association between polycystic ovarian syndrome, over weight and metabolic syndrome in adolescents

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Introduction: Polycystic ovary syndrome (PCOS) is associated with multiple metabolic abnormalities. Studies in the adolescent population are still limited and the results have been much different. The aim of this study was to investigate the association between PCOS, overweight and metabolic syndrome in adolescents.

Materials and Methods: 30 PCOS adolescents were randomly selected from a PCOS population with NIH1990 criteria and 71 adolescents from the normal adolescents. Then anthropometric, hormonal and metabolic parameters were evaluated in four sub-groups including obese and non-obese PCOS and obese and none obese normal adolescent.

Results: The prevalence of overweight and metabolic syndrome in adolescents with PCOS was 52% and 33.3% respectively vs. 22.4% ($p=0.005$) and 11.26% in normal adolescents ($p=0.0001$). Among all subjects, including obese and non-obese adolescents with or without PCOS, the prevalence of insulin resistance, hypercholesterolemia, central obesity and metabolic syndrome were 61.5%, 46.2%, 53.8% and 69.2% respectively.

Conclusion: Obesity and IR are important risk factors for metabolic syndrome in PCOS. Considering the long-term health risks, it is necessary to identify metabolic disorders in adolescents with PCOS as early as possible.

Key words: *Polycystic ovary syndrome, Metabolic syndrome, Overweight.*

P-41

How can you decrease the rate of OHSS in infertile patients with optimal result?

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Introduction: Polycystic ovary syndrome (PCOS) is one of the most common endocrinopathies affecting women in the reproductive age group, and is one of the most common causes of hyperstimulation syndrome in infertile patients. The purpose of this study was decreased OHSS due to induction of ovulation with clomiphene citrate and then letrozole in comparison of letrozole and cabergolin and an optimal pregnancy rate.

Materials and Methods: This is prospective clinical research from Dr. Rasekh Infertility Clinic. 64 infertile polycystic ovarian syndrome women were selected with 47 months infertility. The average age of them is 27.3 years (STD=5). The patients were divided into two groups: Group A; 36 patients (40%) with drug regimen; initially tab clomiphene citrare (from day 3 of menstrual cycle). Then the second drug Letrozole was started from day 8 to 11 menstrual cycle. OHSS was 0%. Group B; 28 patients (31.1%) with drug regimen; initially tab Letrozole (from day 3 of menstrual cycle).Then the second drug cabergolin started from day 8 to 11 menstrual cycle. OHSS was 0%. Pregnancy rate in group A, 8 (22%) and in group B; 6 (21%). The patients were monitored for ovulation by translational ultrasonographic folliculometry, with measurement of number and size of the follicles, as

well as endometrial thickness. Human chorionic gonadotrophin (HCG) was injected intramuscularly when at least one mature follicle with more than 18 mm diameter was detected. Data was analyzed with SPSS statistical software.

Results: The rate of OHSS is similar in both groups ($p<0.05$). This means that both methods of treatment can be completely prevented the creation of OHSS. Pregnancy rate in both groups was almost the same ($p<0.05$).

Conclusion: We recommend for the prevention of OHSS that is a serious complication in treatment of infertile women which one of two above method are used. Whilst in both methods has been favorite fertility rate. The goal of treatment is minimal side effects with optimal result.

Key words: *OHSS, PCOS, Clomiphen, Letrozole, Cabergolin.*

P-42

Antenatal screening for Down syndrome in assisted reproductive pregnancies (ART)

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Antenatal screening and diagnosis of Down syndrome (DS) is a well-established worldwide practice. In recent years both maternal age & the wide use of assisted conception methods has risen dramatically. Not only serum markers in singleton pregnancies with assisted reproductive pregnancies (ART) affects (because of the fetoplacental endocrinological metabolism in these kind of pregnancies), but also ART led to a high prevalence of twin and higher order pregnancies and it complicates even more the antenatal screening algorithms. All of these led to higher false-positive results.

ART pregnancies are on older maternal age and achieve after longstanding infertility and they are extremely wary of any invasive fetal karyotyping. Therefore should provide the most accurate screening of DS. Ultrasound screening by nuchal translucency (NT) measurements at 11-14 weeks is associated with a lower false-positive rate than mid-trimester serum screening and combination of NT measurement and serum screening in singleton pregnancies have the lowest false-positive rate. In multiple pregnancies, serum screening has limited clinical value and NT measurement is the most efficient screening method for these pregnancies. Therefore it should be systematically performed before any fetal reduction in high-order multiple pregnancies is planned.

Key words: *Antenatal screening, Assisted reproductive pregnancies, Down syndrome.*

P-43

Effects of vitamin E and pentoxifylline on the uterine horns properties in female rats

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Introduction: Vitamin E is powerful biological antioxidants that could protect cell membranes against any damages. Also, Pentoxifylline (PX) is antiplatelet drug (decreasing blood viscosity) that inhibit the production of cytokines as well as Tissue Necrosis Factor (TNFα). It's well documented that Pentoxifylline and vitamin E cause reduce ischemia reperfusion injury in ovarian tissue after experimental ovarian ischemia. Based on we decided to determine the effect of the Pentoxifylline and vitamin E on characteristics of the uterine horns in vitro in female rats.

Materials and Methods: A total of twenty four female rats were randomly divided into 3 groups involving: group 1 (oral PX 50 mg/kg once a day), group 2 (vitamin E intramuscular injection, 100 mg/kg once a day) and group 3 group (saline controls that received the same dose of PX). After 28 days treatment, rats were euthanized with chloroform and uterine horn sampled separately and stained with Hematoxylin and Eosin. Finally, tissue changes studied with light microscopy.

Results: Our results showed that vitamin E protect the mucosal tissue of uterus, increased uterine glands number and had more protective effect than Pentoxifyllin.

Key words: *Vitamin E, Pentoxifylline, Uterine horns, Rats.*

P-44

Protective effect of satureja Khuzestania extract against cyclosporine-induced toxicity on the fertility rate in adult male rats

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Introduction: Cyclosporine is one of the main immunosuppressors used for renal transplant recipients, and is given to prevent transplant rejection. Although the drug increases the survival of patients and grafted organs, it has some side effects independent of its effect on the immune system that are usually ignored. Satureja Khuzestanica is famous for its medical application as an analgesic and antiseptic in folk medicine. In this study, the effect of Satureja

Khuzestania extract on the embryo quality in adult male rats which were treated with cyclosporine.
Materials and Methods: 24 rats were randomly divided into three groups as described below according to the treatment they received; control group, Satureja Khuzestania+ cyclosporine group (100mg and 45 mg/ kg per day, orally respectively) cyclosporine group(45 mg/kg per day, orally). The treatment period was 45 days. Percentage of zygotes, two cell, blastocyct and type of embryos were evaluated.
Results: Results indicated that the percentage of zygotes, two cells and blastocyct reduced in cyclosporine treated rat in compartion with control and Satureja Khuzestania+ cyclosporine groups, also type III (high quality) embryos increased in Satureja Khuzestania+ cyclosporine group.
Key words: *Satureja Khuzestanica, Cyclosporine, Male rat, IVF.*

P-45
Protective effect of hawthorn extract on cyclosporine A-induced damage in male mice

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Introduction: Approximately 20% of couples in their reproductive age are suffering from infertility in which male infertility is a contributory factor in half of all these couples. Cyclosporine A (CsA) is a cyclic undecapeptid of fungal organ which is widely used as immunosuppressant for organ transplantation. In addition to renal and hepatic cytotoxicities, testicular toxicity has been known. Hawthorn is considered to be one of the oldest pharmaceutical plants of the world that is widely prescribed or used in medicine. This study was conducted to investigate the effect of hawthorn extract on cyclosporine A (CsA)-induced embryo damages.
Materials and Methods: 32 adult male mice, weighing 20±3 g were used. In treatment group Cyclosporine A were given at the dose of 45 mg/kg/day and Hawthorn extracts at dose of 30 mg/kg/day by gavage for 45 days. After 45 days the animals were sacrificed and Fertility Value from each group were studied.
Results: This investigation revealed that cyclosporine can decrease fertility in mice but Asrmhafzty Brtvan hawthorn have improved embryo quality and increase zygotes, two cell embryo, and blactocycte.
Conclusion: Ciclosporine is a powerful immunosuppressive agent that has improved graft survival rates in organ trasplantation. In some study reveaed that Ciclosporine coused decreaed in sperm viability, motility, sperm count and level of serum testestrone. In our study, 2-cell embryos were stopped division and did not continue to blastocyct stage in cyclosporine group. Possitive effect of hawthorn extract in improves of development embryo to blastocyct stage in treatment rats were consideredonclusion.
Key words: *Cyclosporine A, Hawthorn extract, Reproductive organs.*

P-46
Subsequent pregnancy outcomes in patients with molar pregnancy and persistent gestational trophoblastic neoplasia

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Introduction: To evaluate the subsequent reproductive outcomes in patients with complete and partial molar pregnancy and gestational trophoblastic neoplasia (GTN) at the Motahari Hospital in Urmia from 1383-1389.
Materials and Methods: Questionnaires regarding subsequent pregnancies were done to all patients with history GTN were managed at the Motahari Hospital in Urmia Medical Science University.
Results: 45 patients had become pregnant after recovery, with total of 51 pregnancies. Among these, 4 were terminated by miscarriages and 3 as molar pregnancy. 36 patients had 40 term live baby delivery.
Conclusion: Patients with molar pregnancies and GTN should be reassured that they can in general expect a normal future reproductive outcome.
Key words: *Gestational trophoblastic neoplasia, Molar pregnancy, Pregnancy.*

P-47
Influenza vaccination in pregnant women, necessity or advice?

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Introduction: Women are at increased risk for morbidity and mortality from influenza during pregnancy. Vaccinating pregnant women for influenza can protect both the women and their infants. It is recommended inactivated influenza vaccine for all women who are pregnant during influenza season, regardless of trimester. In this study, the efficacy and importance of the Influenza vaccine is reviewed in pregnant women.
Materials and Methods: It was written with searching keywords such as Influenza vaccine, pregnancy and

efficacy in databases include pubmed and google scholar.

Results: One potential approach to protecting young infants against influenza infection is to vaccinate their mothers during pregnancy. The studies support the possibility of protecting the offspring against influenza by immunization of the mother. IgG cross the placenta via active transport from the mother to the fetus, particularly in the final weeks of pregnancy. Additional IgA is transferred from the mother to the infant via breast milk. Some studies show that inactivated influenza vaccine given to pregnant women is highly effective (91.5%) in preventing hospitalization. Other results also reveal high effectiveness trivalent inactivated vaccine (TIV) in pregnant women.

Conclusion: According to previous studies TIV is recommended for all pregnant women except for persons with a serious allergy to egg protein. So it is benefit that Iran Ministry Health informs for pregnant women Influenza vaccination in fall and winter season and administer them free to reduce morbidity and mortality during pregnancy.

Key words: *Influenza vaccine, Pregnancy, Efficacy.*

P-48
Effect of oxidative stress induced by BSO on histology of fallopian tubes, endometrium in mice

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Introduction: Oxidative stress has been linked to cell damage in various systems. The aim of the present study is to investigate the effect of buthionine sulfoximine (BSO) induced oxidative stress on histology of fallopian tubes, endometrium in mice.

Materials and Methods: In the present study 30 adult female mice are used. The mice were divided into 3 groups of control, sham, and experimental. The mice in experimental group received IP injection 2mmol/kg BSO daily for 2 weeks. In the sham group the mice received the solvent of BSO (0.9% Saline). Uteri and fallopian tubes were removed, fixed in 10% formalin, embedded in paraffin and prepared for histomorphometric studies. The data were analyzed with ANOVA test.

Results: Histomorphometric studies showed that the endometrial thickness and oviduct epithelial thickness were decreased significantly ($p<0.05$) in BSO-treated group.

Conclusion: It is concluded that BSO-induced decreasing of GSH level could affect fertility by endangering implantation by suppressing of endometrial thickening.

Key words: *Buthionine Sulfoximine, Oxidative stress, Oviduct.*

P-49
Psychological aspects of infertility

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Infertility has been a social stigma and has caused emotional trauma and relationship strain. Approximately 1 in 10 couples experience either primary or secondary infertility. For many couples, infertility is a major life crisis and psychologically stressful. Studies have shown that infertile women experience depression, anxiety, frustration, isolation, hopeless and anger. The distress of infertility and its medical treatment is reported to affect different aspects of each partner's personal and the couple's life. The attention to the emotional distress as a consequence of infertility and its treatment has led to the recommendation to provide psychological interventions for infertile couples. Studies have shown that reducing stress will increase the rate of success with infertility treatment. Mental Health professionals with experience in infertility treatment can help a great deal. Their primary goal is to help individuals and couples learn to cope with physical and emotional changes associated with infertility as well as with the medical treatments that can be painful and intrusive. The program which is designed to decrease the physical and psychological symptoms of stress, reduce isolation and educate participants is beneficial for couples. Stress management and relaxation training, cognitive restructuring, self-Nurturing skills and couple counseling are those psychological interventions which are very effective for infertile couples.

Key words: *Infertility, Psychological aspects, Depression, Anxiety.*

P-50
Myomectomy before ART and subseqent perinatal outcome

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Introduction: Placenta previa accreta, increta and percreta are an obstetric disaster. The most common predisposing factors for this are previous cesarean section and myomectomy especially before ART. The aim of this study is to disclose the role of this common surgery before ART in perinatal morbidity and sometimes mortality.

Materials and Methods: This study was undertaken in Obstetrics and Gynecology Department of Alzahra

Teaching Hospital of Tabriz University of Medical Science from April 2008 to December 2011. 86 patients over 31986 maternity cases admitted as placenta previa accreta and sometimes increta or percreta. They were diagnosed by Doppler ultrasound and MRI if needed.

Results: Associated risk factors for placental abnormal adhesion were previous C/S and/or myomectomy. The incidence of previos myomectomy before ART was 8 over 86 or nearly 10%. 4 cases over 8 mothers could survive only by hysterectomy during C/S or hysterectomy and only 2 of them could save their uterus by conservative surgery. Histopathology confirmed diagnosis in all cases.

Conclusion: It is so important to predict the effect of myomectomy, specially submucosal or intramural-submucosal myomectomy on perinatal outcome. We do recommend limiting myomectomy as possible as could be and if there is no other choice, it is possible to predict abnormal influence of placenta by Doppler ultrasound and MRI to reduce the catastrophic results.

Key words: *ART, Myomectomy, Perinatal outcome.*

P-51

The effect of lavender aromatherapy on the pain intensity perception and intarapartum outcomes in primipare

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Introduction: Labor pain is one of main preoccupations of pregnant women. In this study, our aim was determining the lavender aromatherapy on pain intensity perception and intrapartum outcome in primipare.

Materials and Methods: One hundred sixty participants were divided into two equal groups. The aroma group received0.1 milliliter of lavender essential oil mixed with 1 milliliter of distilled water, via tissues attached to their gown close to their nostrils. Pain perception intensity was measured by visual analogue scale (VAS) before the intervention, 30 and 60 minutes after aromatherapy respectively. Collected data were analyzed by t-test and chi-square using the SPSS software.

Results: Independent T test analysis revealed that the differences in the means of pain perception intensity before intervention between the two groups are not significant while the means of pain perception intensity in the aroma group was lower than that of the control group at 30 and 60 minutes after the interventions ($p<0.001$). Paired T test showed that the means of pain perception intensity in the aroma group did not differ before the intervention,30 and 60 minutes after the intervention, but in the control group, had significant increasing in pain perception intensity ($p<0.001$) was seen. Aromatherapy with lavender did not affect the duration of labor phases and Apgar score.

Conclusion: The present study revealed that aromatherapy with lavender affects pain perception of labor pain in the aroma group, but did not affect duration of labor phases and Apgar score.

Key words: *Aromatherapy, Lavender, Labor, Primipara.*

P-52

Prognostic risk factors for early diagnosing of preeclampsia in nulliparas

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Introduction: Preeclampsia is one of major complication of pregnancy leading to maternal morbidity and mortality. Our study aimed to determine factors which help to early prediction of preeclampsia.

Materials and Methods: Seven hundred and thirty-nine nullipara's women at 24-28 weeks of pregnancy were enrolled in this multi-center cohort study. Incidence or absence of preeclampsia in these women was evaluated until the end of pregnancy. For each case a record sheet was assigned which was included information on hematocrit in weeks 24-28 of pregnancy, blood pressure and result of roll over test in weeks 28-32 of pregnancy and the occurrence or absence of disease until the end of the study.

Results: The mean maternal age, body mass index, years of education and positive roll over test were significantly higher in preeclampsia group ($p<0.001$). However, mean gestational age and changes in levels of hematocrit were significantly higher in normotensive cases ($p<0.001$). Preeclampsia occurred in 3.9% of all cases. Our combined model can predict preeclampsia with sensitivity of 93% and specificity of 80%.

Conclusion: Combined model of maternal age, body mass index, years of education and positive rolls over test can predict preeclampsia.

Key words: *Preeclampsia, Roll over test, Nulliparas.*

P-53

Chemoprotective effect of achillea millefolium inflorescence aqueous extract against doxorubicin-induced changes in the rat sperm

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Introduction: Doxorubicin (DOX), an anthracycline antibiotic, is a widely used anticancer agent. In spite of

its high antitumor efficacy, the use of DOX in clinical chemotherapy is limited due to diverse toxicities, including reproductive toxicity. The aim of the present study was to determine whether Achillea millefolium inflorescence aqueous extract (AIAE) with anti-oxidant and anti-inflammatory properties could serve as a protective agent against reproductive toxicity during DOX treatment in a rat model.

Materials and Methods: Male Wistar rats were categorized into four groups. Two groups of rats were treated with DOX at a dose of 4 mg/kg intraperitoneally on day 1, 7, 14, 21, and 28 (a total of 20 mg/kg). One of the groups received AIAE at a dose of 1.2 g/kg per day orally for 28 days along with DOX. A vehicle-treated control group and a Achillea millefolium control group were also included.

Results: DOX-treated rats showed a significant decrease in sperm count and motility with an increase in dead and abnormal sperms, while the combined treatment of AIAE with DOX improved the sperm quantity and quality.

Conclusion: The results clearly demonstrate that DOX can adversely damage the male reproductive system through imposing oxidative stress, while AIAE may be partially protective against DOX-induced adverse reactions due to its antioxidant effects and could be a potential candidate as an additive to enhance therapeutic efficacy of DOX in clinical chemotherapy.

Key words: *Achillea millefolium, Inflorescence, Aqueous extract, Doxorubicin, Rat, Sperm.*

P-54

Evaluation of crocus sativus liquid effect on weight of body and reproductive organs of mature male rat exposed with cadmium

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Introduction: Cadmium is an industrial and environmental pollutant. In animal experiments, Cd may exert deleterious effects on liver, kidney, bone, ovaries, and testes. It was reported that testis could be protected from toxic effects of Cd remarkably by mainly antioxidants treatment. In the present research the effect of Crocus Sativus L. as an antioxidant on the weight of body and reproductive organs of mature rats exposed to Cadmium was evaluated.

Materials and Methods: This research was carried out on 30 mature male rats; weighting about 190-240 gr. Animals were divided into five groups. The first group (control group) received nothing. The second group (Normal saline (NS), 0.3ml), 3rd group (Crocus Sativus L, 100mg/kg Body Weight), 4th group (Cadmium, 1mg/kg BW) and for the 5th group (Crocus Sativus L 100mg/kg BW and Cadmium 1mg/kg BW) were injected intraperitoneally for 16 days at an interval of 48h between subsequent treatments. Animals were sacrificed on day 17 after the first treatment. Rats were weighted and scarified and then reproductive organs e.g. epididymis, seminal vesicle and testes removed, weighted and analyzed.

Results: The findings showed that weight of body and reproductive organs were significantly decreased in exposed cadmium compared with sham and control groups ($p \leq 0.05$). Crocus Sativus L. could improve weight of reproductive organs in Cadmium+ Crocus Sativus L. group in comparison with cadmium group ($p \leq 0.05$).

Conclusion: Results demonstrated that Crocus Sativus L. treatment improves the damaging effect of Cadmium on reproductive system in male rats.

Key words: *Cadmium, Crocus Sativus L, Body Weigh, Sex Organs Weight, Mature male rat.*

P-55

Evaluation of saffron effect on sperm chromatin quality of mature male rat exposed with cadmium

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Introduction: Cadmium is an important heavy metal widely used in batteries, pigments, metal plating, military industries, alloys and plastics. Various mechanisms have been suggested to explain Cd induced cellular toxicity, which are as follow: Reactive Oxygen Species enhance lipid peroxidation, altered antioxidant system, DNA damage, altered gene expression and apoptosis. In the present research the effect of Crocus Sativus L. as an antioxidant on the sperm chromatin quality of mature rats exposed to Cadmium was evaluated.

Materials and Methods: This research was carried out on 30 mature male rats; weighting about 190-240gr. Animals were divided into five groups. The first group (control group) received food and water. The second group (Normal saline (NS), 0.3ml), 3rd group (Saffron, 100mg/kg Body Weight), 4th group (Cadmium, 1mg/kg BW) and for the 5th group (Saffron 100mg/kg BW and Cadmium 1mg/kg BW) were injected intraperitoneally for 16 days at an interval of 48h between subsequent treatments. Animals were sacrificed on day 17 after the first treatment. For the evaluation of the sperm chromatin quality the right cauda epididymis was removed and immediately immersed into 10ml of the HBSS. Then from the mentioned solution, smear was prepared. The smears were dyed with aniline blue 5%.

Results: Findings show that Cadmium has a damaging effect on sperm chromatin ($p<0.05$). In addition Saffron

has an improving effect on the damages of sperm chromatin in Cadmium induced group ($p<0.05$).
Conclusion: Results demonstrated that Saffron treatment improves the damaging effect of Cadmium on sperm chromatin.
Key words: *Camdium, Sperm Chromatin, Mature male rat, Crocus Sativus L.*

P-56
Effect of oxidative stress on sperm quality and Mmu-miR-181b expression in testis of mature mouse

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Introduction: Male infertility is responsible for approximately 50% of infertility in the world. Reactive oxygen species (ROS) is one of the causative agents of infertility in males which effects on sperm quality and function. In this study, the effects of oxidative stress induced by tertiary-butyl hydroperoxide (TBHP) were investigated on sperm quality, testis tissue and miRNAs expression.
Materials and Methods: Adult male mice (9-10 weeks) strain Balb/c was randomly selected from mouse colony. After a primary study to determine LD_{50}, TBHP was injected at the concentration of 1:10 LD_{50} for 2 weeks. The mice were sacrificed and their testis tissues were used for cell viability, ROS assay and miRNAs expression. Epididymis was also surveyed for sperm analysis by CASA system.
Results: The sperm motility, count and viability were decreased in the TBHP treated mice in comparison of the control mice. The flowcytometry analysis showed a significant increase in H_2O_2 and $O_2^{\bullet-}$ levels in both testis and sperm 2 weeks after intra-peritoneal (ip) injection. Body weights revealed no treatment-related effects but atrophy of testis and decrease of testis cells viability was observed. Also, the expression of mmu-miR-181b in the experimental group decreased.
Conclusion: TBHP-induced oxidative stress caused to decrease in sperm vitality and motility and testis cells viability. Results indicated that oxidative stress induction in testis reduced its normal function. That is due to an increased level of H_2O_2 and O_2 in testis and their deleterious effects on genomic levels.
Key words: *Male infertility, Oxidative stress, Reactive oxygen species (ROS), Tertiary-butyl hydroperoxide (TBHP), MiRNA.*

P-57
The pattern of sexual behavior in married women during the engagement

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Introduction: Human sexuality is the sum total of an individual's biological constitution, life experiences and attitudes; it is influenced by interpersonal and cultural factors. In Iran, during engagement period most women discovering their sexual desires unlike during the marriage, and they usually have an established pattern of sexual activity. The lack of normal and appropriate sexual relationship can cause emotional and psychological disorders.
Materials and Methods: This study was a cross-sectional survey on 900 married women during the engagement that were selected by census method. We used a questionnaire for the assessment of current sexual behavior and satisfaction among married women aged 13-26.
Results: Our results showed that the pattern of sexual behavior in married women during the engagement is; 42.1% only vaginal, 22.8% mix, 15% both vaginal and oral, 11.9% both vaginal and anal, 4.1% only anal, and 4.1% only oral sex.
Conclusion: In fact very little is known about the relationship among sexual behavior and sexual pattern of women especially in the engagement period in Iran. With the discovery of inappropriate sexual behavior patterns in high-risk couples we can provide advice to increase appropriate sexual relationship.
Key words: *Sexual behavior, Married women, Engagement.*

P-58
Is urgency related to women's sexual well-being?

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Introduction: Female lower urinary tract symptoms (LUTS) affect quality of life and sexual activity. This study aimed to evaluate the influences of LUTS on women's sexual well-being.
Materials and Methods: We investigated 200 women recruited between August 6 and August 17, 2011, from the outpatient departments at our hospital, regardless of the reason for visiting. All participants were asked to answer a standardized self-reported questionnaire. Using the International Consultation on Incontinence Questionnaire-Short Form (ICIQ-SF) and the overactive bladder symptom score (OABSS), we evaluated urinary symptoms, including stress urinary incontinence, urgency, day time frequency, and nocturia. We analyzed relationships between dissatisfaction with sexual function and other variables, including age, stress urinary incontinence, urgency (≥once a day), daytime frequency (≥8 times/day), and nocturia (≥once a night). The chi-square test and logistic regression models were used for statistical

analyses. Values of p<0.05 were considered statistically significant.
Results: A total of 200 individuals completed the questionnaire. The mean age of respondents was 42.6 years. Prevalence of stress urinary incontinence, urgency, daytime frequency, and nocturia were 20.4%, 5.2%, 42.6%, and 48.0%, respectively. Overall, the prevalence of dissatisfaction with sexual function was 58%. In our study, age, urgency, and nocturia were associated with dissatisfaction with sexual function.
Conclusion: Our study confirmed age and urgency as independent risk factors for dissatisfaction with sexual function. These results suggest that urgency can offer a predictor of sexual dysfunction and probably fertility problems.
Key words: *Urgency, Sexual function, Stress incontinence, Nocturia.*

P-59
Position of routine breast cancer screening in infertility clinics

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An estimated 9% of couples worldwide experience some form of infertility, and 56% of these couples seek medical care for this infertility. In recent years, there has been an increase in the development of assisted reproductive technologies and other treatments to overcome infertility. Breast cancer accounts for one third of all neoplasm seen in reproductive-age women and affects tens of thousands of women each year in that age group. The possible relationship between sex hormones and genital cancers has received increasing attention in the last 20 years sex hormones can be linked to the development or promotion of genital cancers.The role of female sex hormones in breast carcinogenesis is well established. Recently, it has been shown that users of exogenous hormones, in particular menopausal hormone therapy, are at an increased risk of breast cancer; that risk increases with duration of use; and that risk is substantially greater for combined estrogen-progestin than for estrogen-only therapy.Increased breast cancer risks have been recently reported among nulliparous users of gonadotropins; users of clomiphene citrate, with the association restricted to women with non ovulatory disorders; along with an inverse association between breast cancer and infertility because of ovulatory disorders only.Breast cancer risk should be a consideration in follow-up for women treated with Drugs to treat infertility.
Key words: *Routine screening, Breast cancer, Infertility drugs.*

P-60
Evaluation of pinopodes expression on the mouse endometrium immediately before implantation by treatment with HMG/HCG and Sildenafil citrate administration

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Introduction: Sildenafil citrate is a newly developed, potentate the effects of NO (Nitric Oxide) on vascular smooth muscle. The aim of this study was to assess the effects of ovarian stimulation and sildenafil citrate injection on pinopode expression in the mouse.
Materials and Methods: Thirty adult female mice were randomly divided into three groups: control, superovulated and superovulated+sildenafil citrate injection. In experimental groups the mice received 7.5I.U human menopausal gonadotropin (HMG) and then after 48 hours received 7.5 I.U human chorionic gonadotropic (HCG) hormones. In each cage for every two female mice, one male mouse was put in for mating. Superovulated+sildenafil citrate group were injected with sildenafil citrate (3mg/mouse) in 24, 48, 72 hours interval, after HMG injection. The animals were sacrificed by cervical dislocation 96 hours after HMG injection, and their uterine specimens (the middle one-third) were prepared for transmission electron microscope studies.
Results: The electron microscopy observations showed that in most of the control group 4 days after HMG injection, there were long and short microvilli and had no developed pinopodes, while in two other groups, well developed pinopodes were expressed 4 days after HMG injection.
Conclusion: The results showed that hyperstimulated of mice with sildenafil citrate may be more helpful in formation of pinopodes and implantation.
Key words: *Sildenafil citrate, Ovarian stimulation, Pinopode, transmission electron microscopy.*

P-61
The effects of Ginger on spermatogenesis and sperm parameters of rat

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Introduction: Ginger rhizome (Zingiber officinale R., family: Zingiberaceae) is used medicinally and as a culinary spice. Medicinal use of ginger dates back to ancient China and India. Ginger and its constituents are stated to have antiemetic, antithrombotic, antihepatotoxic, anti-inflammatory, stimulant, cholagogue and antioxidant. It has been used since ancient time as medicinal and food origins it contain antioxidative and androgenic activities and have well effect in diseases treatment in more countries world-wide ginger has a useful effect on spermatogenesis and sperm parameters.

Materials and Methods: Wistar male rat (n=30) were allocated into three groups, control (n=10) and test groups (n=20), that subdivided into groups of 2 that received ginger rhizome powder (50 and 100mg/kg/day) for 20 consequence day. Animals were kept in standard conditions. In twentieth day the testes tissue of Rats in whole groups were removed and sperm was collected from epididymis and prepared for analysis.

Results: Serum total testosterones significantly increased in experimental group that has received 100 mg/kg/day Ginger ($p<0.05$) in comparison to control group. Besides, the percentage of sperm viability and motility in both test groups significantly increased ($p<0.05$) in comparison to control group, whereas, LH, FSH hormones, sperm concentration, morphology and testes weights in both experimental and control group were similar.

Conclusion: Results revealed that administration of 100 mg/kg/day of ginger significantly increased sperm percentage, viability, motility and serum total testosterones. This suggested that ginger may be promising in enhancing sperm healthy parameters.

Key words: *Ginger rhizome, Sperm, Spermatogenesis, Rat, Testis, Testosterone.*

P-62

The hormonal and metabolic effects of polyunsaturated fatty acid (omega-3) in PCO induced rats under diet

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Introduction: Polycystic ovary syndrome (PCOS) is the most frequent cause of female infertility, affecting about 5-10% of women in age of procreation. To study the protective effects of omega-3 polyunsaturated fatty acid on experimental PCO induced by estradiol-valerat (PPA) in rats.

Materials and Methods: Wistar female rat (n=40) were allocated into three groups, control (n=10) and test groups (n=30), that subdivided into groups of 3 ,one group received omega-3 (60 mg/rat/orally/daily), second and third groups were induced PCO by single injection of estradiol-valerate (4mg/rat/IM), third group of this research was received omega-3 (60 mg/rat), for 60 consequence day. Animals were kept in standard conditions. In sixty day the ovarian tissues of Rats in whole groups were removed and serum was collected for biochemical analysis.

Results: TAC, SOD levels in both test groups that received omega-3 significantly increased ($p<0.05$) in comparison to control and experiment groups and ovarian weights in both experimental and control group were similar. The level of MDA in which PCO group that received omega-3 was significantly decreased ($p<0.05$).

Conclusion: Results revealed that administration of omega-3 significantly increased the TAC, SOD levels and modulated MDA levels. This suggested that polyunsaturated fatty acid may be promising in PCO patients.

Key words: *Omega-3, Ovarian tissues, Super oxide dismutase, PCO.*

P-63

Effect of oxidative stress on development and differentiation of testis in mice

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Introduction: Antioxidants and reactive oxygen species (ROS) are in balance in the body. Whenever the balance between these molecules is disrupted towards an overabundance of ROS ,oxidative stress (OS) occurs. BSO is a selective inhibitor of glutathione peroxidas and primary germ cells differentiate into spermatogonia in developing testis. The aim of the study is to investigate the effect of BSO induced OS on development and differentiation of testis in mice.

Materials and Methods: In this study 30 adult female and 15 adult male mice into 3 groups of control; sham and experimental are used. Two female mice at their stereos cycle were put with one male mouse in a cage for mating. The mice on 13th day of pregnancy received 2mmol/kg BSO daily until delivery as IP injection. After the pregnancy the 2 day old new born were sacrificed and their testis were prepared for light and electron microscopic study. Morphology of seminiferous cords and their cellular content and interstitial tissue examined and compared with control values.

Results: Light and electron microscopy showed that the newborn testes composed of seminiferous cords in 2 day old newborn mice are composed of sertoli cells and spermatogonial cells. The cords contained mainly sertoli cells and some spermatogonial cells and were separated from each other by a regular distends. In the experimental group the cords appeared smaller and some were ruptured. The cords had lost their regularity and the cells contained denser nuclear. Electron microscopy revealed that seminiferous cords are composed of gonocytes and sertoli cells in the control group. In the experimental group the gonocytes were vesiculated and their nuclei were heterochromatic.

Conclusion: The result indicates that oxidative stress suppresses seminiferous cords differentiation at early stages.

Key words: *Oxidative stress, BSO, Differentiation, Seminiferous cord.*

P-64
Compare the effect of tamoxifen on ovarian morphological characteristics in mouse

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Estrogen is important hormone on follicular differentiation. Tamoxifen is a nonsteroid drug which is used for treatment of breast cancer, CNS tumours, stimulation of ovulation in infertility protocols. Regarding to the affinity of tamoxifen to estrogen receptors and the possible role, the aim of the present study is follicogenesis on the mice that their mother had received tamoxifen during pregnancy.
In this study, 30 adult female mice and 15 adult male mice are used. The mice were mated and the pregnant mice received 100µg/kg tamoxifen on 13th day of pregnancy as IP. The mice in control group only received the solvent. After delivery ,the female pups were kept under standard condition and reached adulthood. For follicogenesis, ovary of the mice study with light microscope.
Key words: *Tamoxifen, Ovary, Mice, follicogenesis.*

P-65
Integrins expression by real-time RT-PCR in ovariectomized mice in response to exogenous steroids hormones

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Introduction: Implantation requires not only synchrony between the maternal environment and the embryo but also requires establishment of tight on tact between the trophoblasts and endometrial epithelial cells. This contact involves integrin molecules which belong to the cell adhesion molecules and have composed of two α and β subunits.
Materials and Methods: Ovariectomized mice were subjected to estrogen, progesterone and estrogen-progesterone hormones. The mRNA levels of several integrins (αv, α4, β1 and β3) genes were evaluated by real-time RT-PCR ovariectomized mice which were subjected to estrogen and or progesterone. The examined genes were expressed differently in ovariectomized mice.
Results: As the data of real-time RT-PCR showed, there was not any integrin expression in control sham and estrogen treated groups except the β1 integrin that was expressed in estrogen-treated group. In both progesterone and estrogen-progesterone-treated groups, all the examined genes were expressed, but in different pattern. The comparison of the ratio of different integrin gene expression and the housekeeping gene revealed that the maximum expression of integrin mRNA related to the α4 in both progesterone and estrogen-progesterone-treated groups ($p<0.05$); however in later group, there was not significant different between the expression of α4 vs. αv.
Conclusion: The progesterone is more effective on endometrial integrin expression than estrogen and differences in the expression pattern of integrins reflect their important and different roles in embryo implantation.
Key words: *Real-time RT-PCR, Endometrium, Integrin, Steroids hormones, Ovariectomized mice.*

P-66
Immunohistochemical study of uterine epithelial proliferation in mouse after application of gonadotropin, progesterone and sildenafil citrate

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Introduction: For years, many researchers around the world to study on fertility and infertility and their techniques such as in vitro fertilization (IVF) embryo transfer and new drugs. Assisted reproductive techniques and multiple drugs with different effect are used to create or increase endometrial receptivity. This study has tried to examine the effect of gonadotropins, sildenafil citrate and progesterone on mouse endometrium.
Materials and Methods: Forty adult female mice were divided into completely random into four groups, control gonadotropin, progesterone and gonadotropin gonadotropin sildenafil citrate. Initially all groups except the control group, 7.5 I.U human menopausal gonadotropin was injected intraperitoneally Human menopausal gonadotropin (HMG). 48 hours later, test groups were injected with 7.5 I.U human chorionic gonadotropin (HCG). Superovulated-progesterone group were injected with progesterone (1mg/mouse) in 24, 48, 72 hours interval, after HMG injection. Animals were sacrificed 96 hours after HMG injection, and their uterine specimens were prepared for immunohistochemical study. In this study were used in the kit ki67 for proliferating cells. Then, using a light microscope ki67 positive cells in different groups were compared.
Results: My results of immunohistochemical staining showed, Ki67 positive cells in the stage immediately before implantation was not observed in any groups Luminal epithelial cell nuclei during the staining were stained with only hematoxylin.
Conclusion: The results of our study showed that sildenafil citrate in mice stimulated for ovulation by HMG/HCG not able to induce cell proliferation in the luminal epithelial cells in the phase immediately before implantation.
Key words: *Ki-67, Endomrtrium, Sildenafil citrate.*

P-67
Estrous cycle mice and integrins expression by real-time RT-PCR

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Introduction: The interaction between integrins and their ligands can promote different functions. Integrin plays an important role in contact between the embryo and endometrium by interaction with a variety of extracellular proteins during implantation period.
Materials and Methods: The subgroups of proestrus, estrus, metestrus and diestrus were studied in mice. The mRNA levels of several integrins (αv, α4, β1 and β3) genes were evaluated by real-time RT-PCR in endometrial tissue in different phases of estrous cycle in mice. The examined genes were expressed differently in normal estrous cycle phases.
Results: The αv, β3 mRNA were detected only in the metestrus phase. The α4 and β1 integrin genes were expressed in all phases of estrous cycle. As the results demonstrate, the higher ratio of expression belongs to β1 integrin in proestrus phase than estrous and diestrus phases .There were significantly differences between the expression of α4 vs. αv and β3 and β1 vs. β3 integrins in metestrus phase ($p<0.05$).
Conclusion: The progesterone is more effective on endometrial integrin expression than estrogen and differences in the expression pattern of integrins reflect their important and different roles in embryo implantation.
Key words: *Real-time RT-PCR, Endometrium, Integrin, Estrous cycle, Mice.*

P-68
Pinopodes development and expression of endometrial integrins in ovariectomized mice

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Introduction: Pinopode is endometrial receptivity marker which expresses for a short time at implantation window .Although the pattern of integrins expression during mouse pregnancy were shown but the correlation between the expressions of different types of integrin molecules with pinopode expression in mouse was not evaluated.
Materials and Methods: Ovariectomized mice were subjected to estrogen, progesterone and estrogen-progesterone hormones. Their uterine horns were evaluated for integrin expression by immunohistochemistry and real-time RT-PCR and for pinopode development by transmission and scanning electron microscopic studies.
Results: The studies of TEM electron micrograph showed that ultrastructure of the surface epithelial cells in estrogen-treated group was similar to the control and sham groups. In the estrogen progesterone-treated group the apical cell surface projections were more prominent than the other groups. Observation by SEM showed that in different-treated groups on the surface of the epithelial cells, there were a lot of projections which resemble to irregular short microvillus, the number of short projections and some fungi-shaped projections (pinopodes like) or there were some pinopodes like projections on the surface of the cells.
Conclusion: The pinopodes may have minor effect in mice implantation or have some delay in their expressions in ovariectomized mice which were subjected to exogenous hormones.
Key words: *Pinopode, Endometrium, Integrin, Ovariectomy, Mice.*

P-69
Timing of insemination and pregnancy outcomes in IUI cycles

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Introduction: One of the most factors in success of IUI is timing of insemination. In current practice insemination is done 34-36 hour after HCG administration. In this study insemination was done after 36 hour of HCG administration with no differences in pregnancy rate.
Materials and Methods: 110 couples with mild male infertility, endometriosis, ovulatory factor and idiopathic infertility enrolled in this study and randomly divided in three groups. In group A insemination was done (36-40) hour, group B (40-44) and group C (44-48) hour after HCG injection. The main outcome was pregnancy rate.
Results: There was no deferent in pregnancy rate in three groups. (29 %, 24% and 14 %, respectively. $p=0.138$).
Conclusion: Insemination can be done any time after the administration of HCG.
Key words: *IUI, Gonadotropin, HCG.*

P-70
Effect of age on the quality and quantity of oocyte and embryo in polycystic ovarian syndrome patients undergo ART

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Introduction: Polycystic ovarian syndrome (PCOS) is probably the most prevalent endocrinological disorder affecting women during the reproductive age. It is estimated to affect 5-10% of women, and characterized by increased circulating androgen levels, anovulatory infertility and frequently gonadotropin dysregulation and hyperinsulinemia. Gonadotropins are main regulators of menstrual cycls. Women with polycystic ovarian syndrome, often have menstrual disturbance that is result of their gonadotropin dysregulation. Studies show that advancing age in PCOS patients leads to improve their menstrual disturbance. To evaluate the effective role of female age on oocyte and embryo quality and quantity in PCOS patients that are undergoing ART methods.
Materials and Methods: A group of 15 female with polycystic ovarian syndrome and infertility who came to Novin infertility center for ART between 2010-2011, were recruited for this study. Female age, quality and quantity of oocytes, number of embryos transferred and pregnancy rate were measured. And then we identified effects of age on quality and quantity of oocytes and number of embryos transferred. The statistical analysis was performed by using SPSS, version 16/0. All tests were with a confidence interval of 95% (p<0/05).
Results: There were reverse and significant association between female age and number of oocytes (p=0.028), metaphase II oocytes (p=0.034), fertilized oocytes (p=0.046) and the number of type A embryos (p=0.027). However increasing age of PCOS patients was associated with reduced pregnancy rate with ART methods.
Conclusion: Advancing age in PCOS patients, lead to decrease in the number of all oocytes forms and type A embryos.
Key words: *PCOS, Age, Oocyte quality, Embryo quality.*

P-71
The effects of honey bee venom on modulation of polycystic ovarian syndrome- induced oxidative stress in Wistar rat model

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Introduction: Polycystic Ovarian Syndrome (PCOS) is inflammatory disease characterized by hyper androgenemia, hyperthecosis and chronic anovulation. TNF-α is a key inflammatory stimulus which plays a main role in regulating normal activity of ovary in follicular growth and luteal stages, and its over expression in adipose tissue leads to obesity and insulin-resistance in humans and rodents, as if stimulating mitotic activity in undifferentiated theca cells and increasing steroidogenic cells causes PCOS. Honey bee venom (HBV) contains a variety of biologically active components having various pharmaceutical properties. This study was designed to detect the possibility of HBV application as an anti-inflammatory therapeutic agent.
Materials and Methods: 2mg/100gr B.W Estradiol Valerate (EV) was subcutaneously injected to induce PCOS in mature rats. After 60 days, 1 mg/kg i.p. HBV was administered for consecutive 10 days. Ovaries and serum from three groups of EV-induced PCOS, HBV-treatment and normal intact animals was collected for histological comparison and immunological analysis of TNF-α. All the experiments were repeated three times. Our data were analyzed by one-way ANOVA parametric test.
Results: Thickness of theca layer, number and diameter of cysts and atretic follicles and levels of TNF-α significantly decrease in HBV group comparing with PCOS group. Moreover, corpus luteum, as a sign of ovulation, was observed in HBV-treated ovaries which were obviously absent in PCOS group.
Conclusion: Our results suggest that beneficial effect of HBV may be mediated by the inhibitory effect of HBV on TNF-α level.
Key words: *Polycystic ovarian syndrome, Honey bee venom, TNF-α.*

P-72
Effectiveness of elective cervical cerclage for prevention of preterm birth in women with history of infertility

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Introduction: Cerclages have been placed for prevention of preterm labor because of a patient's obstetrical history, physical examination, ultrasound, infertility history or a combination of the above. This retrospective study conducted to show benefit of cerclage versus no cerclage in patients with a history of long time infertility (IH).
Materials and Methods: Pregnancy outcome was compared between 50 Singleton pregnancies (IH) with cerclage and 50 Singleton pregnancies without cerclage.
Results: There was no statistically significant in mean of age and obstetric history between 2 groups. Mean of pregnancy age in the time of cerclage was 16.62±3.22 weeks. There were no complications of procedure among patient with cerclage such as infection, rupture of membrane, anesthesiologic complication. Mean of gestational age at delivery was 38.01±2.26 in cerclage group and was 37.03±2.23 in control group. Two cases of cerclage group and three cases of control group had preterm labor. There were no statistically significant for length of pregnancy and preterm labor between two groups.

Conclusion: Prophylactic cerclage for patient with history of infertility without any other risks is not recommended.
Key words: *Cerclage, Infertility, Preterm labor.*

P-73
History of pervious abdominal surgery and ectopic pregnancy

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Introduction: Ectopic pregnancy remains a major gynecological problem in contemporary gynecological practice. Not only do women die from this disease, but also of greater clinical importance is the indirect morbidity of poor fertility prognosis and adverse outcome in subsequent pregnancies. The purpose of this study was to investigate history of pervious abdominal surgery and ectopic pregnancy in Hamadan province 2000-2010.
Materials and Methods: In a cross- sectional study was performed retrospectively in 521 patients with ectopic pregnancy diagnosis and treatment was admitted to hospitals in the Hamadan province were studied (2000-2010). Data processing and statistical analysis were performed using SPSS/16.
Results: The results showed that 21.8% of women had history of abortion. 44.5% of patients had a history of pervious abdominal or pelvic surgery. Most type of surgical cases was cesarean section (33.2%), cesarean section and tubectomy (18.9%), tubectomy (15.5%), appendectomy (11.2%) and history of curettage (11.2%), respectively.
Conclusion: Ectopic pregnancy is an obstetrics emergency, the causes of which are often found in the women's gynecologic history. Patients with a history of abdominal and tubal surgery are known to be at risk for ectopic pregnancy. All abdominal pain in early pregnancy should be treated as suspicious for ectopic implantation until this possibility has been eliminated.
Key words: *Ectopic pregnancy, Pervious abdominal surgery.*

P-74
Epidemiology of infertility: A population-based study in a community in Babol, Iran

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Introduction: During the most recent decades, changing of social patterns has increased the prevalence of infertility. The aim of the study was to determine the prevalence of infertility and self-reported infertility in a community in Babol, and then identify the factors associated with infertility.
Materials and Methods: A retrospective, descriptive, epidemiology study was conducted on characteristic of urban and rural women. A total of 1140 individuals aged 20-45 were selected using standard cluster sampling technique.
Results: Among 1140 women, 59 (5.2%) (CI 4.2, 6.2) were voluntarily childless. Of the remaining 1081 women, 913 (84.5%) (CI 82.5, 86.5) reported no difficulties in having children and the remaining 168 (15.5%) (CI 13.5, 17.5) experienced difficulty conceiving at same stage of life in their life. In total, 12.2% women had primary infertility and 1.9% had secondary infertility. The commonest self-reported causes of infertility in this study were ovulation problems (39.2%), unexplained infertility (34.9%), and sperm quality problems (16.9%). Significant difference observed ($p<0.05$) in marriage age, education, long term health problems, smoking, body mass index, and past history of tubal surgery, ectopic pregnancy, Chlamydia between the groups. The adjusted OR for infertility in women with marriage age <19 yr and 19-35 yr was significantly lower than in those with marriage age >35yr (OR=0.13; CI=0.03, 0.52).
Conclusion: This study shows a high prevalence of infertility for women in a community in Iran. A more detailed study suggested on the cause of infertility and local geographical factors in the prevalence of infertility in Iran.
Key words: *Infertility, Epidemiology study, Women, Iran.*

P-75
Exploring the eminent role of vitamin D3 in reproduction

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Vitamin D3 has well-known classic activities on bone and mineral metabolism. However, in the last 20 years, studies by many groups have revealed that this hormone has potent effects on genes, cells, and biologic mechanisms not related to the maintenance of skeletal integrity. Vitamin D3 has many immunomodulatory actions on variety of immune cells and regulates their functions after binding to its intranuclear receptor, VDR. A wide variety of non-classical tissues expresses both VDR and the vitamin

D-activating enzyme 1 hydroxylase which highlighting the potential for local autocrine-paracrine responses rather than traditional endocrine effects. Among the tissues that express 1 hydroxylase is the placenta-decudynm and this has raised important questions concerning the potential role of locally generated 1, 25 (OH) 2D3 as a modulator of fetal-placental development and function. When bound to the VDR, vitamin D3 regulates key target genes associated with implantation, such as HOXA10, whereas the potent immunosuppressive effects of this hormone suggest a role in implantation tolerance. These observations are further supported by data from our group showing expression of 1 hydroxylase in preeclamptic pregnancies, revealing a potential role for 1, 25 (OH) 2D3 as a regulator of placentation Murine gene knockout models for 1 hydroxylase and VDR, both of which are infertile, this has further emphasized the effect of vitamin D3 on reproduction. Our observations along with the findings of other groups postulate an active role for 1, 25 (OH) 2D3 in placenta-decidua.

Key words: *Vitamin D3, Vitamin D3 Receptor, 1 hydroxylase, Reproductive Immunology.*

P-76
Comparison of Sublingual, oral and vaginal misopristol for cervical ripening 12 hours before Hysteroscopy

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Introduction: Misoprostol is a synthetic prostaglandin E_1 analogue that is used off-label for a variety of indications in the practice of obstetrics and gynecology, including medical abortion, induction of labor, cervical ripening before surgical procedures, and the treatment of postpartum hemorrhage. Misoprostol is on the World Health Organization Model List of Essential Medicines. Hysteroscopy as a minimally invasive procedure is going to be substituted with major surgeries as laparatomy for hysterectomy or mulerian ducts repair and other intrauterine disorders. The aim of the present study was to evaluate the efficacy of misoprostol administered orally, vaginally, or sublingually on cervical ripening before hysteroscopic surgery in premenopausal non-pregnant women.

Materials and Methods: Non-pregnant premenopausal women scheduled for operative hysteroscopy with a 10-mm rigid hysteroscope were assigned by computerized randomization to receive 200 microgram of misoprostol, administered either orally or vaginally orsublingually 8-12 h prior to surgery Patients were randomized to receive sublingual=47 oral=47or vaginal=47 misoprostol. The three groups were comparable in terms of age, BMI, parity, gravidity, history of vaginal delivery and surgery type.

Results: The preoperative cervical width [sublingual: 7.5±2.0 mm (8, 3-10); oral: 7.5±1.9 mm (7, 4-10); vaginal: 7.6±2.4 mm (8, 1-10)] was statistically similar among the groups. The time to reach Hegar number 10, side effects and complications during the hysteroscopy were comparable among the three groups.

Conclusion: We found that sublingual, oral and vaginal misoprostol were equally effective for cervical priming before hysteroscopy in premenopausal non pregnant women.

Key words: *Cervical, Misoprostol, Oral, Sublingual, Vaginal.*

P-77
Rate of oocyte maturation, in vitro fertilization and embryo development in presence of melatonin

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Introduction: The effect of melatonin during in-vitro oocyte maturation (IVM), fertilization and embryo development of mouse oocytes was evaluated.

Materials and Methods: Obtained oocytes from supper-ovulated mouse ovaries were divided to two groups: cumulus-oocyte complexes (COCs, group i) and Germinal Vesicle (GV, group ii). The oocytes were cultured in supplemented maturation medium with different dosages of melatonin (0, 10 and 100 nM, 1, 10 and 100 μM). The cumulus expansion and nuclear status were evaluated after 24 h of in-vitro maturation. Immediately after these evaluations, oocytes were used for in-vitro fertilization (IVF). Then, resulted embryos from IVF were cultured in treated medium with different doses of melatonin (as mentioned above). Outcomes were compared using Chi-square test respectively.

Results: The expansion (86.79%) and maturation (80.55%) rate of COCs increased in supplemented medium with 10 nM of melatonin Vs control group (73.33%, $p<0.01$), but oocytes without cumulus cells indicated higher maturation in higher melatonin doses (10 and 100 μM, 84.34 and 79.5% vs. 69.33% in control group ($p<0.01$). Fertilization rate was higher in treated medium with 1 μM of melatonin (93.75%, $p<0.01$). Cleavage and blastocyst percentage were promoted in treated medium with 10 and 100 nM (92.37 and 89.36% vs. 81.25% in control group ($p<0.01$). We observed a dose dependent response to melatonin treatment in this experiment.

Conclusion: Exogenous melatonin can promote oocyte expansion, IVM, IVF and embryo development rate.

Key words: *Development, Maturation, Melatonin, Cumulus-oocyte complex.*

P-78
Induction of polycystic ovary syndrome (PCOS) in adult female rats and the effect of pollen on endometrial thickness

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Polycystic ovarian syndrome is the most common endocrine disorder in women of reproductive age. Women with this disorder exhibit some symptoms, including oligo-ovulation, hyperandrogenism, obesity, hyperlipidemia, infertility and insulin resistance. Abortion and implantation are more likely in the first three months of pregnancy in PCOS ones. The goal of this research was to investigate the therapeutic effect of pollen on endometrial thickness. Bee pollen is used as a healthy food with a widespread range of nutritional and therapeutic properties. Pollen is valuable as a nutritional in human diets. Pollen contains carbohydrates, proteins, lipids, vitamins, minerals, water and ash. In this research ,thirty two adult female rats were divided to four groups: 1) Control group: they were intramuscularly injected by 0/4 cc Sesame oil. 2) PCOs group: they were intramuscularly injected by 0.4 Estradiol valerate. 3) Control pollen: they were gavage by pollen. 4) PCOs rats that treated by pollen, they were gavaged by pollen for nine week. Following nine week ,uterine horn of rats were removed and put them in 9% formalin for fixation, then slides were studied after preparation of tissue sections staining. Endometrial thickness has a meaningful difference in comparison of other three groups.

Key words: *PCOs, Endometrium, Female rat, Pollen.*

P-79
Induction of PCOS in adult female rats and effect of royal jelly on thickness of endometrium experimental PCOS rats

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PCOs is characterized by infertility, oligoamenorrhea, and hyperandrogenism, 75% women are infertile because of anovulation and if they become pregnant, early abortion happens at the first three months and implantation reduces .Royall jelly is a kind of nutrients including: vitamins, amino acids, sugar and antioxidative effects of royal jelly has proved on cells. The good of this research is studying of effect of royal jelly on andometrial thickness. In this research ,thirty two adult female l rats were divided to four groups: 1) Control group: they were intramuscularly injected by 0.4 cc Sesame oil. 2) PCOs group: they were intramuscularly injected by 0.4 Estradiol valerate. 3) Control royal jelly: they were gavage by royal jelly. 4) PCOs rats that treated by royal jelly, they were gavaged by royal jelly for nine week .Following nine week , uterine horn of rats were removed and put them in 9% formalin for fixation, then slides were studied after preparation of tissue sections staining .Endometrial thickness has a meaningful difference in comparison of other three groups.

Key words: *PCOs, Royal jelly, Femal rat.*

P-80
Effects of melatonin on mouse follicular development and oocyte maturation in vitro

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Introduction: Melatonin acts as indirect antioxidant and a powerful direct free radical scavenger and direct responses to melatonin in gonads have been reported. The purpose of this study was to investigate the influence of melatonin on follicle development and oogenesis of in vitro cultured mouse ovarian follicles.
Materials and Methods: Preantral follicles with diameter of 150-175 µm were mechanically isolated from 18-21 day old NMRI mouse ovaries. Follicles were cultured individually in microdroplets of α-minimal essential medium (α-MEM) supplemented with 0, 10 nM and 100 nM melatonin for 6 days. On day 6 in vitro ovulation was induced by supplementing hCG/EGF to the culture medium. After 16h maturation state of oocytes was assessed.
Results: On day 6 of culture a significant ($p<0.05$) decrease in follicle survival was noticed in two treatment groups compared to control group. After in vitro ovulation induction the follicles of treatment groups showed a higher ovulation rate ($p<0.05$) than those cultured in control groups. Oocyte maturation capacity was adversely influenced by two concentrations of melatonin and GV arrest was significantly higher compared to control group ($p<0.01$).
Conclusion: Cultute of mouse preantral follicles in medium supplemented with 10 nM and 100 nM melatonin reduced the number of surviving follicles and oocyte maturation capacity and increased ovulation in vitro.

Key words: *Preantral follicle, Melatonin, In vitro ovulation, Oocyte maturation, Follicle development.*

P-81
Demographic changes of testicular macrophages in adult diabetic rats with

spermatogenic disorders: Immuno-fluorescence Study

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Introduction: The complications of diabetes are the major problems that occur in diabetic patients. In normal testicular tissue of adult rat, macrophages were seen in two classes. Resident macrophages ($ED2^+$ cells) and monocytes migrated from blood circulation into the interstitial compartment of testicular tissue ($ED1^+$ cells). Under normal conditions, macrophages play an important role in development of Leydig cells. In addition, it has been reported that, the steroidogenic activity of Leydig cells was regulated by some factors which derived from macrophages. The aim of this study was to detect the alterations in population of testicular macrophages in diabetic testis.
Materials and Methods: formaldehyde fixed paraffin embedded testicular tissue sections were stained for macrophages using two monoclonal antibodies CD163 (ED2) and CD4 (ED1). The last antibody (CD4) was conjugated with Flourescein isothiocyanate (FITC) and the second antibody for CD163 was labeled with Alexa 647. For counterstaining of nuclei we used from 4', 6-diamidino-2-phenylindole.
Results: Immunofluorescence analysis of macrophages by laser scanning confocal microscopy revealed that, in testicular tissue from nontreated diabetic rats, the number of macrophages increased in comparison to control and Metformin treated diabetic rats.
Conclusion: The results from this study showed that, the aggregation of testicular macrophages was changed in diabetic conditions and this process may be related to disturbances of endocrine activity of Leydig cells in diabetic rats.
Key words: *Diabetes, Immunofluorescence, Spermatogenesis, Testicular, Macrophages.*

P-82
Hormonal alteration of pituitary-testicular axis influence the sperm populace and motility in chronic phase of type 2 diabetes

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Introduction: Diabetes mellitus is a serious metabolic disorder with numerous complications. Uncontrolled diabetic high blood glucose is associated with structural and functional complications of reproductive system. The present study was conducted to assess the relationship between the alterations of hormones involved in spermatogenesis and the ability of sperm production of reproductive system following long time period of diabetes.
Materials and Methods: Diabetes was induced in adult male rats by single intraperitoneal injection of streptozotocin (STZ) at 45 mg/kg body weight. A group of rats treated with metformin at 100 mg/kg body weight for reducing the elevated blood glucose level.
Results: The results revealed that, the blood glucose level increased significantly in untreated diabetic rats. The blood levels of testosterone, 17-β estradiol and progesterone reduced in diabetic rats whereas, the blood levels of these hormones elevated to near normal after treatment with metformin. Same as abovementioned hormones, the levels of pituitary gonadotropins were reduced after induction of diabetes while, metformin treatment lead to elevation of these hormones to near normal levels in diabetic animals. Furthermore, untreated diabetic rats had lower epididymal sperm density nevertheless; the sperm motility was not altered significantly.
Conclusion: These findings indicated that uncontrolled diabetes and subsequently elevation of blood glucose, might be effective in alteration of pituitary-testis axis hormones and the production of spermatozoids as an outcome of functional status of reproductive system.
Key words: *Pituitary, Testis, Sperm count, Diabetes, IVF.*

P-83
Comparison of effects of gonadotropin releasing hormone (GnRH) agonists and antagonists in ART cycles in 35 years old patients

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Introduction: The incidence of infertility is about 15% for all couples of world societies. Assisted reproductive technologies (ART) are the point of hope. The aim of this study was comparing effects of GnRH agonists and antagonists in ART cycles in patients 35 years and over.
Materials and Methods: In a clinical trial that performed in women's reproductive health and research center on infertile women, the effects of GnRH agonists and antagonists in ART cycles in patients 35 years and older were evaluated.
Results: Mean number of injections administered in the GnRH agonists significantly lower than GnRH antagonists ($p=0.024$). Mean number of oocytes and follicles in patients of the GnRH agonists was significantly higher than GnRH antagonists ($p<0.001$). Significant difference was not found between the mean Oestradiol levels in the two groups of patients ($p=0.915$). Significant difference was not found between the mean duration of ovulation was studied in two groups of patients ($p=0.254$). Pregnancym outcome was positive in 23 patients of GnRH agonists and in 10

patients of GnRH antagonists (p=0.015), which was continued until week 12 (p=0.003). The severity of OHSS in 10 patients (4 patients of GnRH agonist groups and 6 patients of GnRH antagonist groups) and mild in 6 patients (2 patients of GnRH agonists and 4 patients of GnRH antagonists) was moderate (p=0.278). Endometrial status in 115 patients (59 patients of GnRH agonists and 56 patients of GnRH antagonists) was three layers, and in 5 patients (1 patients of GnRH agonists and 4 patients of GnRH antagonists) was echogen (p=0.364).

Conclusion: As discussed above in our study we found GnRh agonist cases had higher number of oocytes, but other parameters including OHSS, pregnancy rate and endometrial status were similar.

Key words: *GnRH agonist, GnRH antagonist, ART, Pregnancy.*

P-84

The relation of follicular fluid Vitamin D and IVF program

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Introduction: Vitamin D is distinguished to be concerned in calcium-phosphate homeostasis and bone metabolism. Vitamin D is suggested critical roles in reproductive physiology. This study was designed to investigate to find out 25OH-D levels in the follicular fluid (FF) and serum of infertile women exhibit a correlation with IVF cycle result and pregnancy rate, and the association between the levels of 25OH-D in body fluid (follicular fluid) and vitamin D repletion status was assessed.

Materials and Methods: This prospective observational study included 221 infertile women participated in IVF cycle from 2010 to 2011.Serum and follicular fluid collected for vitamin D .Vitamin D deficient level, insufficient level, sufficient level were defined as 10 ng/ml, 10-29 ng/ml and 30-100 ng/ml respectively. IVF cycle parameters and clinical pregnancy rate were compared with vitamin D level.

Results: In this study deficient level, insufficient level, sufficient level was 22.6%, 70.1% and 7.2%. No significant correlation was seen between pregnancy rate and serum vitamin D level (PV=0.094). Serum vitamin D level in pregnant and non pregnant groups were 23.8±24.8ng/ml and 26.75±21.73ng/ml respectively, which was not significant (p=0.17). Serum and follicular fluid vitamin D level had significant correlation (p=0.001).

Conclusion: Although vitamin D is one of the important hormones in the body, we did not find any correlation of serum and follicular vitamin D level with pregnancy rate in IVF cycle.

Key words: *Vitamin D, IVF, Follicular fluid, Pregnancy rate, 25oh-d.*

P-85

Protective effect of black grape seed extract on cyclosporine A-induced on invitro fertilization damage in male mice

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Introduction: Approximately 20% couples in their reproductive age are suffering from infertility in which male infertility is a contributory factor in half of all these couples. Cyclosporine A (CsA), an immunosuppressant widely used for organ transplantation, In addition to renal and hepatic cytotoxicities testicular toxicity, has been known.

Materials and Methods: This study was conducted to investigate the effect of black grape seed extract on cyclosporine A (CsA)-induced embryo damages. 32 adult male mice, weighing 20±3 g were used. In treatment group Cyclosporine A were given at the dose of 45 mg/kg/day and black grape seed extract at dose of 40 mg/kg/day by gavage for 45 days. After 45 day the animals were sacrificed and Fertility Value from each group were studied.

Results: This investigation revealed that cyclosporine can decrease fertility in mice but black grape seed extract have improved embryo quality and increase zygotes, two cell embryo, and blactocycte.

Conclusion: Ciclosporine is a powerful immunosuppressive agent that has improved graft survival rates in organ trasplantation.In some study reveaed that Ciclosporine coused decreaed in sperm viability, motility, sperm count and level of serum testestrone. In our study, 2-cell embryos were stopped division and did not continue to blastocyct stage in cyclosporine group. Possitive effect of black grape seed extract in improve of development embryo to blastocyct stage in treatment rats were consideredonclusion

Key words: *Cyclosporine A, Black grape seed extract, Reproductive organs.*

P-86

Effects of licorice extract on invitro maturation and invitro fertilization (IVM& IVF) in a mice model of polycystic ovary syndrome

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Introduction: Polycystic ovary syndrome (PCOS) is the most common cause of anovulatory infertility. The

aim of this study was to evaluate the effects of Licorice on PCOS and study of fertility rate with IVM in female adult mice.
Materials and Methods: Forty female adult mice were assigned randomly into four equal groups. Group I: control, group II: animals receiving licorice (100 mg/kg/day), group III: Estradiol Valerate-induced PCOS mice (2 mg/mice) and group IV: induced PCOS mice receiving licorice. The treatment period was three week. Percentage of zygotes, two cell, blastocyct and type of embryos were evaluated.
Results: Results indicated that the percentage of zygotes, two cell and blastocyct reduced in PCOS mice in comparison with control and licorice and PCOS+licorice group also type III (high quality) embryos increased in PCOS+licorice group.
Conclusion: Licorice has significant effects on fertility rate with IVM in mice with polycystic ovary syndrome (PCOS).
Key words: *Licorice, Female mice, PCOS, IVM.*

P-87
The protective effect of Equisetum arvense alcoholic extract on follicular atresia in STZ-induced diabetic mice

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Introduction: The diabetes is one of the most common disorders in which some patients at reproductive aged have sever fertilizing problems. In Type I diabetic patients which produce antibodies could damage the sperm and impaired in egg fertilization. Moreover some women with uncontrolled blood sugar have underlying problems in eggs maturation. Therefore the current study was designed to evaluate the protective effect of *Equisetum arvense alcoholic extract* (EE) on diabetes-induced follicular atresia.
Materials and Methods: To follow-up present study 24 mature female mice were divided into four groups as control-sham (n=6), diabetic (n=6) and diabetic +EE (250 and 500 mg/kg, orally, daily gavage). In order to induce diabetes the STZ (50 mg/kg for 5 days) was administered. Following 30 days of STZ administration the animals were sacrificed and both ovaries were dissected to histological studies. The corpus luteum number per ovary, normal and atretic follicles were counted.
Results: Histological observations demonstrated that, in diabetic group the atretic follicles number were significantly ($p<0.05$) more than in comparison to diabetic+EE- treated and control animals. Moreover the total number of follicles within both side of ovaries remarkably ($p<0.05$) were reduced in diabetic animals. In comparison the total number of corpus luteum in both side of ovaries in group with received 500 mg/kg EE were significantly increased ($p<0.05$).
Conclusion: These results suggest that the diabetic animals had remarkably lower ovulation rate and significantly increased number of follicular atresia and the EE could fairly improve follicular development and raised the ovulation rate.
Key words: *Atresia, Corpus luteum, Diabetes, Equisetum alcoholic extract, Follicle, STZ.*

P-88
Effect of exogenous testosterone infusion on quality of sperm and levels of serum testosterone, LH and FSH in experimental model of spinal cord injury of mice

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Introduction: The purpose of this study was to create a spinal cord trauma model by compression device. Several studies have shown that testosterone is protective in spinal cord injury. We investigated the effect of exogenous testosterone intraperitoneal infusion on morphology, quality and count of sperm.
Materials and Methods: Male mice with average of 30 g weight were used. The animals were anesthetized with an i.p. injection of ketamine/ xylizine mixture. Alaminectomy of T10 vertebra was performed leaving the dura intact. The animals placed in a stereotaxic apparatus. The compression was applied to the spinal cord for 5 minutes, using a rectangular plate, which was longitudinally oriented over the spinal cord. After this time the skin sutured.
Results: serum levels of testosterone, LH and FSH were measured after 7 and 35 days post SCI. The quality of sperm and levels of mentioned hormones decreased.
Conclusion: We observed that infusion of exogenous testosterone during this treatment had positive effect on levels of these hormones and quality of sperm.
Key words: *Spinal cord injury, Sperm, Testosterone, LH, FSH.*

P-89
Comparative study of prooxidant-antioxidant balance and malondialdhyde after tubal sterilization and vasectomy over time in adult rats

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Introduction: Sterilization (tubal sterilization and vasectomy) is a widely applied contraceptive method all around the world. Although most studies have mentioned sterilization as a safe method, there are reports over Tubal ligation and vasectomy

complications. The aim of this study was to compare effects of TL and vasectomy on the serum oxidative stress (Prooxidant-Antioxidant Balance (PAB) and Malondialdhyde (MDA) over time.

Materials and Methods: Male and female rats were divided into sham-vasectomy and sham-Tubal ligation, respectively. The PAB and MDA levels were measured on days 15 and 45 and months 3 and 6 after the intervention. For female rats, blood sampling was performed during the Diestrous phase and estradiol and progesterone were also measured.

Results: Serum PAB and MDA increased after Tubal ligation ($p<0.05$). Vasectomy increased serum MDA remarkably after 45 days, 3 months and 6 months ($p<0.05$). After vasectomy serum PAB also increased although not significantly. Serum estradiol and progesterone decreased remarkably, in Tubal ligation group compared to the sham group ($p<0.05$).

Conclusion: Bilateral Tubal ligation and vasectomy both increase the serum oxidative stress; however the imbalance after tubal ligation was much noticeable. As for the TL probably reduced serum estrogen levels is involved in imbalance. Complications followed by TL or vasectomy could be due to increased level of oxidants therefore prescribing antioxidants during and or after surgery may be a solution.

Key words: *Tubal ligation, Vasectomy, Prooxidant-Antioxidant Balance, Malondialdhyde, Rat.*

P-90

Is there any difference between the trend of colony diameter of mouse spermatogonial stem cells between Sertoli and STO coculture systems

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Introduction: to compare the effect of co-culture on the trend of colony diameter of mouse spermatogonial stem cell between Sertoli and STO cells.

Materials and Methods: The testis of mouse minced into small pieces mechanically and enzymatic digestion was performed to separate the cells from seminiferus tubules. Lectin-coated dishes used for Sertoli cell isolation from spermatogonial stem cells. With the formation of a confluent layer of Sertoli cells, spermatogonial stem cells transferred on this feeder layer. Also mitomycin C-treated STO fibroblast cell line was used. The colony diameter of mouse spermatogonial stem colonies was assessed after 3, 7.10 and 14 days of culture by an inverted microscope.

Results: The results showed significant differences between the trend of colony diameter between Sertoli and STO groups during assessment with higher ascend in Sertoli cells ($p<0.05$).

Conclusion: The present study demonstrated the possible positive influence of Sertoli cell on the colony diameter in the process of in vitro colonization.

Key words: *Spermatogonial Stem Cell, Sertoli, STO, Colony Diameter.*

P-91

Low birth weight prevalence and effective factors on birth weight in Tehran

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Introduction: Birth weights lower than 2500 grams are defined as low birth weight, and are major causes of perinatal morbidity and mortalities all over the world.

Materials and Methods: This was a prospective longitudinal study, performed on 1033 pregnant women, visiting prenatal clinics in medical university hospitals in Tehran in 2011. All participants were enrolled in the study, before 20th week of gestation after giving written consent, upon entry a complete demographic and reproductive health questionnaire was completed for them, and were all followed up with routine prenatal care till delivery. Birth data were extracted from birth certificates.

Results: Of 1033 newborns in this study, 59 (5.7%) had low birth weight. Mean birth weight was: 3165±450 gr. In Mann-Whitney analysis, off all complements consumed in pregnancy, only folic acid had positive significant effect on birth weight ($p=0.001$). To assess all possible effective factors on birth weight, Linear Regression analysis was used, and these factors were assessed: Body Mass Index before pregnancy, height of mother, nutritional complements consumption (Iron, Calcium, Folic Acid, and Multivitamins), third trimester weight, preterm delivery, and sex of baby. Of all these factors, 3rd trimester weight ($p=0.001$, $\beta=0.2$), height of mother ($p=0.02$, $\beta=0.13$), had positive; and female sex of babies ($p=0.004$, $\beta=-0.08$), preterm delivery ($p=0.001$, β-0.35) had negative significant effects on birth weight.

Conclusion: In this study, mothers' being tall, good weight gain in pregnancy, term delivery, and male sex of babies were effective in increasing birth weight.

Key words: *Pregnancy, Low Birth Weight, Nutritional Complements.*

P-92

Effect of experimental testicular torsion on fertilization rate in IVF (in vitro fertilization) in adult male mice

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Introduction: Testicular torsion and detorsion causes reperfusion injury which damages the testicular tissue and affects the quality of sperm. Therefor it might cause infertility or subfertility in men and male animals. The aim of this study is to evaluate fertilization rate after testicular torsion/detorsion in adult male mice.
Materials and Methods: 24 male mice were selected and randomly divided into 3 groups, each containing 8 mice. Group 1: control. Group 2: experimental testicular torsion, 180 degree, for 90 minutes. Group 3: experimental testicular torsion 720 degree, for 90 minutes. Groups were examined after 6 weeks.
Results: in groups 2 and 3, histological damage of testicles and decrease in sperm quality and viability was observed. As well as decrease in fertilization rate in IVF was observed.
Conclusion: testicular torsion decreases quality of sperms and therefore, decreases the rate of fertilization.
Key words: *Testicular torsion, Mouse, Sperm, IVF.*

P-93
Comparison of single and two dose of methotrexate in treatment of ectopic pregnancy

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Introduction: Ectopic pregnancy currently is the leading cause of pregnancy-related death during the first trimester. The methotrexate (MTX) was accepted as medical treatment and reduced surgery in unruptured ectopic pregnancy. Despite numerous studies, the best protocol for MTX treatment remains controversial. The present study compares first week single and two dose MTX administrations protocol in treatment of ectopic pregnancy.
Materials and Methods: In this prospective randomized clinical trial 100 eligible women that clinical examination and vaginal sonography confirmed the diagnosis of unruptured ectopic pregnancy, matched and were collected in two groups. All patients received a dose (50mg/m2) in day 0 and only case group received same dose in day4. All women were given additional doses of MTX on day 7 and/or 11 and/or 14 if βhCG levels did not decrease by 15% during follow up period. Results of two groups were compared for fall of serum βHCG, treatment response and adverse events.
Results: In the single dose group, treatment was considered successful in 44 women (88%), whereas in the two dose group, 49 women (92%) responded to treatment. In the two dose group fewer or 1 women (2%) experienced tubal rupture compared to 6 (12%) of those who had single doses. Other laboratory and clinical complications including abdominal cramps were not significant in two groups.
Conclusion: A first week two dose methotrexate regimen for the treatment of unruptured tubal ectopic pregnancy is more effective than a single dose. In addition, single dose have more treatment failure and cause more tubal rupture.
Key words: *Ectopic pregnancy, Methotrexate, Medical treatment, Drug, Surgery.*

P-94
Impact of oxidative stress on development and differentiation of ovarian follicles in mice

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Introduction: Antioxidants and reactive oxygen species (ROS) are in balance in the body. Whenever the balance between these molecules is disrupted towards an overabundance of ROS ,oxidative stress (OS) occurs. Primary germ cells differentiate to oogonia and primordial follicles and oocytes in the developing ovary.The aim of the present study is to investigate BSO induced OS effect on development and differentiation of ovarian follicles in mice.
Materials and Methods: In this study 30 adult female and 15 adult male mice into 3 groups of control, sham and experimental are used. Two female mice at their stereos cycle were put with one male mouse in a cage for mating. Observation of vaginal plaque was considered as the first day of pregnancy and the mice on 13th day of pregnancy received 2mmol/kg BSO daily until delivery as IP injection. After the pregnancy the 2 , 3, 6 and 7 days old new born were sacrificed and their ovaries were fixed and prepared for light microscopic studies. In the sections ,the number of follicular nests and diameter of primordial and primary follicles were determined using Motic software and compared with control values using t-test.
Results: Light microscopy and morphometry showed that follicular nests are distinguished on the 2nd and 3rd days old and follicles on 6th and 7th days. Morphometric studies revealed that the number and diameters of nests were similar in control and sham groups, but significantly ($p<0.001$) reduced in Experimental groups. However, the number and diameters of primordial and primary follicles in experimental and controls were not significantly different.
Conclusion: The result indicates that oxidative stress suppresses follicular differentiation at early stages but does not affect the development of already differentiate follicles.
Key words: *Oxidative stress, BSO, Differentiation, Ovary, Follicle.*

P-95
The comparison of TLR2 expression in follicular cells between infertile PCOS and normal women

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Introduction: Polycystic ovary syndrome (PCOS) is an endocrine problem that can affect 5-25% of woman in reproductive age. Emerging evidence demonstrates that macrophages and natural killer cells (NK cells) as well as their products are involved in normal cyclical of ovarian steroidogenesis and apoptosis of granulosa cells. Macrophage and NK cell function affected by pattern recognition receptors (PRRs). A group of PRRs that identified in female reproductive tract is Toll like receptors (TLRs) family. Among TLRs family, TLR2 recognize a broad range of microbial products of gram positive bacteria and endogenous ligands including heat shock protein (HSP) 60, Beta defensin and reactive oxygen species (ROS). Therefore, the aim of this study is to investigate TLR2 gene expression in follicular cells obtained from PCOS women in comparison to normal women.

Materials and Methods: Twenty patients (10 infertile PCOS patients and 10 normal women with male factor infertility) underwent controlled ovarian stimulation. The follicular fluid was obtained from the largest follicle (>18 mm) then transferred to a sterile Petri dish, and after the oocytes were removed, the fluid was centrifuged at 300g for 5 min. The supernatant was removed. Total RNA was extracted separately from cellular pallet in each group and real time PCR was performed.

Results: Mean relative expression of TLR2 gene was significantly higher in patients with PCOS in compare to normal women.

Conclusion: This result clearly demonstrated that TLR2 is involved in pathophysiology of PCOS. Our further studies are directed towards understanding TLR2 function in PCOS.

Key words: *PCOS, TLR2, Follicular cells.*

P-96
Expression of TLR2 in endometrium of women with unexplained recurrent spontaneous abortion

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Introduction: Innate immunity acts as the first line of host defense against invading pathogens by using special receptors called pattern recognition receptors (PRRs). One of the main PRRs which are found in female reproductive tract is Toll like receptors (TLRs). TLRs family consists of 10 functional receptors in human that recognize different ligands derived from pathogens. Recently some endogenous ligands are known such as heat shock proteins. Unexplained recurrent spontaneous abortion (RSA) is usually defined as three or more consecutive pregnancy losses before 20th week of gestation without any known cause. One of suggested etiologies of unexplained RSA is immunological factors. TLR2 forms heterodimer with TLR1 or TLR6 and recognize components of gram positive bacteria. The aim of present study was to investigate TLR2 gene expression in endometrium of patients with unexplained RSA in compare to normal women.

Materials and Methods: Endometrial biopsies were obtained between day 19th-24th of menstrual cycle from 10 women with unexplained RSA and 6 fertile women (having at least one successful pregnancy). TLR2 gene expression was studied by RT-PCR and then quantified by real time PCR.

Results: TLR2 gene expression was detected in endometrium of women with unexplained RSA. The mean relative expression of TLR2 gene was higher in women with RSA in compare to normal women but this increase was not statistically significant.

Conclusion: Higher expression of TLR2 gene might have effect in the pathogenesis of unexplained RSA. Our further studies are directed towards investigation the gene expression of other TLRs.

Key words: *Toll like receptors, Recurrent spontaneous abortion, Innate immunity, PCR, Gene expression.*

P-97
Toll like receptors in endometriosis

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Introduction: Endometriosis is an estrogen dependent, chronic gynecological disease defined as the presence of endometrial stromal or glandular cells outside the

uterine cavity. Endometriosis is a common condition with a varied phenotype that is mainly associated with pain including dysmenorrhea and deep dyspareunia as well as problems with fertility. There are relationships between the female immune system and the occurrence of endometriosis .Toll-like receptors (TLRs) are a major family of innate immune systems which recognize specific pathogen associated molecular patterns (PAMPS) in bacterial , fungi, virus and parasites. Human TLRs comprise a large family of 10 different types' proteins that are expressed on various immune cells. The objective of this study is to clarify the expression of TLR 1- 10 in the ectopic and eutopic endometrium of women with endometriosis in compare with normal endometrium of healthy women.

Materials and Methods: This study contains three groups (n=5). Ectopic biopsies were obtained with laparoscopic procedure from patient with endometriosis. Eutopic and control biopsies were gained with piple from endometrium of women with and without endometriosis. The existence of TLR1-10 genes was tested with reverse transcriptase polymerase chain reaction (RT-PCR).

Results: TLR 1-10 mRNA were expressed in all groups but in ectopic and eutopic samples we observed variable expression.

Conclusion: The expression of TLR1-10 in the women with endometriosis is a strong evidence of critical role of innate immune system against infections in this disease. Further study will be done to quantify the expression of these genes by Q-PCR.

Key words: *Endometriosis, Innate immunity, Toll like receptors.*

P-98
Nutrition in reproductive health

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This article reviews nutrition-related issues affecting women and their reproductive health. Health care providers must be able to perform a basic nutritional assessment to identify risk factors and develop a plan of care to reduce those risk factors and improve health. Guidelines are provided to assist in performing a nutritional status assessment. Nutritional assessment of women of reproductive age should identify factors that may affect fertility, periconceptional health, and pregnancy outcome. Recommendations are provided to assist the health care provider in counseling women regarding the relationship of food choices and exercise to health, fitness, and optimal bodily function. Controversies surrounding the effect of micro-nutrient deficits and excesses on reproduction and correction for these imbalances are discussed. Women should be encouraged to initiate dietary and other lifestyle changes to allow for optimal reproductive outcomes.

Key words: *Reproductive.*

P-99
Does metformin affect on pregnancy outcome in PCOs infertile women with different BMI?

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Introduction: Polycystic ovary syndrome (PCOS) patients are often obese and high incidence of ovulation failure in these women is related to insulin resistance and hyperinsulinimea which enhancing their weight. Insulin sensitizing agents such as Metformin (Met) is suggesting potential scope for ovulation induction improvement in these women. The aim of this study was to compare the effectiveness of adding Met to Clomiphen Citrate (CC) at the different classification of BMI in pregnancy outcome of PCOs infertile women.

Materials and Methods: This multi-center single-blind randomized controlled trial study was performed on 334 PCOs infertile patients in Iran from 2007-2009. The Patients were divided in 2 groups randomly and ovulation induction were done with CC alone (group 1) or CC+Met (group 2) and the treatments were continued for 3 cycles. BMI of the patients were divided in 4 groups: A) underweight<18.5 Kg/m^2, B) normal weight (18.5-24.9 Kg/m^2, C) overweight 25-29.9 Kg/m^2, D) obese ≥30 Kg/m^2 in each groups. Rate of pregnancy in different classification of BMI were evaluated.

Results: Pregnancy rate in different classification of BMI in CC+Met shows more improvement in overweight and obese patients than CC group, but it was not significant. Nevertheless, mean of BMI was a significantly higher in CC+Met group relates to CC group in pregnant women ($p<0.05$).

Conclusion: Metformin may help overweight and obese PCOs women to become pregnant without delay to lose weight.

Key words: *Metformin, Polycystic ovary syndrome, BMI, Infertility.*

P-100
The effects of formaldehyde on sperm parameters, testis structure and their treatment by manganese chloride in adult mice

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Introduction: Formaldehyde (FA) as a ubiquitous environmental pollutant is extensively used in hospitals, laboratories and many industrial settings. FA exerts adverse effects on testicular structure and sperm parameters through increasing oxidative stress. Manganese, a well-known antioxidant, can inhibit oxidative stress damages. The aim of this study was to investigate the influences manganese on testis structure and sperm parameters in adult mice exposed to FA.
Materials and Methods: Twenty five of adult male NMRI mice (age of 6-8 weeks) were selected and randomly divided into four groups: (1) Control; (2) Sham; (3) FA exposed group; and (4) FA and Manganese chloride exposed group. The FA exposed groups were inter peritoneally received 10 mg/kg formaldehyde daily for 14 days and Manganese chloride was just injected 5mg/kg on second weeks. Mice were then scarified and sperms were collected from cauda of right epididymis and analyzed for count, motility, morphology, and viability according to WHO criteria. The other testes tissues were also removed weighed and prepared for histological examination. Seminiferous tubules and lumens diameters, epithelium thickness were measured.
Results: The findings of this study revealed that formaldehyde significantly reduced the testicular weight, sperm count, motility, viability and normal morphology in comparison with control group ($p\leq0.05$). In addition, seminiferous tubules atrophied and seminiferous epithelial cells disintegrated in Formaldehyde group in comparison with control group ($p\leq0.05$). Manganese could improved testicular structure and sperm parameters in FA+$MnCl_2$ group in comparison with control group ($p\leq0.05$).
Conclusion: Manganese can improve formaldehyde damage effects.
Key words: *Formaldehyde, Manganese, Testicular structure, Sperm parameters.*

P-101
The effect of matricaria camomilla (MC) on primary dysmenorrhea

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Introduction: Primary dysmenorrhea in women is one of the most common disorders that can cause numerous problems in their personal and social life. Chamomile essential oil is one of the most important medicinal plants which have antispasmodic properties. With regard to the high prevalence of dysmenorrhea the present study seeks to determine the effects of MC on Primary Dysmenorrhea.
Materials and Methods: We study three researches. Articles were collected from reliable various medical sites.
Results: In a clinical trial study by Modaress *et al* (2011) a comparison of capsule mefenamic acid and MC on primary dysmenorrhea in Tehran University in the mean score of pain was found in both groups menstrual pain was reduced after two cycles of treatment but this was a significant decrease in MC ($p<0.001$). In a experimental studies and randomized intervention by Jenabi et al (2009) as the effect of chamomile tea on improving primary dysmenorrhea in Tuyserkan Azad University pain and anxiety after one month Consumption of tea compared to the control group was significant ($p<0.001$). In a clinical study by Yazdani *et al* (2002) as compared to drops of chamomile, fennel and controlled without medication in the treatment of dysmenorrhea and premenstrual syndrome in fars students, a significant decrease was in symptom severity between cycles control with the use of fennel and chamomile in the pelvic and abdominal pain, fatigue and depression ($p<0.05$).
Conclusion: The results showed that consumption of capsules or drops or tea of chamomile can effectively reduce pain in primary dysmenorrheal.
Key words: *Primary dysmenorrhea, Chamomile, Mefenamic acid, Fennel.*

P-102
The source of stress and anxiety in infertile couples

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Introduction: The purpose of this study, the appraisement of family intervention effect in the private lives of infertile couples.
Materials and Methods: 150 women were selected from Dr. Rasekh infertility clinic by census method in the fall of 2011. It was used from questionnaires to collect data. Data was analyzed with SPSS statistical software.
Results: The average age of women were 28.17±5 years and duration of infertility was 57.72 months. The most important reason for refer to infertility clinic; 71.5% women's desire to have a child, 14.6% their partners desire, 8.5%with the agreement of each other, 5.4% due to the insistence of family and relatives. Intervention of the husband's family in Married life and create resentment and emotional problem; 10.6% too much, 10.6% much, 12.8% moderate, 26.2%low, 39.7% very low. Up questions were also asked about intervention of women's family; 2.9% too much, 6.2% much, 12.2% moderate, 28.8% low, 49.6% very low. Intervention by neighbors and acquaintances; 6.4% too

much, 8.5% much, 11.3% moderate, 29.1% low, 43.3%very low. They are Fortunate couples without children, If someone did not intervene in the lives of infertile couples; 69.3% agreement completely, 22.9% agreement, 5% Apathetic, 1.4% opposite, 1.4% opposite completely.

Conclusion: the patients should be consulted by psychologist frequently that will be a fundamental role in reducing stress and even accelerate the outcome treatment. Finally, the couple must be said "Life is just not parenting but also has a sacred purpose".

Key words: *Stress, Anxiety, Infertility, Intervention.*

P-103
The emotional affect of IUI on infertile women

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Introduction: The purpose of this study is evaluation of emotional and psychological effects on infertile women who are undergoing IUI.

Materials and Methods: This qualitative clinical trials research is done on 60 infertile women referred to Dr. Rasekh clinic. Six questions were asked each patient as; too much, much, medium, low and none. Mean age is 32 years. How did you feel pain when doing IUI? There is not answer of too much but much 16.6%, medium 29.16%, low 50%, none 4.16%. How much did you cause discomfort when semen intrauterine injection was performed outside the home and in the office? Too much 12.5%, much 16.6%, medium 20.83%, low 25%, none 25%. Do you have any discomfort if semen collection is performed during intercourse? All patients were responded none. How much is caused your discomfort when your partner practices masturbation? Too much 20.83%, much 16.6%, medium 8.3%, low 4.16%, none 50%.How much is the amount of your wife discomfort when semen intrauterine injection was performed outside the home and in the office? Too much 20.83%, much 12.5%, medium 12.5%, low 8.3%, none 45.83%. How did you have feeling during the IUI? Hope 83.3%, afraid 8.3% and each of Spiritual and religious feelings and not any feel were 16.4%.

Results: 48 patients were accessible. The majorities (54.16%) feel less pain or no pain. 16.6% of them felt too much pain. Discomfort in the office environment, 50% of patients had with high to moderate discomfort and 50% of them had little or no discomfort. The majority of partner of patients (54.16%) had little or no discomfort than IUI process.

Conclusion: Because this method is promising for having a child. So, applying this method will not lead to undesirable effects in these individuals.

Key words: *IUI, Emotional, Hope.*

P-104
Development of antral follicles after auto-transplantation of mouse pre-antral follicles

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Introduction: Ovarian cryopreservation prior to chemotherapy and auto-transplantation post-treatment can restore fertility to women with Premature Ovarian Failure (POF). One of the concerns about the cryopreservation and transplantation of ovary's tissue is the less acquirement of follicles after transplantation. Thus, we assumed that transplantation of ovary follicles lessens these concerns.

Materials and Methods: In this study NMRI mice (4 weeks) heterotopic grafted with own follicles. Preantral follicles obtained and were being separated mechanically from those. These follicles were being enclosed inside a fibrin scaffold, included of fibrinogen and thrombin, and have being transplanted heterotopic in cervical fascia for a period of 14 days. Survival, growth and number of grafted follicles were being assessment with Hematoxylin and Eosin staining and histological sections were analyzed to determine follicle number and stage. A total of 371 follicles were analyzed by histology.

Results: We observed 17 of 21 mice after 14 days were containing tissue-like graft and in the 4 mice no graft observed. Also, from 371 grafted follicles after 14 days the number of 99 had been survived (26.68%), the numbers of 72 were being at preantral stage (19.40%) and the number of 27 had been developed to antral stage (7.27%). The number of 8 degenerated.

Conclusion: Our results demonstrate the mouse preantral follicles enclosed in fibrin after autologous transplantation are survived with more percent and could be developed to antral follicles.

Key words: *Auto-transplantation, Pre-antral follicle, Graft, Heterotopic transplantation.*

P-105
A new vitrification method-novel direct cover vitrification- for mouse ovarian tissue cryopreservation improves follicle preservation

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Introduction: Cryopreservation of ovarian tissue is an alternative technique to preserve the fertility of mammalian species. The aim of the present study was to comparing direct cover vitrification (DCV) and

conventional vitrification (CV) for cryopreservation of ovarian tissue.

Materials and Methods: Ovaries of 5-6 week old Bulb/ce were randomly allocated into three main experimental groups: control or non-vitrified group, CV group and DCV groups: Four concentrations of cryoprotectants were used in DCV and CV groups. The equilibration and vitrification solution was 5% EG+5% DMSO+20% FBS+DPBS (V1), 10% EG+10% DMSO+20% FBS+DPBS (V2), 15% EG+15% DMSO+20% FBS+DPBS (V3), 20% EG+20% DMSO+20% FBS+DPBS (V4) respectively. And in the other group (V5), the equilibration solution was V1, V2 and V3, respectively, and the vitrification solution was V3. The equilibration and vitrification solution of CV group were same as DCV group.

Results: The survival rates of isolated preantral follicles were significantly higher in DCV5 group than other groups ($p<0.05$). The percentages of normality and viable follicles of various developmental stages of follicle in DCV5 group were significantly higher than those achieved by other groups ($p<0.05$). TEM showed that less damage was detected in DCV5 group.

Conclusion: The novel cover vitrification with optimal concentration of cryoprotectants is significantly efficiency and suitable for cryopreservation of ovarian tissue. The integrity of mouse ovarian tissue was preserved by DCV technique more than CV.

Key words: *Cryopreservation, Vitrification, Ovarian tissue, Ultrastructure*.

P-106
Effects of Coriandrum sativum extract on reproductive parameters in adult male Wistar rats

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Introduction: Antifertility effects of *Coriandrum sativum* leave ethanolic extract were evaluated in male Witsar rats.

Materials and Methods: Adult Wistar rats were received 50, 100 and 200 mg/kg extract via gavage for 70 days. The effects of the extract were assessed on body, testis and accessory sex glands weights, seminiferous tubule diameter, germinal epithelium height, sperm parameters and serum testosterone level.

Results: The relative weight of testis and epididymis were decreased significantly ($p<0.05$) in group received 200 mg/kg extract of Coriandrum sativum. No significant changes were observed in the seminal vesicle and ventral prostrate weights. Seminiferous tubules diameter, germinal epithelium height, epididymal sperm count and serum level of testosterone reduced significantly ($p<0.05$) in highest dose group. However, 70 days after treatment withdrawal reproductive parameters recovered to control levels.

Conclusion: Our results indicate ethanolic extract of *Coriandrum sativum* leave have reversible negative impact on male reproductive functions.

Key words: *Coriandrum sativum, Antifertility, Contraception, Spermatogenesis, Sperm parameters.*

P-107
Iran multicenter study on infertility epidemiology, 2005-2011

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Introduction: Many publications present the epidemiology of infertility, but the percentage distribution of factors responsible for infertility varies significantly. The objective was to define infertility profiles in Iran assessed according to the information provided by 3 large infertility centers: Al Zahra, Ebn-e-Sina and Yazd.

Materials and Methods: Multicenter study was performed. Couples with primary infertility, attending one of the three centers in Iran, were asked to fulfill a questionnaire. Overall 826 questionnaires were analyzed: Al Zahra -385, Ebn-e-Sina -235, Yazd -206. Only semen analyses fulfilling WHO Manual 1999 criteria were used in the study and were afterwards compared with 2010 WHO standards.

Results: Results from 3 Iranian centers showed that the average age of infertile women was 30.34±8.65 years and of infertile men 35.18±11.04 years. The mean duration of infertility equaled 5.19±2.84 years. Among 826 surveyed women, no pathological findings concerning reproductive abilities were observed in 537 cases (65.01%). In the remaining patients the following were diagnosed: uterine factor in 26 (9%) women, ovulation disorders in 98 (34%), including 58 (20.1%) of PCOS patients, tubal factor in 122 (42.2%) and endometriosis in 130 (45%) patients. The average of 95 (11.4%) of couples had a mixed cause of infertility. In the study male factor accounted for 58.1% of cases.

Conclusion: According to the data provided by Iran infertility centers the rate of male factor as a reason of infertility has reached 58.1%. Endometriosis and tubal factor are the main reasons affecting the female reproductive potential.

Key words: *Infertility, Epidemiology, Iran.*

P-108
Assessment of maturation rate and morphology of immature mouse oocytes after vitrification

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Introduction: Fertility on estimated 10-15% of couple of reproductive age. In general; %15 of oocyte collected in ART cycles are immature. These oocytes may be cryopreserved further for use in in vitro maturation (IVM) program. This study assesses the survival rate ¸maturation capacity and morphology of mouse oocyte after vitrification.
Materials and Methods: 6-8 weeks old female mice selected and were stimulated by injection of 10 IU of PMSG. After 48h the mice were killed and GV oocytes were obtained by puncturing of antral follicles. The GV oocytes were divided into two groups: (I) GV oocytes that were direcly matured in vitro; and (II) GV oocytes that were first vitrified ¸ then matured in vitro. All oocytes under went IVM in Ham' F10 supplemented with 0.75 IU LH and 0.75 IU FSH and 20% FBS. After 12-16h of incubation, the oocyte survival rate, maturation capacity and morphology evaluation.
Results: Oocyte maturation rate were significantly reduced ($p<0.05$) when oocytes were vitrified at GV stage followed by IVM (43.3%) in comparison with¸ Fresh-IVM assess (88.3%). Following morphologic assessment, abnormalities such as dark cytoplasm and changing the form of oocytes was observed in vitrified-IVM oocytes.
Conclusion: Fresh-IVM was successful than vitrified-IVM group. This study demonstrated the vitrification has adverse effect on oocytes maturity and morphology.
Key words: *GV oocyte, Vitrification, Maturation, Morphology.*

P-109
Comparison of two different culture media on in vitro maturation and fertilization rate of mouse immature oocytes

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Introduction: Induction of in vitro maturation and development of immature oocyte is one of the methods that have been used recently in artificial reproduction techniques. This method is useful especially in women who are affected by cancer and polycystic ovary syndrome. Despite using many types of in vitro media, an appropriate environment has not been reported yet. In this study, we investigated the effect of two culture media on maturation and fertilization rate of mouse immature oocytes.
Materials and Methods: Germinal vesicle oocytes were collected from 6-8 weeks old mice ovaries, 48hr after injection of 10 IU PMSG and then divided into two groups. In the first group, 132 oocytes were placed in culture medium contained OMM (Sage), FSH & LH, FBS 20%. In the second group, 138 oocytes were put in culture medium contained Ham'sF10 (Sigma), FSH & LH, FBS 20%. Oocytes were placed in an incubator for 24 hours. Then, the stages of oocyte maturation were assessed by invert microscope and mature oocytes in each group were transferred to sperm-contained drops. After 24hr, rate of two-cell embryos was recorded.
Results: Maturation rate of oocytes in the first group (90.1%) was higher than second (79.7%) group. The formation rate of two-cell embryo in the first group (67.2%) was higher than second (60.0%) group.
Conclusion: It seems OMM could improve in vitro maturation and fertility potential of immature oocytes and consequently the formation rate of two-cell embryos in mice, in comparison with Ham'sF10.
Key words: *Mouse, Immature oocyte, Maturation.*

P-110
Effect of phoenix dactylifera pollen on sperm parameters of infertile men

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Introduction: There are many ancient records of herbal medical plants. The phoenix dactylifera date palm pollen is used in the traditional medicine for male infertility. The aim if this study was to determine the effects of orally administrated date palm pollen on sperm parameters of infertile men.
Materials and Methods: In this clinical trial, 30 nonsmoker infertile men whose problem could not be solved surgically were enrolled. They were treated by date palm pollen for 2 months.7 gr of date palm pollen, was solved in drinking milk and administered 3 times a week during the study course. Semen analysis was done before and after the treatment and the results were compared.
Results: The mean sperm count was 12.33±5.61× 106/mL at baseline and 22.03±12.17×106/mL after the treatment period ($p<0.05$). The mean percentage of sperm progressive motility was 14.69±6.8% before the treatment which increased to 24.01±11.11% thereafter ($p<0.05$). No significant increase was detected in sperm with normal morphology.
Conclusion: Date palm pollen seems to improving the sperm count and motility in infertile men. We believe further studies on larger sample sizes are needed to elucidate the potential role and mechanism of action of date palm Pollen in the treatment of male infertility.
Key words: *Date palm pollen, Sperm, Male, Infertility.*

P-111
Gonadotrophin-releasing hormone agonist compared to pre-ovulatory injection of human chorionic gonadotrophins for ovulation induction in intrauterine insemination treatment cycles

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Introduction: The clinical outcome of intrauterine insemination (IUI) treatment cycles employing a gonadotrophin-releasing hormone agonist (Superfact) or human chorionic gonadotrophin (HCG) for ovulation induction was compared.
Materials and Methods: A group of 80 patients presenting with amenorrhoea, oligomenorrhoea or unexplained infertility were all treated with clomiphene 100 mg for 5 days and human menopausal gonadotrophins (HMG) from day 3 of the cycle, on an individualized schedule. They were then randomly divided into two groups to receive either a single sc. injection of 0.5 mg superfact or a single i.m. injection of 10,000 IU HCG after follicular maturation. IUI was performed approximately 34 and 36 h following the injection.
Results: Patients received 51 treatment cycles with GnRHa, producing 11 conceptions (22.9%) and two abortions (3.9%), mature ovarian follicles was 3.4±0.08 ($p<0.05$). patients underwent 47 cycles treated with HCG, producing 18 conceptions (35.3%) and four abortions (8.3%) and mature ovarian follicles was 2.6±1.4.
Conclusion: These results show that a sc. injection of a relatively low dose of GnRHa can be as effective as HCG in induction ovulation but pregnancy rate is more by HCG in IUI treatment cycles.
Key words: *HCG, Agonist GnRh, IUI.*

P-112
What is the place of luteal phase support in intrauterine insemination (IUI) cycle?

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Introduction: Intrauterine insemination (IUI) is a common treatment for infertility. The outcome of IUI depends on many factors. One of these factors is the quality of luteal phase. Limited data exist concerning the need for luteal phase support in IUI cycle. The aim of this study is comparison of the pregnancy rate in luteal phase supported IUI with unsupported IUI cycle.
Materials and Methods: The data of 398 infertile patients had undergone IUI were assessed at Novin Infertility Treatment Center from April 2010 to December 2011. All of them were stimulated with clomephen or letrozol and HMG. 205 patients had received luteal phase support in the form of intravaginal progestron and 193 patients had received no luteal phase support. We use t-student and chi-square test for statistical analysis.
Results: There was no significant difference between the 2groups in age, duration of infertility, reason of infertility and clinical characteristics and quality of sperm in both groups. No significant difference was 0bserved in pregnancy rate between patients who received vaginal progestron (12.9%) versus received no vaginal progestron (19.7%) ($p=0.07$).
Conclusion: Routine administration of vaginal progestron for luteal phase support does not seem to improve pregnancy rate in patients underwent.
Key words: *Intrauterine insemination (IUI), Pregnancy rate, Luteal phase, Progestron.*

P-113
Tumor necrosis factor (TNF) alpha polymorphisms and their association with endometriosis

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Introduction: The aim of this study was to investigate the relationship between the polymorphisms of the tumor necrosis factor-alpha (TNF-alpha) with endometriosis.
Materials and Methods: The TNF-alpha C (-850) T, G (-308) A, G (-238) A and T (-1031) C were analyzed in women with (n=65) and without endometriosis (n=65).
Results: Single polymorphism of TNF-alpha in -1031T/C was different between the two groups and had an approximately two times higher risk of endometriosis than women without endometriosis.
Conclusion: TNF-alpha polymorphisms are genetic factors associated with endometriosis through these polymorphisms, -1031T/C and -238 G/A may be involved in the development of endometriosis in women.
Key words: *Endometriosis, TNF-alpha, Polymorphism.*

P-114
Low success rate with IUI, Why?

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Introduction: IVF success rates are much higher than they were before 2000, while success rate with stimulated IUI have not changed. Endometrial thickness and pattern can play an important role in implantation and success rate of IUI (2).
Materials and Methods: In this retrospective study, we have assessed the data of 199 IUI cycle in Novin

infertility treatment center. These patients have been stimulated with clomiphene or letrozole and HMG, endometrial thickness and its pattern and number of follicles ≥14mm have been assessed by ultrasound in day of 11 cycles.

Results: Pregnancy rate was 12%. The mean of endometrial thickness in patients who became pregnant (group 1) was 5.6 and in not pregnant (group 2) were 5.4. There was no significant difference in according endometrial thickness between two groups (t=0.501). In addition, there was no relation between endometrial thickness and number of follicle ≥14 (F=0.187).

Conclusion: Endometrial thickness cannot affect on pregnancy rate in IUI cycle.

Key words: *Endometrial thickness, IUI, Pregnancy rate, Follicle.*

P-115

The comparison of superficial and vibration massages on backache during labor in primiparous women

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Introduction: Myometrial contractions are unique in the extent of pain in comparison to muscular contractions that a woman experiences during her life and women desire to get rid of such a pain. The purpose of this study was the compare two methods of superficial strocking and vibration massages on intensity and variation of low back pain during labor in primiparous women.

Materials and Methods: In this clinical interventional study 120 women were enrolled who were referred to the labor department of Hafez and Zeinabieh hospitals in Shiraz. Participants were randomly divided into three groups of 40. The first group got strocking massage, the second got vibration massage and third group was the control group. The massages were conducted in strocking and vibration groups in three stage of dilatation (3-4, 5-7, 8-10cm respectively) in T10-L1 area for 15 minute in each stage.

Results: There was no significant difference between three groups in age & education level. Intensity of low back pain before and after of massage in two experimental groups were significantly different in 3 stages (p=0.001). Intensity of pain in 3 stages after conducting massage was significantly lower than control group (p=0.001) Variation of pain also was significantly different in 3 stages of dilatation.

Conclusion: Both strocking and vibration massages in T10-L1 segment were effective in reducing the low back pain of primiparous women. Intensity of low back pain was descending in case groups mostly in third stage. But in control group the pain was increasing in intensity mostly in third stage.

Key words: *Strocking massage, Vibration massage, Low back pain, Labor.*

P-116

Knowledge and attitude of medical university students regarding human papollomavirus

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Introduction: Increasing prevalence of HPV Infection among young and sexually active people and its relation with cervix of uterus cancer as one of the leading causes of women mortality especially in the developing countries makes it necessary to evaluate and promote the public especially medical university student's knowledge about this important health risk.

Materials and Methods: Knowledge, awareness and informational behavior of 669 medical university students of Tabriz University of Medical Sciences were evaluated using a prepared questionnaire in July 2011. Data obtained from the study were analyzed by using SPSS™ 17 software and means comparison, Chi-Square tests and logistic regression.

Results: Most of them were familiar with HPV through university courses (90.6%). But, they did not know the condition in details. Mean knowledge score of residents, postgraduate midwifery and nursing students was higher than other groups (p<0.001). According to the predictions, academic educational level (p<0.001), age (p=0.002), and smoking (p=0.006) are regarded as the most important factors relating to the student's knowledge.

Conclusion: Fair knowledge of medical university students about HPV makes it necessary to set effective national public health efforts to promote knowledge and prevent from HPV transmission considering high number of young women susceptible for cervical cancer.

Key words: *Knowledge, Medical University Students, Human Papollomavirus.*

P-117

Early menopause, association with tobacco smoking and tea consumption

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Introduction: Early onset of menopause is a risk factor for several health problems. The objective was primarily to investigate the association between early menopause and current, past active and passive smoking. A second aim was to investigate the association between tea consumption and early menopause.
Materials and Methods: The present population-based cross-sectional study included a sub-sample of 200 postmenopausal women born in 1330-1335 who participated in the study. Early menopause was defined as menopause occurring at an age of less than 45 years. We applied logistic regression analyses to examine the association between early menopause and selected lifestyle factors.
Results: Current smoking was significantly associated with early menopause (OR, 1.59; 95% CI, 1.11-2.28). Stopping smoking more than 10 years before menopause considerably reduced the risk of early menopause (OR, 0.13; 95% CI, 0.05-0.33). Total exposure to smoking (the product of number of cigarettes per day and time as a smoker) was positively related to early menopause and, at the highest doses, nearly doubled the odds (adj. OR, 1.93; 95% CI, 1.12-3.30). These data suggest a possible dose-response relationship between total exposure to smoking and early menopause, but no dose-response relationship was detected for the other variable examined. We found no significant association of tea consumption with early menopause. Of the lifestyle factors tested, high educational level (OR, 0.50; 95% CI, 0.34-0.72) and high social participation (OR, 0.60, 95% CI, 0.39-0.98) were negatively associated with early menopause.
Conclusion: This cross-sectional study shows an association between current smoking and early menopause. The data also suggest that the earlier a woman stops smoking the more protected she is from early menopause. Early menopause was not significantly associated with passive smoking, or tea consumption.
Key words*: Tea, Tobacco, Early menopause.*

P-118
Pregnancy outcome after infertility

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Introduction: Pregnancy following a period of infertility was considered to be an increased risk for the fetus and mother, so we planned a survey to verify this.

Materials and Methods: During one year 1389, we studied pregnancy complications in all women who delivered after 20ws and had a history of infertility primary or secondary with any causes and compared with total obstetric population.
Results: From 8905 deliveries during this year, 410(4.6%) had a history of infertility primary (83%) or secondary (17%) or both (6%). Duration of primary infertility under 3y was 18.3% and secondary infertility under 3y was 41%. Most of them (90%) were gravid one or two with a history of EP in2% and abortion in 23%. Our patients conceived spontaneously (37.1%) or as a result of ovulation induction (24.7%), IUI (19.1%), IVF (9%) and ICSI (10.1%). The incidence of pregnancy complications were: multiple pregnancy in16.5%, preterm labor in 22.2% whom 9.4% were ≤30 weeks and18.4%were <34weeks, hypertensive disorders 22.2%, placental abruption 2%. They delivered by elective operative delivery 29.3%, emergency operative delivery 37.4%, induction of labor 15%and normal vaginal delivery15%. The incidence of infants who were accepted to NICU was 29.3% and low Apgar score (0-5) was 6%. Fetal anomalies were detected in 8%.
Conclusion: We had an increase rate in multiple pregnancy, hypertensive disorders, preterm labor, operative delivery and infants accepted to NICU.
Key words: *Pregnancy outcome, Infertility.*

2- Embryology, Genetic, Stem cell

P-119
An infertile man with a 45X karyotype (case report)

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In this report, we describe a 24 year infertile man with normal secondary sexual characteristics and a 45X karyotype. Physical examination showed bilateral soft small testes and azoospermia. Serum testosterone, estrogen and gonadotropin levels were within normal range. Chromosome analyses were performed on cultured lymphocytes and molecular analysis of the Y chromosome was done using a sequence-tagged site (STS) PCR techniques. Cytogenomic studies showed 45, X karyotype and Sy14 STS gave positive result. The other STS were not amplified. This is the rare male case reported with a 45, X, with normal external genitalia. These types of cases will be useful for the study of correlation between infertility phenotype and cyto-molecular genotype.
Key words: *45 x karyotype, Infertility, Sy14 sts.*

P-120

Cytogenetic abnormalities detected in patients with non-obstructive azoospermia and severe oligozoospermia in North-West of Iran

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Introduction: Genetic factors have a major importance in male infertility. Numerical and structural chromosomal abnormalities have seen frequently in nonobstructive azoospermia and sever oligozoospermia cases with unknown etiology. The main purpose of this study is detect the frequency and type of chromosomal abnormalities in patients with azoospermia and sever oligozoospermia and fertile control subjects in north-west of Iran.The association between the genetic abnormality and clinical parameters was also evaluated.
Materials and Methods: The study was carried out in 50 infertile males (35 were azoospermic, 15 severe oligospermic). For this purpose, chromosomal analysis in peripheral blood lymphocytes according to the standard methods was performed in 50 infertile male and 50 fertile male as control group who were referred to Dr. Rahmani Medical Genetic Lab between years 2010-2011.
Results: The total prevalence of chromosomal abnormalities were found to be 16% (8/50), including five patients (10%) were 47, XXY; one patient (2%) 46, XY/47, XXY; one patient (2%) 46, XY/45, XO. All of them were azoospermic males , and one patient (2%) 46, XY, del (Y) (q11.2) that was Oligozoospermic, And in control males except one case that was 46,XYY and fertile man, all control males had no chromosomal abnormalities.
Conclusion: Cytogenetic studies of these patients showed increased chromosomal abnormalities in infertile men in comparison of the normal population. Comparison of our results with the review of the literature shows a relatively similar incidence of chromosomal anomalies in infertile men. The occurrence of chromosomal abnormalities among infertile males strongly suggests the need for routine genetic testing and counseling prior to the employment of assisted reproduction techniques.
Key words: *Male infertility, Chromosome, Azoospermia, Oligozoospermia, Cytogenetic abnormality.*

P-121

Comparison of two different embryo loading techniques for embryo transfer in IVF/ICSI cycles

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Introduction: It is well recognized that the embryo transfer technique itself is now as an important determinant factor of IVF success. Among different steps in embryo transfer technique, embryo loading is considered less attention. The aim of study was to compare between two different techniques for embryo loading.
Materials and Methods: 386 embryo transfers were included in this retrospective study which 188 and 198 patients were placed in group A and B respectively. In group A, the embryos were drawn directly into the embryo transfer catheter from culture micro drop under the oil but in group B, the embryos were moved from culture micro drop into G2 medium first and then the embryos were drawn into embryo transfer catheter and finally transferred into the uterus. The main outcome measure the study was chemical pregnancy.
Results: There were insignificant differences for number of fertilized oocytes, etiology of infertility, source of sperm, type of stimulation protocol, percent of conventional IVF or ICSI, high quality embryos, type of embryo loading catheter, fresh embryo transfer and ease of transfer between two groups. Although chemical pregnancy was higher in group B compared to A (29% versus 24%, respectively) but the difference between two groups was statistically insignificant (p=0.23).
Conclusion: Although we did not find any significant difference for chemical pregnancy between two common techniques for embryo loading, but more prospective studies with large sample size and follow up the patients until delivery are necessary for better conclusion.
Key words: *Embryo loading technique, Embryo transfer, Pregnancy.*

P-122

Morphological and morphometrical study of early-cleavage mice embryos after vitrification

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Introduction: Since a little knowledge of quantitative characteristics of embryos after cryopreservation has been found in literatures at yet. The aim of this study was to investigate possible changes that occur to embryos after vitrification process from morphological and Morphometrical points of view.

Materials and Methods: 30 early cleavage mice embryos that collected from IVF technique were evaluated in vitrification technique. Before and after vitrification digital images were taken from them. Quantitative parameters include: zona pellucid thickness (ZPT), zona pellucid thickness variation (ZPTV), diameter and volume of blastomeres and embryos, and grading of morphological appearance of embryos as a qualitative parameter has been studied.
Results: Our finding showed that in all quantitative parameters except ZPTV, there were significant mean differences before and after vitrification ($p \leq 0.05$). Vitrified embryos did not show significant alteration in their qualities.
Conclusion: Although gamete and embryo cryopreservation especially by vitrification method has become an integral part of all ART-programs and these changes does not show cytological damages surely, however we should consider the negative changes that appear following in this technique. With regard to this fact, we should do more study for finding solutions to reduce these damages by inducing positive modifications for utilizing this technique as a good quality procedure.
Key words: *Morphology, Morphometry, Embryo, Vitrification, Mice*

P-123
Effects of incubation with progesterone on motility spermatozoa of male ICR mice

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Progesterone (P) in the follicular fluid is responsible of most of the biological effects of this fluid on spermatozoa. The effects of P are mediated essentially by three signaling pathways increase of intracellular $[Ca^{2+}]_i$, efflux of Cl^{-}, stimulation of phospholipases and phosphorylation of sperm proteins. In this study, we used ICR male mice (10-12 weeks). They were rapidly killed by cervical dislocation. The caudal epididymis was promptly removed. And the distal tubules were punctured with a 27-gauge needle in three to five places, and a mass of sperm were squeezed out with forceps into a plastic petri dish (35×106 mm) containing 5 ml medium prewarmed at 37°C. The sperm were incubated at 37°C under 5% CO_2 in air. The experimental groups were as following: 1/ Control: (without progesterone). 2/ Exp. 1: with 1 µg/ml progesterone. 3/ Exp. 2: with 10 µg/ml progesterone. 4/ Exp. 3: with 100 µg/ml progesterone, and the spermatozoa were cultured for 10 min in a CO_2 incubator. Each 14 µl of sperm suspension was withdrawn to analyze the movement pattern after 90 min of incubation. Result showed 41% of spermatozoa were motile after 90 min incubation with 1 µg/ml of progesterone and 48% of spermatozoa were motile after 90 incubation with 10 µg/ml of progesterone and 30% of spermatozoa were motile after 90 min incubation with100 µg/ml of progesterone. There was significant difference between motility rates of Exp. 1, 2 and 3 after 90 min. incubation versus control ($p<0.05$).
Key words: *Progesterone, Motility Spermatozoa, ICR mice, Follicular fluid.*

P-124
Long term effects of Dursban on spermatogenesis in mice

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Introduction: Dursban is an organophosphate pesticide which widely used to control insect pests of crops in the agriculture. This chemical is very highly toxic to animal and humans and is an irreversible inhibitor of cholinesterase. Sub lethal doses of leave behind damage body organs specially the reproductive system. In the present study, we examined the impact of dursban on mice testes.
Materials and Methods: In the present study, 40 adult male mice were divided into four equal groups including: experimental 1 and 2, control and sham groups. In both experimental groups, Mice were intraperitoneally injected with consecutive doses of 15 and 30 mg/kg dursban five days a week for one month. The sham group was injected to olive oil and controls no injection. Animals were sacrificed 7 days after the last injection. Tissue sections were prepared from testis to investigate possible changes occurring in spermatogenic and Leydig cells. Data were analyzed using of one-way ANOVA and Tukey's.
Results: These results show no significant differences in body weight of experimental groups. But, Germ cells, spermatocyts, spermatids and Leydig cells in the numbers showed a significant decrease at experimental groups compared with control group. Moreover, comparison of testis and seminiferous diameters between experimental and controls groups revealed significant differences ($p<0.05$).
Conclusion: The study suggests that dursban can be exerting adverse effect on sperm production and fertility. Therefore, application of dursban should be limited to designed program.
Key words: *Dursban, Testis, Leydig cells, Spermatogenic cells.*

P-125
The effect of Papaver bracteatum Lindl extracts on in vitro fertilization and developmental competence of adult NMRI mice oocytes

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Introduction: *Papaver bracteatum* Lindl extract contain antioxidants. Anthocyanins are as main components in Papaveraceae Family. Antioxidants have protective effects against free radicals. The formation of free radicals in the body is a natural process that it can be made of environmental factors. Production of free radicals in the body has harmful effects on reproduction.
Materials and Methods: Female Naval Medical Research Institute (NMRI) mice at 7-8 weeks old were randomly assigned into two groups (10 mice per group). In control group, mice injected intraperitoneally (IP) with saline alone. In experimental group, mice treated with *P. bracteatum* Lindl extract alone (200 mg/kg of body weight, IP, twelve consecutive days). Ovulated MII oocytes were isolated from the mouse oviductal ampullae. The oocytes were transferred into Human Tubal Fluid (HTF) medium supplemented with 15 mg/ml BSA and capacitated sperm were added to IVF medium. After 4-6 h, both male and female pronuclear (2PN) were transferred into KSOM medium supplemented with 4mg/ml BSA. After IVF process, embryos were cultured and their developmental process was monitored for 96 h.
Results: Developmental rate and blastocyst formation improved by using of the Papaver bracteatum Lindl extract; We observed a significant increase both the in vitro fertilization (IVF) rate and in vitro developmental (IVD) competence when compared to the control group ($p<0.05$).
Conclusion: *Papaver bracteatum* Lindl extract, as a medicinal plant with anti-oxidant property; It can be reduced oxidative stress induced from the environmental factors and also increased in vitro fertilization rate and developmental competence of adult NMRI mice oocytes with free radical-scavenging activities effects.
Key words: *Antioxidant, Embryo, In vivo, Oocyte, Papaver bracteatum Lindl.*

P-126
Effects of blood processing and centrifugation speed on increasing the content of free fetal DNA obtained from the maternal circulation

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Introduction: Decisive prenatal diagnosis requires invasive protocols such as chorionic villus sampling (CVS) or amniocentesis. Due to the risk of fetal loss and injury, the numbers of women who endure these direct tests are limited. Discovery of fetal DNA in maternal circulation has provided the possibility of non-invasive prenatal diagnosis. Many laboratories are working on optimizing this new method. This study was designed to evaluate effects of formaldehyde-treated and centrifugation speed on content of free fetal DNA obtained from the maternal plasma samples.
Materials and Methods: Peripheral blood was obtained from 40 pregnant samples during gestational weeks of 8 to 38. We evaluated the effects of formaldehyde solution treated (4% weight per volume) and three centrifugation speed (1000, 3000 and 5000 rpm) on increase the content of free fetal DNA obtained from maternal circulation.
Results: Significant differences were found in using of formaldehyde and 1000 rpm centrifugation speed on increase the content of free fetal DNA obtained from maternal circulation ($p<0.01$).
Conclusion: The result showed that the addition of formaldehyde to maternal blood samples, and centrifugation speed coupled with careful processing protocols increase the relative content of free fetal DNA, and provides a foundation for development of noninvasive prenatal diagnostic tests to distinguish fetal DNA from maternal DNA in the maternal circulation.
Key words: *Blood processing, Centrifugation speed, Free fetal DNA, Maternal circulation.*

P-127
Identification of bovine fetal Y-chromosome specific repeated sequence from maternal circulation in early gestational age

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Introduction: Fetal sex determination is now possible at 8th week of pregnancy, by maternal blood sample testing. The great sensitivity of PCR technique allows the detection of small amounts of fetal DNA present on maternal plasma. This test is based on the identification of specific regions of the Y chromosome circulating on maternal blood. The aim of this study was amplificationofbovinefetalY-chromosome specific sequence from maternalcirculationin the first trimester of pregnancy for sex determination of bovine fetus.
Materials and Methods: Maternal blood samples were collected from 102 pregnant cows during the 56-89

days of gestation. Plasma was obtained by centrifugation and DNA was extracted by phenol chloroform method from 350 µL maternal plasma. The Y-chromosome-specific repeated sequence, BC1.2, in male fetuses was used as a molecular marker. The polymerase chain reaction has been optimized the amplification of fragments. The PCR products were sequencing by DNA analyzer for identifying of BC1.2 sequence in male bovine fetus.

Results: Fetal gender was determined according to the presence or absence of the BC1.2 sequence in maternal circulation. The BC1.2 sequence was detected in 61 of 102 maternal circulations of cows with male fetuses.

Conclusion: The results showed that PCR with amplification of bovine fetal Y-chromosome specific sequence is a sensitive method for bovine fetal sexing in the first trimester of pregnancy.

Key words: *Bovine fetal, Y-chromosome, Specific repeated sequence, Maternal circulation, Early gestational age.*

P-128
Phenol-chloroform method; an ideal procedure for fetal DNA isolation from maternal plasma

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Introduction: Fetal DNA in maternal plasma and serum has been shown to be a useful material for prenatal fetal sex determination during early gestational ages. The purpose of this study was compare of two DNA extraction methods from mother plasma and its routine clinical application in fetus gender determination with non-invasive method.

Materials and Methods: Maternal blood samples were taken from 46 pregnant cows during the 8th-38th weeks of gestation. DNA was extracted from maternal plasma with two salting-out and phenol-chloroform methods. The concentration and purity of extracted DNA were detected by ultraviolet spectrophotometer. The PCR reaction was carried out to amplify fragments X and Y chromosomes of amelogenin gene. Three µl of the extracted DNA by phenol-chloroform method was used as a template.

Results: The concentration and purity of extracted DNA by phenol-chloroform method were (64-274 ng/ml and 0.93-1.03), whereas, to salting-out method were (0-38 ng/ml and 0.08-0.24). The difference between the mean absorption of DNA extracted by phenol-chloroform and salting-out method was not significant in A_{260} ($p>0.05$). But in contrast, the difference between mean purity (A_{260}/A_{280}) of DNA extracted by phenol-chloroform and salting-out method was significant ($p<0.001$). The X chromosome fragment was detected in all 46 samples and the Y chromosome fragment was detected only in 28 plasma samples that delivered a male calf. The sensitivity and specificity of test was 100% with no false negative and false positive results.

Conclusion: The results showed that phenol-chloroform method is an ideal procedure for fetal DNA isolation from maternal plasma.

Key words: *DNA extraction, Maternal plasma, Gender determination, Non-invasive method.*

P-129
Prenatal identification of bovine fetus sex by real-time PCR using cell-free fetal nucleic acids in maternal blood

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Introduction: The analysis of cell-free fetal DNA extracted from maternal plasma using real-time quantitative PCR is a rapidly developing field. The optimization and modification of real-time PCR technique can be used to significantly improve the reliability and quality of cell-free fetal nucleic acids measurements.

Materials and Methods: Peripheral blood was collected from 46 pregnant cows within 10th and 36th week of pregnancy. Cell free DNA was extracted from maternal plasma samples and tested by a real-time PCR assay for the ß-actin gene (for total DNA) and the male specific SRY target (for fetal DNA) on the Y chromosome. The results of tests were compared with fetal sex determined after delivery.

Results: Our study showed that we were able to detect bovine fetal sex correctly. The specificity of the system reached to 100% (no Y signal was detected in women's pregnant with a female fetus). The ß-actin amplification in maternal plasma samples represented measure of the total amount of extracted DNA (maternal and fetal) and was served as a control of amplification in cases of female gender results.

Conclusion: Bovine Fetus sex identification can be accurately determined from cell-free fetal nucleic acids in maternal blood using real-time PCR analysis.

Key words: *Prenatal identification, Bovine fetus sex, Real-time PCR, Cell-free fetal nucleic acids, Maternal blood.*

P-130
Methylenetetrahydrofolate reductase (MTHFR) C677T polymorphism and male infertility in an Iranian population group

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Introduction: infertility is a global health problem and approximately one couple in seven is affected by fertility or subfertility problems. Polymorphic variants in some genes such as MTHFR could be associated with reduced sperm counts in humans, leading to male infertility in some populations. Methylenetetrahydrofolate reductase (MTHFR) is a key enzyme in the folate pathway. This enzyme plays a critical role in DNA synthesis and methylation reactions. This enzyme has an important role in balancing the pool of methyl groups between DNA synthesis and DNA methylation. Mutations, like the C677T substitution are known causes of low MTHFR enzymatic activity, so to assess whether the C677T polymorphism of the MTHFR gene is associated with male infertility in Iran; we determined the frequencies of the T677 mutation in patients and controls.
Materials and Methods: In this study 300 unrelated infertile men and 303 fertile men were assessed. Genomic DNA was extracted by salting out procedure. Detection of the MTHFR C677T mutation was performed by PCR-RFLP analysis.
Results: The frequencies of CC, CT, and TT genotypes in patients were 161 (54%), 108 (36%), 31 (10.3%) and in controls were 151 (49.83%), 124 (40.92%), 28 (9.24%) respectively. So this polymorphism in infertile patients was not significantly higher than controls.
Conclusion: Our findings suggest that there is no significant association of SNP C677T in the MTHFR gene with infertility, indicating that this polymorphism would not be a genetic risk factor for male infertility in our study group.
Key words: *MTHFR, Gene polymorphism, Male infertility.*

P-131

Bone morphogenetic protein 4 enhances the differentiation of primordial germ cell from mouse embryonic stem cell

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Introduction: In vitro germ cell development from embryonic stem cells (ESCs) has provided a new method for the study of germ cell development. The aim of this study was to evaluate the effect of bone morphogenetic protein 4 (BMP4) on the differentiation of ESCs into germ cells.
Materials and Methods: CCE mouse ESCs were cultured in dulbecco's modified eagle medium (DMED) containing 20% fetal bovine serum (FBS) for 1 day in order to embryoid body (EB) formation and then cultured for 4 days both in the presence or absence of 5 ng/ml BMP4. Expression of Mvh (VASA), the primordial germ cell (PGC) specific marker, was evaluated using immunocytochemistry technique.
Results: The results of immunocytochemistry showed that the mean percentage of immunostaining cells of VASA was increased significantly in BMP4-treated cells compared with BMP4 free group, ESCs and 1-day-old EB.
Conclusion: The results suggest that BMP4 is an efficient inducer in PGC derivation from mouse ESC.
Key words: *Embryonic stem cell, BMP4, Germ cell.*

P-132

The comparison between the mean of the viability and proliferation rates of mouse embryonic stem cells after BMP4 treatment in simple and co-culture systems

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Introduction: In this study, we examined the effect of bone morphogenetic protein 4 (BMP4) on mouse embryonic stem cells (ESCs) viability and proliferation rates in simple and co-culture systems in order to improve the outcome of induction processes and make a system with highest viability and proliferation rates for further studies on BMP4 roles in multiple developmental stages.
Materials and Methods: ESCs were cultured in dulbecco's modified eagle medium (DMED) containing 20% fetal bovine serum (FBS) for 1 day in order to embryoid body (EB) formation and then cultured for 4 days in simple, mouse embryonic fibroblast (MEF) and STO co-culture systems both in the absence or presence of 5ng/ml of BMP4. The mean number of whole cells and living cells were considered as proliferation and viability rates respectively. Data analysis was done with ANOVA test.
Results: The results showed significant higher viability and proliferation rates in simple culture systems. The highest viability and proliferation rates were seen in the cells cultured in simple culture system containing BMP4.
Conclusion: The results suggest that addition of 5ng/ml BMP4 in simple culture system had the best effects on the proliferation and viability rates of CCE mouse ESCs. However, the employment of STO and MEF as feeders has no apparent effects on these factors.
Key words: *Embryonic Stem Cells, BMP4, Proliferation, Viability.*

P-133
Effects of sulpiride antipshycotic drug on in vitro fertilization rate and embryo development in adult male mice treated with it

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Introduction: Priscription of most of antipsychotic drugs like sulpiride affect on some of the hormons synthesis in hypothalamus and hypophysis. Also some hormons unbalanced concentration make unusual impression on reproductive system. In some patients who use these drugs need of in vitro fertilization seems unrefutable. Although the rate of in vitro fertilization success in these couples is unconsiderable, this method is used to help them for successful pregnancy.
Materials and Methods: 24 male adult mice were divided in 3 groups as test, control sham and control. In the same conditions, test received 40 mg per kg sulpiride solution, daily for 45 days IP. Control sham received placebo. For each male mice, 3 female mice were super ovulated, killed and ovums were collected. 50000-100000 of taken sperms of each male mouse were injected in macro droplets for each oocyte. After 24hs, fertilization rate and 2cells zygots and after 120hs arrested emberyos were defined and analyzed.
Results: Results show that in test group percentage of fertilization, 2cells embryos and blastocysts were significantly lower than control sham and control groups. Number of arrested embryos was much more than 2other groups.
Conclusion: Some couples in which men use sulpiride, because of some problems occure in male reproductive gamets, in vitro fertilization is not quarantee fertility and pregnancy but it can use as an axillary way to imptove the chance of pregnancy. It has been suggested that in these cases usage of similar drugs with lower side effects and the same advantages will reduce the rate of infertility.
Key words: *Sulpiride, In vitro fertilization, Mice, Embryo development, Arrested embryos.*

P-134
A survey on effect of ginger hydro-alcohol essence and Cyclophosphamid on ovarian hormones

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Introduction: As an anti-neoplastic medicine, Cyclophosphamid is classified as a derivative of mustard nitrogen, which passes through brain- blood - barrier and it is known as causing significant poisoning affects with high stoppage effects on body. Through attaching two DNA chains of cell nucleus and breaking inter/intra-chain connection and inhibition RNA synthesis Cyclophosphamid causes high toxicity effects on body. Of main effect of the medicine is Amenorrhea, reducing hypothalamuses-hypophysis gonad hormones, ovaries fibrosis, infertility, arthritis, heart-vessel disorders, Thrombophlebitis, renal toxicity, bladder fibrosis, and cystic hemorrhagic.
Materials and Methods: The study is conducted over 40 rate of Wistar race with average weight of 45-50gr., 23 days old in 5 group each of which with 8 members. First, samples were excited by IP injection of PMSG (10 IU) in follicular phase, then ovulation activated by administering HCG (10 IU). Control group received no medicine. While sham group only received medicine solvent and experiment group received cyclophosphamid with a dose of 5 mg/Kg/BW. After 21 days samples received ginger hydro-alcohol essence (gavage) with dose of 2gr/kg/BW with Cyclophosphamid.
Results: During this word, statistical tests SPSS on different concentrations of hypophysis gonadotropic plasma hormones estrogen, progesterone and different factors were examined. Rates in experimental group which received hydro-alcohol essences with Cyclophosphamid placed at $p<0.05$ level in comparison to the group which only received Cyclophosphamid and there was a significant increase in gonadotropic hormones.
Conclusion: This research showed us that ginger hydro-alcohol essence with dose of 2gr/kg/BW could inhibit pharmacology effects of Cyclophosphamid for fertility.
Key words: *Cyclophosphamid, Ginger essence, Estrogen, Progesterone.*

P-135
Effects of an adenylate cyclase activator on developmental competence of immature mouse oocytes in the presence or absence of cumulus cells

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Introduction: Forskolin has been used to extend pre-maturation culture aiming to synchronize the nuclear and cytoplasmic maturation in order to reach the optimal stage for full developmental competence.
Materials and Methods: GV oocytes of PMSG-primed mice were divided into cumulus-denuded oocytes (CDOs) and cumulus-oocyte complexes (COCs) groups. Oocytes were cultured under two step in vitro maturation manner; in the first step, immature oocytes were arrested meiotically in Tissue Culture

Medium199 containing 50uM forskolin and then, in the second step were matured in maturation medium without forskolin for 24h. In control groups, GV oocytes were culture without forskolin only for 24h (one step manner). Obtained MetaphaseII oocytes were subjected to in vitro fertilization and embryos were cultured for 2 days.

Results: There was no significant interaction between presence or absence of cumulus cells and forskolin. The COCs maturation (59.5%), fertilization (58.0%) and two cells embryo (71.3%) rates were higher than CDOs (42.4%, 45.4% and 53.3% respectively) in control group ($P<0.05$). Immature oocytes cultured with forskolin in two step manner showed a significantly higher ($p<0.05$) maturation, fertilization and two cells embryo rates in COCs (64.2%, 62.3 and 81.2% respectively) and CDOs (42.4%, 45.4% and 53.3% respectively) compared to their control groups, while no significant difference was observed between COCs in control group and CDOs which were cultured in the presence of forskolin with tow step manner ($p>0.05$).

Conclousion: Prematuration culture with forskolin in order to delaye spontaneous meiotic maturation has a positive effect on developmental competence of mouse GV oocytes in the presence or absence of cumulus cells.

Key words: *In vitro maturation, Oocytes, Cumulus Cells and Forskolin.*

P-136
The effect of Aflatoxin on sperm quality and in vitro fertility potential in mouse model

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Introduction: Aflatoxins are toxic to a wide variety of animals, including man. Aflatoxins also are known to contaminate a variety of human foods and animal feeds. Sub-symptomatic exposure to aflatoxins is known to produce male reproductive toxic effects with several manifestations.

Materials and Methods: 40 male adult mice were divided in 4 groups. Test groups received 100, 300, 700 mg/kg Aflatoxin, daily for 45 days orally. Control sham received solution of Aflatoxin. All mice after 45 days were sacrificed and cauda epididymis was removed and placed in 1 ml HTF+BSA 4mg/ml medium and incubated for 30 min in Co_2 incubator (5% Co_2, 37^oC) to allow the spermatozoa to swim out. The spermatozoal suspension was analyzed for sperm motility, and viability. For each male mouse, 3 female mice were superovulated, killed and ovums collected. And collected oocytes were fertilized by fresh sperms of each group. The rate of fertilization and preimplantation embryo development examined in period of 120 hours ($p<0.05$).

Results: The results showed that treated by Aflatoxin caused significant decrease in sperm motility and viability. The results obtained from in vitro fertilization revealed that the fertilization rate, embryo quality, two cell embryos and blastosystes rate in Aflatoxin treated groups have been decreased significantly compared with control group and the rate of arrested embryos including lysis and degenerated blastomers and cytoplasmic vesicles has been increased significantly in experimental group.

Conclusion: Taking collectively, the present results highly support the idea that Aflatoxin induced testicular toxicity with adverse effect on sperm quality and fertilization rate in a dose-dependent manner.

Key words: *Aflatoxin, Sperm quality, In vitro fertilization, Embryo development, Mouse.*

P-137
Effects of Atrazine on in vitro fertilization (IVF) and sperm DNA damage in adult male rats

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Atrazine, an herbicide that controls wide-leaf weeds growth, is widely used in agriculture and can affect farmers and animals` health and fertility. In this study36 adult male rats weighing 170±5 g were divided into three groups (control, low dose and high dose) and exposed to Atrazine orally by gavage. Sperm specimens from epidydymal tail into HFT medium in a CO_2 incubator with 37^oC were collected on 15th, 25th and 45th days of exposure. These sperms were analyzed to determine percentage of motile, viable, immature and DNA damaged sperms. For in vitro fertility investigations, eggs were collected from female rats. Percentage of fertilized eggs and embryos in 2, 4 and 8 cells, morula and blastocyst stages were examined. All data were analyzed by ANOVA test. Results showed that in the exposed groups total sperm count and motility of the sperms had decreased and, the immature and DNA damaged sperms had increased. Also due to quantity and quality decrease of the sperms, fertility power in exposed groups was significantly reduced. Atrazine`s detrimental effects on the sperms of the high dose group were more. This study that Atrazine in both, low and high, doses can decrease fertility rate in male rats.

Key words: *Atrazine, IVF, Sperm, Rat.*

P-138
Effects of Ethyl alcohol on in vitro fertilization (IVF) in adult male mice

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Ethyl alcohol is a colorless volatile liquid with different uses for example in liquors or as a solvent in chemical processes. The aim of this study was to investigate effects of this alcohol on male mice fertility. 27 adult male mice, weighing 20±3 g were given 3 mg/kg/day pure Merk ethyl alcohol by gavage for 45 days. In the other hand female mice were prepared by 7.5 IU PMSG hormone and after 48 hours 7.5 IU HCG hormone by IP injections. After 12 to 14 hours they were euthanized in CO_2 gas chamber and oviduct with a part of uterine horn were collected. Eggs were out of the oviduct ampula by dissected method and added to fertilization drop (400 µL). Simultaneously male mice were euthanized and epidydymal tail with a part of ductus deferens were taken to HTF+4mg/ml BSA medium for 30 minutes to let sperms come out to the medium. After swiming up the sperms they were added to the fertilization drop. After 5 to 6 hours, when fertilization was done, percentage of fertilized eggs and embryos in 2 and blastocyst stages were analyzed which were decreased. This investigation demonstrates that ethyl alcohol can decrease fertility in mice.
Key words: *Ethyl alcohol, Mice, IVF.*

P-139
Pyridaden effects on DNA integrity of sperm cells and early embryonic development in mouse

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Introduction: Pyridaben is a new acaricide and insecticide for control of mites and some insects such as white flies, aphids and thrips. This study was designed to clarify that how pyridaben can affect the sperm morphological parameters, DNA integrity, and to estimate the effect of various dosage of pyridaben on in-vitro fertilization rate. 80 adult male BALB/c strain mice weighing 25±2 gram were used. Food and water were given ad libitum. Animals were divided into test and control groups. Control group received corn oil (0.2 ml/day). The test group was subdivided to two groups receiving 212 and 53 mg/kg/day pyridaben. Test groups received the pyridaben orally for 45 days. Spermatozoa were obtained from epididymal tail on days 10, 25 and 45 in control and Pyridaben -exposured groups. Sperm viability and motility, morphological maturity, protamine compression, DNA double-strand breaks and in vitro fertilizing (IVF) ability were examined.
Pyridaben exposure provoked a significant decrease in sperm number, viability and motility of epididymal tail. Our data suggest that the pyridaben resulted in negative impact on the sperm maturation and DNA integrity in a time-dependent manner, which consequently causes a remarkable reduction in IVF ability. Pyridaben exhibited significantly ($p<0.05$) lower results for IVF. Embryo arrest in exposured group was significantly ($p<0.05$) higher than control group. In conclusion pyridaben was able to induce DNA damage and chromatin abnormalities of spermatozoa which could be contributed in observed low fertilizations rate.
Key words: *Pyridaben, In vitro fertilizasion, DNA damage, Mice.*

P-140
Protective Effect of Selenium on Diazinon Induced sperm DNA damage and decrease of sperm count, sperm viability and velocity

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Diazinon (DZN) is an insecticide witch is widely used in agriculture and to control pests in the environment; this compound can be highly toxic for animals and human kind. DZN is characterized in organophosphate (OP) agrochemicals. To evaluate the effect of selenium (SE) as a potential antioxidant on diazinon (DZN) induced histopathological damages, 54 mature male rats were used. The animals were assigned into 3 groups including control-sham, DZN alone and SE+DZN groups. The control-sham group received corn oil and the animals in DZN and SE+DZN groups received 300 mg/kg and 6 microgram/rat, orally, once a day for 60 days respectively. Immature, immotile, death and DNA damaged sperms number increased in DZN exposure animals. Total sperm count decreased by the time in all DZN-exposed animals. The animals, which exposed to SE+DZN, Immature, immotile, death and DNA damaged sperms number was significantly lower in number in comparison to DZN cases. Observations demonstrated that the percentage of morphologically abnormal sperms significantly ($p<0.05$) increased by the time in DZN exposed animals.
Key words: *Diazinon, Selenium, Sperm, DNA damage.*

P-141
The effect of vitamin E on reproductive system in female rats treated with citalopram

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Introduction: Selective serotonin reuptake inhibitors (SSRIs) are the pharmacological treatment of choice for depression, anxiety and obsessive-compulsive disorder. Citalopram is the most potent selective serotonin reuptake inhibitor (SSRI) which is used as an antide-pressant but causes sexual dysfunction. Major depression is associated with defective antioxidant defenses. Vitamin E is the major fat soluble antioxidant in the body. The reproductive behavior is flounced by oxidant-antioxidant balance of body.
Materials and Methods: This study female rats were randomly divided into four groups of eight each, the citalopram was administered via drinking water (30 mg/kg):group I served as controls; group II received in their drinking water citalopram; group III received vitamin E; group IV was treated with citalopram and vitamin E.
Results: In this study citaloperam administrated to rat for treating depression. The citalopram has some negative side effects on reproduction system such as difficulty in orgasm, ejaculation disorder in males and temporary amenorrhea in females. In other hand, it is known that vitamin E acts as antioxidant agent in the body. It is thought, the side effects of citalopram may be due to oxidative substances produced by metabolic function. So vitamin E prescribed together with citalopram and observed that vitamin E can reduce relatively some side effects and improved reproduction behavior.
Key words: *Female Rats, Depression, Reprodution System, Vitamin E, Citalopram.*

P-142
Evaluation of Sperm Quality, Maturation and DNA Integrity in Adult Mice Treated With Sulpiride

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Introduction: Usage of some atypical antipsychotic drugs has severed effects on fertility in male. Hypothalamus and hypophysial impressions and changes in plasma hormons concentration like prolactin, LH and FSH cause different effects on sperm production and quality.In this study, the effects of Sulpiride on sperm count, motility, DNA integrity and other parameters were investigated.
Materials and Methods: 24 adult male mice (age: 6-8 weeks) were divided in 3 groups as test, control sham and control. Treatment group was injected 40mg/kg sulpiride solution IP, daily for 45 days. Control sham received placebo. All mice were sacrificed by cervical dislocation 45days after injection started and couda epididymis were removed surgically and placed in 1ml HTF+BSA 4mg/ml medium and incubated 30 min in CO_2 incubator to allow the spermatozoa to swim up. The spermatozoal suspention was analyzed for sperm concentration in the cauda epididymis, motility and viability. Additionally sperm maturation and DNA integrity were assessed by Aniline blue and Acridine orange staining. Data were analyzed and compered in 3 groups.
Results: In conclusion outcomes show that treatment with sulpiride causes significant decrease in sperm count and motility after 45 days, while abnormal sperm number increase in compare with control sham and control. Studing of sperm viability and DNA maturation show obvious reduction and the rate of DNA damage increase in compare with 2 other groups.
Conclusion: Results of this study prove that sulpiride antipsychotic drug has negative effects on sperm parameters in patients who use it and in some cases couse secondary infertility by its effects on hypothalamus-hypophysis-testis axis.
Key words: *Sulpiride, Mouse, Sperm viability, Sperm quality, DNA damage.*

P-143
Evidence for the differential expression of SRY gene during retinoic acid-induced differentiation of human embryonic carcinoma cells

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Introduction: In mammals, gonad development begins with series of signaling pathways determining final fate of the gonads to become testis or ovary. *SRY*, which encodes on the Y chromosome, is a master regulatory factor in gonad development pathways. Previous studies have clarified the outstanding role of *SRY* in sex determination. *SRY* expression at the onset of this process triggers the signaling cascades leading to testis differentiation rather than ovary. Despite of the growing evidence supporting the crucial role of *SRY* in initiating testicular differentiation, less is known about other possible functions of this gene.
Materials and Methods: In order to further scrutinize possible roles of SRY in differentiation, we analyzed the expression profile of SRY in NTERA2 cells, a human embryonic carcinoma cell line, using Quantitative real-time PCR method.
Results: Our findings showed a difference in *SRY* expression of NTERA2 cells, in the way that the level

of *SRY* mRNA was increased after onset of differentiation, in comparison with un-induced pluripotent cells.
Conclusion: The current preliminary data bring up the hypothesis that SRY could contribute to other biological processes such as cellular differentiation, directly or indirectly.
Key words: *SRY, Differentiation, NTERA2.*

P-144
Avaluation of the Effect of experimental alkolizm on sperm in vitro fertilization potential in mice model

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Introdcution: Chronic alcoholics are often associated with impotence, loss of libido, sterility, testicular atrophy and gynecomastia. Alcoholics are often associated with fertility disturbances with low sperm count and impaired sperm motility. This study was designed to determine the effects of administration of alcohol on sperm ferilization potential.
Materials and Methods: 20 adult male mice were divided in 2 groups: control sham (salin normal) and test group received ethanol (3 g/kg body weight as 25%, v/v) was given by gastric intubation daily for 45 days. After 45 days all mice were sacrificed and cauda epididymis was removed and placed in 1ml HTF+BSA 4mg/ml and incubated for 30 min in Co2 incubator (5% Co_2, 37^oC) to allow the spermatozoa to swim out. For each male mouse, 3 female mice were superovulated, killed and ovums collected And were fertilized by fresh sperms of each groups. The rate of fertilization and emberyo development was examined in period of 120 hours ($p<0.05$).
Results: The results from in vitro fertilization showed that experimental alkolizm have been decreased significantly the sperm fertilization potential, preimplantation embryo development, embryo quality, percentage of two cell embryos and blastosystes rate compared with control group and the rate of arrested embryos including lysis and degenerated blastomers and cytoplasmic vesicles has been increased significantly in ethanol treated group.
Conclusion: The present study demonstrates that chronic consumption of ethanol has toxic effect on spermatozoa and impairs fertility in male mice. Although it is hypothesized that chronic consumption of ethanol has adverse effects on birth outcomes.
Key words: *Alcohol, Sperm, In vitro fertilization, Embryo development, Mouse.*

P-145
Evaluation of The effect of ethanol consumption on oocyte quality, in vitro fertilization rate, embryo quality and embryo development in female mouse

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Introduction: This study was performed to analyze the effect of ethanol consumption on female fertility. Alcoholic women are known to have a variety of menstrual and reproductive disorders, from irregular menstrual cycles to complete cessation, absence of ovulation, fertility and fecundity. Alcohol has also been assocaited with early menopause. The objective of the present study was to verify if there is any relation between alkolizm and female fertility.
Materials and Methods: In this study adult female mice were randomly divided in 2 groups (n=10) with one group serving as control sham (salin normal) and test group received ethanol (3 g/kg body weight as 25%,v/v) was given by gastric intubation daily for 35 days. Following 35 days to induce superovulation in mouse of each group undergoing for gonadotrophin treatment. The oocyte collected from each mice were fertilize by fresh sperm in HTF+4mg/mlBSA modium. The number of oocyte and oocyte quality, rate of fertilization, two cell embryos, arrested embryos, blastocysts and embryos quality was examined in period of 120 hours.
Results: The results obtained from this study revealed that the number of oocyte collected from each mouse in test group in compared with the control group have significantly decreased and had lower oocyte quality. After in vitro fertilization, the fertilization rate, preimplantation embryo development, embryo quality have been decreased significantly in compared with control group ($p<0.05$).
Conclusion: High alcohol consumption was associated with increased risk of infertility. The study showed that chronic alcohol consumption decreased oocyte quality, fertility potential, embryo development and embryo quality.
Key words: *Alcohol, Oocyte, In vitro fertilization, Preimplantation embryo development, Mouse.*

P-146
The Protective Effect of satureja khuzistanica against female mice fertility disorders induced by Busulfan

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Introduction: The overall increase in cancer prevalence and the significant increase in long-term survival have generated worldwide interest in

preserving fertility in young women exposed to gonadotoxic chemotherapy and radiotherapy. The protection against iatrogenic infertility caused by chemotherapy assumes high priority.one of this chemotherapy drugs is busulfan. Ovarian suppression and amenorrhea commonly occur in premenopausal women undergoing chronic, busulfan therapy. In this study we use extract of satureja khuzistanica against side effects of busulfan.

Materials and Methods: 48 adult female mice were randomly divided into 6 groups (n=8): control group received only vehicle orally once a day, two chemotrapy groups were gavaged and injected (ip) with Busulfan, a group were gavaged with satureja khuzistanica, two groups were gavaged and injected (ip) with Busulfan and were gavaged with satureja khuzistanica. Following 35 days to induce superovulation in mouse of each group undergoing for gonadotrophin treatment. The oocyte collected from each mice were fertilize by fresh sperm in HTF+4mg/mlBSA modium. The number of oocyte and oocyte quality, fertilization rate and preimplantation embryo development was examined in period of 120 hours.

Results: The results obtained from this study showed that threated with busulfan decreased oocyte number and quality, fetilization rate, preimplantation embryo development and embryo quality. Administration of satureja khuzistanica in group 5 and 6 significantly increased the number of oocyte collected and quality, fetilization rate, preimplantation embryo development and emberyo quality compare chemotrapy groups($p<0.05$).

Conclusion: the present study indicates that administration of busulfan induce female fertility disorders and satureja khuzistanica may have a protective effect against busulfan disturbans.

Key words: *Busulfan, Satureja khuzistanica, Oocyte, In vitro fertilization, Embryo development, Mouse.*

P-147

The effect of composition of the culture media on mouse embryonic stem cells differentiation to germ cell development

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Introduction: Embryonic stem cells (ESCs) differentiation into germ cells has been already reported, but little is known about the effect of culture media on germ cell development. Changes in culture media can enhances more ESCs either to become germ cells or to initiate rapid division cycles and increasing their numbers. This experiment was done to determine the effect of different culture media on germ cell differentiation.

Materials and Methods: ESCs were differentiated to embryoid bodies (EBs) or monolayer culture system using two different culture media (DMEM+FBS or Knockout DMEM+ ES Cell Qualified Fetal Bovine Serum, FBS- ES). After 5 days, characteristic of germ cells was identified by the presence of three germ cell markers, including Mvh and Oct4 by immunohistochemistry and tissue non-specific alkaline phosphatase activity. Trypan blue staining assessed viability and proliferation rates of cells and cell counting was done after 2 and 5 days of differentiation.

Results: Knockout DMEM+FBS- ES gave better results than the DMEM+FBS for expression of all germ cell markers in both culture, but more were detected in EBs than Monolayer culture. On the other hand, EBs in DMEM+FBS showed very little germ cell markers. The cell count in monolayer culture system showed greater number of cells in Knockout DMEM+FBS-ES in comparison with other groups. EBs differentiation in DMEM+FBS showed significant decrease in cell numbers.

Conclusion: the present study compared monolayer and EBs differentiation protocol in different media and result showed that exposure of ESCs to appropriate media, can improved differentiation of germ cells putatively.

Key words: *Germ cells, Embryonic stem cells, Culture media, FBS.*

P-148

The pregnancy outcomes of four strategies for frozen-thawed embryo transfer cycle

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Introdcution: The aim of the study was to investigate the impact of the developmental stage of embryos (day 2 and 3) on our clinical outcome of two cryopreservation strategies (thawing two or 24 hours before embryo transfer).

Materials and Methods: The data of 564 frozen-thawed embryo transfer cycles were assessed at Novin Infertility Treatment Center from April 2009 to December 2011. The pregnancy outcomes of frozen embryo transfer (FET) (embryos day 2 and 3) were compared retrospectively between two cryopreservation strategies (embryo transfer 2 hours and 24 hours after thawing).In fact in this study we compared pregnancy outcomes between four groups. Group A and B: Day 2 and 3 embryos with overnight culture after thawing. Group C and D: Day 2 and 3 embryos which transferred 2 hours after thawing. We use chi-square test for statistical analysis.

Results: There was no significant difference between the four groups in age, duration of infertility, reason of infertility and clinical characteristics. In all, day 3 frozen-thawed embryos which transferred 2 hours after thawing (group D), gave better results (higher pregnancy rate) than other groups. Furthermore, we

realized that day 2 frozen-thawed embryos with mitosis resumption after an overnight culture period (group A) have better implantation ability than two other groups (groups B and C) but it was not statistically significant.
Conclusion: We conclude that freezing supernumerary embryos on day 3 with just 2 hours incubation before transferring provides better pregnancy rate compared with day 2 embryos and day 3 with overnight culture after thawing.
Key words: *Freeze, Thaw, Embryo, ICSI outcome.*

3- Urology

P-149
Generation of embryonic stem like cells from neonatal mouse testis

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Introduction: New research proposes the pluripotency of spermatogonial cells obtained from testis. These spermatogonia-derived stem cells are called embryonic stem like cell that express embryonic stem cell markers and differentiate to the three germ layers. The aim of this study was the generation of embryonic stem like cells from neonatal mouse testis.
Materials and Methods: Testis cells were collected from neonatal mouse. After decapsulation, testis was mechanically dissected and dissociated via a two-step mechanical and enzymatic digestion. ES Like cells colonies that resembled ES cell was appeared within 2-3 weeks (at passages 5). Real time PCR was performed to analyze the expression of a subset of pluripotency markers, as well as germ cell-specific genes. ES Like cells were confirmed with SSEA1, SOX2 and Oct4 immunofluorescence staining as pluripotency markers.
Results: Results showed that at fifth passages, the pluripotency genes; Nanog and C-myc has significant increase in ES Like cells in compare with spermatogonia cells, whereas the spermatogonial markers; Stra8, Mvh, and Piwill2 became down regulated. In addition to these pluripotency genes, the ES cell marker SSEA-1, SOX2 and Oct4 was expressed in the ES-like cells, similar to ES cells.
Conclusion: This research indicates pluripotency evidence of ES-like cells derived from testis. ES-like cells shows some molecular characteristics with embryonic stem cells.
Key words: *Spermatogonia, ES-like cells, Reprogramming, Testis, SSEA1.*

P-150
Caspases 3 and 9 activity is associated with mitochondrion- dependent apoptosis of testicular germ cells in ciprofloxacin- treated male mice

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Introduction: It has been reported that ciprofloxacin (CPFX) inhibits cell growth and induces apoptosis in certain eukaryotic cells.Here the role of mitochondrial pathway in the CPFX induced apoptosis in testicular germ cells was investigated.
Materials and Methods: A number of twenty four mature male NMRI mice were used. The animals assigned into control and test groups. The test groups subdivided into low dose (206 mg/kg) and high dose (412 mg/kg) CPFX treated groups. Control animals received carboxymetyl cellulose. All animals were treated orally for 45 days. At the end of the study the animals were sacrificed and testicular tissues were homogenized in PBS. Concentration of caspase 3 and 9 were measured by mouse enzyme linked immunosorbent assay kits. Then after isolation of DNA, it was analyzed and characterized by gel electrophoresis for the determination of apoptotic cell death by Apoptotic DNA-Ladder kit.
Results: The concentration of caspase 9 and 3 in the mice which were treated with two doses of CPFX was higher than control. But not significant differences were found between low dose and high dose treated mice. After agarose-gel electrophoresis, ladder pattern was observed in CPFX - treated mice.
Conclusion: Caspase 9 appear to be the initiator caspase activated in mitochondrial apoptotic pathway and it can activate the caspase 3 leading to apoptotic cell death. Therefore the mitochondrial apoptotic pathway is involved in mediating the CPFX induced apoptosis of testicular germ cells.
Key words: *Ciprofloxacin, Apoptosis, Caspase 3, Caspase 9, Testicular germ cell.*

P-151
Physiotherapy management in prenatal and postnatal women with urinary incontinence

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Introduction: According to the International Continence Society, urinary incontinence is a condition in which involuntary loss of urine leads to social and hygienic problems. It is a common problem in

approximately one third of women and subsequently my affect their quality of life. Common causes of urinary incontinence include pregnancy and childbirth with the possible mechanism of pelvic floor muscles damage and trauma to the pelvic floor organs. In literature, physiotherapy management, particularly pelvic floor muscle training is communally recommended in prenatal and postnatal women to overcome the urinary incontinence. However, the role of physiotherapy is usually neglected in maintaining and restoring the normal function of the pelvic floor muscles affected by pregnancy; thus the health promotion objectives are unlikely totally fulfilled. The purpose of this study was to determine the effectiveness of physiotherapy management, particularly pelvic floor muscle training on urinary incontinence in prenatal and postnatal women.

Materials and Methods: To meet the study objective, systematic review manuscripts, and evidence-based physiotherapy practices were used as an effective way to collect and present the data.

Results: The evidences showed that the approximately 70% improvement was achieved in symptoms of urinary incontinence in prenatal and postnatal women. There was a significant positive relationship between the intensity of the pelvic floor muscle training and the treatment effectiveness.

Conclusion: Physiotherapy management, particularly pelvic floor muscle training, plays an important role in improvement of symptoms in prenatal and postnatal women with urinary incontinence.

Key words: *Physiotherapy, Pelvic Floor Muscle Training.*

P-152

Long-term effects of ciprofloxacin, a fluoroquinolone antibiotic on histological structure of the testis in mice

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Introduction: Approximately 15-20% couples in their reproductive age are suffering from infertility in which male infertility is a contributory factor in half of all these couples. Among the variety of causes, environmental factors such as drugs seem to be among the most important factors of infertility. In the present study we sought to elucidate the impact of ciprofloxacin (CPFX) on histological structure of the testis.

Materials and Methods: Twenty four mature male NMRI mice were randomly divided into three groups. Two groups received low dose (206mg/kg body weight) and high dose (412mg/kg body weight) of CPFX and the remained group, control, received carboxymetyl cellulose p.o. for 45 consecutive days. At the end of the study the animals were sacrificed and testicular tissues were fixed in 10% formalin fixative for 48h and subsequently embedded in paraffin. Sections (5-6µm) were stained with iron-weigert for histological assessment of the testis.

Results: Indicated that the tubular differentiation index, spermiation index and repopulation index significantly reduced in CPFX-treated mice in comparison with control group, also CPFX caused a significant increase in the percentage of seminiferous tubules with disruption and depletion. Moreover CPFX decreased the number of Sertoli cells that participate in spermatogenesis cells integrity and spermiation. Also Leydig cells/mm^2 of interstitial tissue decreased in CPFX-treated male mice.

Conclusion: Current study has proved that CPFX is able to elicit toxic effects on male fertility and exert its effects in low dose because the outcomes for both low and high dose were not statistically remarkable.

Key words: *Ciprofloxacin, Leydig, Mice, Sertoli.*

P-153

Effects of co-administration of dopamine and vitamin C on ischemia-reperfusion injury after experimental testicular torsion-detorsion in rats

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Introduction: The objective of this study was to investigate the effects of dopamine as vasodilator, vitamin C as an antioxidant and combined administration of them on ischemia-reperfusion (I-R) injury following testicular torsion (TT).

Materials and Methods: Thirty adult male rats were divided into six groups each containing five rats. Testicular ischemia was achieved by twisting the left testis for 4 h. Group 1 was for determination of the basal values. Group 2 had 4 h TT. Group 3 had 4 h TT and was then treated with dopamine. Group 4 had 4 h TT and was then treated with vitamin C. Group 5 had 4 h TT and was then treated with dopamine and vitamin C. Group 6 was designed as a sham operated group.

Results: Testicular torsion caused a significant decrease in the percentage of spermatogenesis and seminiferous tubules diameters compared with the control and sham groups. Administration of dopamine, vitamin C and their combination increased above

mentioned parameters and decreased serum malondialehyde levels significantly. However, vitamin C had better results than the other treatments ($p<0.05$).
Conclusion: In conclusion, a potent antioxidant like vitamin C was found to be more effective than increasing blood flow by a vasodilator like dopamine on improving I-R injury following TT.
Key words: *Testicular torsion, Vitamin C.*

P-154
The impact of alcohol on sperm parameters in mice with experimental diabetes

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Introduction: It is founded that insulin-dependent diabetes can reduce ejaculated semen and decreased vitality and motility of the spermatozoa. Alcohol consumption can have an adverse effect on sperm production. Alcohol abuse is considered as one of the problems associated with poor semen production and sperm quality**.** The aim of this study is survey the impact of alcohol on sperm parameters in mice with experimental diabetes.
Materials and Methods: Totally 32 Adult male mice (10 weeks old, 35g) were divided to 4 groups including mice of group 1 served as control fed on basal diet, group 2 received streptozotocin (STZ) (200 mg/kg, in single dose, intra peritoneal) and basal diet, group 3 received alcohol (10 mg/kg, water-soluble) and basal diet and group 4 received streptozotocin and alcohol for 35 days. Finally, right tail of epididymis was cut and placed in Ham's F10. Swimed out spermatozoa were analyzed for number, motility, morphology (Pap-staining) and viability (eosin-Y staining).
Results: In diabetes and alcohol treated mice, a significant decrease was found in sperm number, sperm motility and sperm viability compared to control group .In diabetic group and alcohol treated mice, we also saw a significant decrease in sperm number, sperm viability and sperm motility compared to control mice.
Conclusion: Although alcohol and diabetes can reduce sperm parameters, the combination of alcohol consumption with diabetes may have more detrimental effects on spermatozoa.
Key words: *Sperm parameters, Diabetes, Alcohol.*

P-155
The effects of cannabis sativa hydroalcoholic extract on sperm parameters in diabetic rats

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Introduction: Diabetes is a metabolic disorder which has a variety of side effects on the male reproductive system. Cannabis sativa is one of the herbal plants used in many cultures. The present study investigated the effect of hydroalcoholic extract of cannabis sativa on some sperm parameters in diabetic rats.
Materials and Methods: Thirty five wistar male rats (210-240 gr) were allocated into three groups; control, diabetic, and diabetes treated with one of cannabis sativa extract (10, 50 and 100mg/kg). Diabetes was induced by Interaperitoneal injection (IP) of a single dose of STZ (60mg/kg). The control and diabetic groups received distilled water and the experimental groups C received one of extract doses using IP method for 14 consequent days. The animals were sacrificed. Blood sample was taken and serum testosterone was measured by ELISA method. Sperms were collected from cauda epididymis. Sperm count, motility, and morphology were determined. Data were analyzed by one- way ANOVA and $p<0.05$ was considered significant.
Results: The mean of blood glucose in diabetic rats treated with the extract significantly reduced as compared to the diabetic group ($p=0.000$). The average sperm count and motility, percentage of sperms with normal morphology and testosterone levels in diabetic and diabetic treated with extract decreased significantly ($p=0.000$).
Conclusion: Cannabis sativa extract showed a moderating effect on the diabetic hyperglycemia but no ameliorative effect on the reproductive dysfunctions of diabetes.
Key words: *Diabetes, Cannabis Sativa, Sperm motility, Testosterone.*

P-156
The effects of prenatal water deprivation on testes of rat: A histological study

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Introduction: Prenatal stresses such as water deprivation affect developmental process of embryo. Recently we showed that prenatal water deprivation

induces apoptosis in developing sexually dimorphic nucleus (SDN) of male rats that is derived by reducing the concentration of serum testosterone. This study evaluated the effects of water deprivation on histological parameters of rat testes.

Materials and Methods: Pregnant rats were divided into two groups (control and experimental). In experimental animals, water was removed from the ewes for 48h at the end of third trimester of gestation (19-21st days). Then, testicular histopathology and histomorphic analyses on newborns were performed.

Results: The results showed that prenatal water deprivation induced histopathological alteration such as epithelium vacuolization and atrophy. Morphometrical data showed that prenatal water deprivation decreased tubular diameter and reduce epithelium height ($p<0.001$). Johnson's score showed poor spermatogenesis in experimental group ($p<0.000$).

Conclusion: Present study revealed that prenatal water deprivation had toxic effect on developmental process of testes. The data confirm that testis, as the end point of hypothalamic pathway is also sensitive to water deprivation as that for sexual dimorphic nucleus of the brain.

Key words: *Prenatal stress, Rat, Testis, Water deprivation.*

P-157
Inhibitory effect of chilli extract (Capsicum annuum) on isolated bacteria from human semen

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Introduction: Urogenital tract infection is one of the well-known factors which are effective on men infertility. Nowadays, emerging of antibiotic resistance strains and the side effect of consuming antibiotic resulted in using new assay for remediation. So the investigation of antimicrobial effects of chilli extract on isolated bacterial strains from human semen was the goal of current research.

Materials and Methods: Bacterial strains were isolated from 30 human semen samples by culturing on BHI agar and incubated at 37ºC for 24h. Capsicum annuum was collected from chilli farm situated at 20km from west of Tehran and Maceration method with ethanol 96% was used for chilli extraction. Antimicrobial effect of chilli extracted was investigated by disk diffusion method. The minimal inhibitory concentration (MIC) and minimal bactericidal concentration (MBC) were determined by broth dilution method.

Results: Staphylococcus aureus and Escherichia coli were dominant strains which isolated from 30 human semen samples. The growth inhibition zones were determined 9 and 10 mm for S. aureus and E. coli respectively. The minimal inhibitory concentration for S. aureus and E. coli were obtained 76.32 and 19.08 mg/ml, respectively.

Conclusion: The result showed that the ethanolic extract of Capsicum annuum has antimicrobial effect and could inhibit the growth of dominant bacteria isolated from human semen.

Key words: *Chilli extraction, Semen, Staphylococcus aureus, Escherichia coli.*

P-158
A comparison between semen parameters before and after swim up in intrauterine insemination method

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Introduction: Infertility is estimated to affect about 10-15% of couples and when medical treatment is not effective, we have to use ART methods. One of these methods that can improve semen parameters, is swim up. We aimed to define the influence of swim up on sperm count, morphology and motion.

Materials and Methods: A group of 345 male who came to Novin Infertility Center for IUI between 2010-2011, were recruited for this study. Sperm count, morphology and motility of sperm, before and after swim up, were measured. The statistical analysis was performed by using SPSS soft ware, version 16.0. All tests were two-tailed with a confidence level of 95% ($p<0.05$).

Results: There were significant differences between mean number of sperm after swim up (84.14×10^6) and before swim up (55.92×10^6). Sperm motility before swim up was 55.6% and after swim up improve to 92.3% and swim up lead to improving sperm motility in Grade A (22.11±7.40).

Conclusion: Swim up had significant effect on semen parameters including: motility, morphology and sperm grading.

Key words: *Swim up, Sperm count, Sperm morphology, Sperm motility.*

P-159
The protective effect of equisetum arvense alcoholic extract on testicular tissue and serum testosterone level in diabetic mice

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Introduction: Both types of diabetes are popular throughout the world, with the latter increasingly being described as a "modern disease" caused by lifestyle, diet, obesity and genetically disorders. In longer time, the diabetes can cause fertility problems in male human population with exerting severe damages in testicular tissue and reducing total number of normal sperms and semen volume. Therefore, this study was designed to evaluate the protective effect of Equisetum arvense alcoholic extract (EE) on histological structure of testicles and serum level of testosterone in STZ-induced diabetic mice.
Materials and Methods: Twenty four mature male mice were assigned into control-sham, diabetic, diabetic+EE (250mg/kg, orally, daily gavage) and diabetic+EE (500mg/kg, orally, daily gavage) groups. The STZ (50mg/kg for five days) was administrated in order to induce diabetes. Following 45 days of STZ administration the animals were sacrificed. Then, the testes and serum samples were analyzed for histopathological and biochemical alteration, respectively.
Results: In diabetic animals the percentage of seminiferous tubules with positive tubular differentiation (TDI), repopulation (RI) and spermiogenesis (SPI) indexes were significantly ($p<0.05$) lower than those animals in EE-treated groups. The total number of Leydig cells/one mm^2 of interstitial tissue were increased in the groups of EE-treated. The EE-treatment elevated serum level of testosterone.
Conclusion: Achieved data indicate that the diabetes could impair spermatogenesis and spermiogenesis processes. Moreover, it reduces the serum level of testosterone through degenerating leydig cells. Ultimately, the EE could fairly protect the testicular tissue by protecting Leydig cells and maintaining serum testosterone concentration in normal level.
Key words: *Diabetes, Equisetum arvense, Testis, Testosterone, Spermatogenesis.*

4- Nursing and Midwifery

P-160
The Comparative evaluation of infertile women and men's opinions towards surrogacy

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Introduction: Infertility is generally defined as 1 year of unprotected intercourse without conception. Infertility as a stressful life crisis devastates the person's mental health. The one of the latest methods of ART is surrogacy. The unique aspects of surrogacy have led to it becoming the most controversial of all the assisted reproductive techniques in recent years and arises ethnical, moral, psychological and social issues. So this study performed with the purpose of determining the knowledge and attitudes of infertile women and men about surrogacy.
Materials and Methods: This is the descriptive study. The population under study was infertile women and men who referred to Fatemieh Infertility Treatment Center in Hamadan city. 150 women and 150 men as the study sample were selected by systematic randomized method. Data gathering was on the base of questionnaire and interview. Data analyzing performed with SPSS software.
Results: Only 10% of infertile women and Infertile 14% of men did not had enough knowledge toward surrogacy. The positive attitudes of the infertile women and men toward surrogacy were 53.33% and 54.66% respectively. Also there wasn't significant statistical relationship between the knowledge and attitudes toward surrogacy and sex of the participants in the study.
Conclusion: Although of having good knowledge of infertile women and men toward surrogacy, but the attitudes of them about this technology aren't so positive, the making and the other hand changing the cultural background in society for better acceptability of this method by people is needed.
Key words: *Infertility, Surrogacy, Opinion.*

P-161
Strategies for improving women's health promoting behaviors

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Introduction: Women's health constitutes a major aspect of development in societies and is considered a health-related priority. A strategy of health improvement is a "plan for action", consisting of mechanisms by which the objectives of health improvement and public health are realized. The aim of the present study is to determine appropriate strategies for improving health promoting behaviors in women of reproductive age.
Materials and Methods: The current study uses the nominal group technique (NGT). A specialized panel discussion was held in October 2011 with twelve health

specialists who were selected through purposive sampling. The session lasted for 2.5 hours.
Results: Individual writing of ideas in silence generated eighty-one strategies; once the repeated and irrelevant items were eliminated and items with similar concepts were merged, forty-four strategies remained. Among these, the following four items had the highest scores, respectively: improving physical activity with social support approach, empowering women, encouraging and improving men's role in women's health, and promoting social support.
Conclusion: The nominal group technique (NGT) may serve as a systematic and scientific method to make proper use of data and evidence alongside the professionals' experiences to combine them optimally and contribute to a rational decision about health improving strategies. The strategies presented in this study may be utilized by policy-makers, planners, managers, researchers and healthcare providers to improve women's health promoting behaviors, and thus contribute to their wellbeing.
Key words: *Strategy, Women, Health promoting behaviors, Nominal group technique.*

P-162
Trichomoniasis and relationship with clinical and para clinical observations in women supported by selected health centers of Tabriz

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Introduction: Sexually transmitted infections pose a serious threat not only to women's sexual and mental/ psychological health but also to the general health, and well- being of millions of women worldwide. Trichomoniasis is estimated that 180 million people are infected annually worldwide, making it one of the most common STDs. Up to 50% of infections may be asymptomatic. The key to successful and practical management of STIs lies in the accurate diagnosis and appropriate treatment for conditions. The aims of this study were determine Trichomoniasis prevalence and relationship with Clinical and para clinical observations in Women to refer to Tabriz health centers.
Materials and Methods: This is a cross- sectional study, in which 1000 women who had the inclusion criteria's were selected by random sampling from 12 selected health centers of Tabriz. A questionnaire was used to obtain their personal and reproductive information's, check list for clinical observations and Wife test, direct observation, and Diamond culture methods were used for diagnose vaginal infections. PH of their vaginal discharges was determined. Data were analyzed by using SPSS version 13.5, and frequency, mean and standard deviation, $\chi 2$ and fisher exact test.
Results: The prevalence of trichomoniasis was 9.2%. Findings showed that the majority of clinical observations were abnormal discharge volume, no homogeny consistency of discharge, clear appearance and yellow-green color of discharge and PH over 5.5 in patients, that just appearance and color of discharges were statistic relationship with trichomoniasis ($p<0.01$). Wife test, direct observation, and Diamond culture methods were negative in majority of patients. Sensitivity and specificity of direct observation method were respectively 33% and 100%.
Conclusion: According to high prevalence of trichomoniasis infection and important role in infertility after chronic cervisities also clinical and Para clinical methods do not have sufficient Sensitivity and specificity for diagnosis, it seems necessary to pay more attention to these infections, and more efforts should be done for prevention. Midwives and other health professionals have an important role in giving more information to women about infections and risk factors and improving their quality of life.
Keywords: *Trichomoniasis, Clinical and para clinical observations.*

P-163
Why has infertility become medicalised?

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Introduction: Medicalization is the process by which non-medical (or social) problems become defined and treated as medical problems, usually as illnesses or disorders. Medicalization can be described as an expansion of professional power in different sections of human life. The power of medical science penetrates more and more into the private and social existence of individuals. The female body has been the target area of the medical profession for centuries. The value of children and their important place in the social organization of society appears to be central to the medicalization of infertility.
Materials and Methods: We conducted searches for all literature published before December 31, 2011, using PubMed, Cochrane Library database, Google search engine and sciencedirect database. Key words used for searches included infertility, fertility, medicalization and childlessness. In addition we reviewed the reference lists of all obtained articles.
Results: One benefit of medicalization is that it may reduce the stigma associated with certain problems through redefinition as physiological or biological origin and infertile couples seek medical interventions to enhance putatively normative reproductive capabilities.
Conclusion: Placing social problems within just a biomedical framework does not provide a complete satisfactory solution for conditions that deviate from cultural norms because those norms are replicated in biomedical ideologies about the nature and treatment of disease.
Keywords: *Infertility, Medicalization, Fertility, Stigma, Social problems.*

P-164
What do women know about Human Papilloma Virus?

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Introduction: Human papilloma virus (HPV) as a common sexual transmitted infection in a world can bring about considerable health problem especially cervical cancer in women and result in high expenses. Virus is commonly contaminated through Sexual contact while other vertical and horizontal transition should not be neglected.
Materials and Methods: Knowledge, awareness and informational behavior of 400 women in Tabriz were evaluated using a prepared questionnaire (55 questions arranged in 5 parts) in July 2011. Data obtained from the study were analyzed using SPSS-17 software using One Way ANOVA test, $\chi 2$ test or Fisher's exact test and logistic regression model. In this study, $p<0.05$ was regarded statistically meaningful.
Results: Mean age of women was 34.50±4.43 years. Mean score of HPV knowledge among participants was 14.40±3.51 while about 26% of them had a moderate or higher knowledge about the infection. 64% of studied women could not pose sufficient knowledge about routes of transition and 71.4% were not aware of its link with cervical cancer; only 29.2% declared that HPV infection is curable and can be prevented.
Conclusion: Low knowledge of women about HPV infection and its transmission route make it necessary to set effective national educational programs to promote knowledge and prevent HPV transmission considering high number of young women susceptible to cervical cancer in Iran.

Key words: *Women, Human papilloma virus.*

P-165
Prevalence and risk factors of trichomona vaginitis in the clients of Tabriz Health Centers

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Introduction: Vaginitis is one of the most common diseases in women. Trichomona vaginitis which is caused by protozoan Trichomona vaginalis has a worldwide distribution, in which affects about 150-180 million women annually in the world, and is the causative agent for 80% gynecologists and midwives visits. The purpose of this study was to define the prevalence and common risk factors of Trichomona vaginitis, in women referring to Tabriz health centers.
Materials and Methods: This was an analytic study in which 1200 women in the age range of 15-45 years, that lived in Tabriz and referred to health centers of Tabriz University of Medical Sciences, were enrolled. Stratified sampling was done. For the purpose of gathering fertility information, an interview checklist was used and all the subjects underwent vaginal examination and discharge of the posterior vaginal fornix of each patient was collected by using a sterile swab and then mixed it in a micro tube which contained 0.5 cc saline normal for the diagnosis of TV in a wet mount assay?
Results: The overall frequency of Trichomona vaginitis by wet mount method was 4% (48 women). There were no statistically significant differences between age, occupation and disease duration ($p>0.05$) and infection rate of Trichomona vaginalis, but there was a significant association between TV and some variables such as the contraception methods ($p=0.04$), the average of their incomes ($p=0.005$), vaginal PH ($p=0.02$), the symptoms in husbands ($p=0.02$), and the frequency of this disease per annum ($p=0.01$).
Conclusion: It can be concluded that Trichomona vaginitis is an important sexual transmitted disease in Tabriz and etiology of infertility after chronic cervisities. In order to decrease new cases of Trichomona vaginalis infections, midwives, as health providers, should inform women of genital infections and their transmission ways.

Key words: *Trichomona Vaginitis, Risk Factors, Prevalence, Tabriz.*

P-166
The determination of group B streptococcus in the rectovaginal of pregnant women who referred to the health centers of Shiraz Medical Sciences University in 2011

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Introduction: Group B streptococcus bacteria is the main component in the delivery and often do not cause clinical signs during pregnancy. Infections from these bacteria have no symptoms in pregnancy. It can cause a wide range of problems from the main causes of infection prior to birth, to septicemia in mother and neonate. Unpleasant consequences are premature labor, premature rupture of membrane, and chorioamnionitis. In neonates, it can cause neonatal early infection, stillbirth, respiratory distress and apnea.
Materials and Methods: This was a semi experimental study carried out on 250 pregnant mothers with and singleton pregnancy randomly in 37 weeks referred to different prenatal clinic (October to February 2009). Culture specimens for group B streptococcus (GBS) were obtained from the rectum

and vagina. Then sociodemographic variables, gynecological-obstetrical antecedents, and prenatal outcomes were studied. Data were analyzed using the Statistical Package.

Results: The age of mothers was between 17-40 years with average and Standard deviation of 26.37±5.1 years. The prevalence of vaginal 3.5% and rectal GBS colonization was 0.4%. The other microorganisms were yeast in vagina of 172 case (67.7%) and gram negative bacteria in 42 cases (16.5%). There was association between the vaginal GBS and first minuet APGAR and rectal GBS with weight birth ($p<0.05$).

Conclusion: The carriage rate of GBS among pregnant women in the present and a previous study, remain high. Attempts to establish and implement a program aimed at GBS disease prevention have met with repeated failure. Data on the prevalence of GBS neonatal disease, preventative measures and outcome of infected infants are greatly needed.

Key words: *Group B streptococcus, Rectovaginal, Pregnant women.*

P-167
The consequence of new and old criteria for diagnosis of gestational diabetes mellitus

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Gestational diabetes mellitus (GDM) is one of the most common pregnancy complications affecting approximately 7% of all pregnancies and up to 14% of pregnancies in high risk population. Most experts agree that new more clinically relevant, risk-based criteria for the diagnosis of GDM are needed. New and old criteria for diagnosis of GDM: Women diagnosed with GDM under the older criteria were treated appropriately whereas those classified as having ”normal” glucose tolerance test result were not treated. New and old criteria for diagnosis of GDM are associated with similar rates of cesarean delivery, shoulder dystocia, and infants who are large for gestational age. Under the new criteria the threshold for the fasting and 2-hour [OGTT] is slightly lower than under the old criteria. Only 1 abnormal value is enough for diagnosis under the new criteria, but under the old, at least 2abnormal values were necessary for diagnosis of GDM.

Women diagnosed with GDM under the new criteria are more likely to be younger and multifarious than women diagnosed under the older criteria. In other research seen, shoulder dystocia or birth injury, preterm delivery and preeclampsia were significantly associated with ≥1 elevated glucose value. The rate of cesarean delivery, in women classified under the new criteria is lower than under old criteria (30.5 vs. 32.4%). In addition, the incidence of infants large for gestational age was slightly higher in women diagnosed with GDM under the old than under the new criteria (13.8 vs. 10.8%).

Key words: *Consequence, New and old criteria, Diagnosis, Gestational diabetes mellitus.*

P-168
Prevalence of hypertension in pregnant women

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Introduction: Pregnancy can increase blood pressure in pregnant and cause hypertension. A hypertensive disorder in pregnancy is common and it has dangerous complications in pregnancy such as maternal and fetal mortality and morbidity, hypertension associated with bleeding and infection is the major cause of maternal mortality. A Large number of pregnant women with hypertension do not have any symptoms this cause pregnant woman do not timely visit their doctor and receive treatment. By determining Prevalence of hypertension in pregnant women the importance of problem will be revealed for Politicians take until methods for increasing awareness and timely visit in pregnant women.

Materials and Methods: In this review article, we tried to study 20 related articles and express their results.

Results: Many studies have shown tha Hypertension disorders, the most common medical complication of pregnancy that occur in 5 to 10 percent of pregnancies and its rate in Iran is of about 25% and its medical complication such as maternal and fetal mortality and morbidity is most common of another disorders and is about 5 to 10.

Conclusion: By considering prevalence of hypertension in pregnant women and its medical complication politicians should take methods for increasing awareness about hypertension and its treatment method.

Key words: *Hypertension, Women, Pregnancy.*

P-169
The relative frequency of infertility kind in referred infertile couples to IVF Department of Ahvaz Imam Khomeini Hospital in 2007-2008

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Introduction: Infertility is a unique medical condition and a complex disorder with significant psychosocial, economic, demographic implications because it involves a couple, rather than a single individual. No doubt the problem of infertility is important to human life that in many cases couples and led to disorganization effects on social life is next. 10-15% prevalence of infertility also determines the importance

of this issue. The aim of study is to determine the relative frequency of kind of infertility in infertile couples.

Materials and Methods: A retrospective cross sectional study. Setting was In vitro fertilization (IVF) ward. Patients were all (735) infertile couples were referred to infertility center of Ahvaz Imam Khomeini Hospital on 2007-2008 years (12 months period).

Results: Among the 735 couples studied, 712 couples were enrolled. The age range of men and women were 18-62 years and 16-46 years respectively (Mean age 27.98±5.34 Women and Men, 33.13±6.05). Minimum and maximum of the infertility duration was 1 year and 25 years and the mean duration of infertility was 5.17±3.66. 570 person (81.1%) of infertile couples had Primary infertility.

Conclusion: Due to the high prevalence of primary infertility, the prevention-treatment strategies in infertile couples should identify its causes and plan to be inhibited. Although the long-term average of infertility duration showed poor of fertility's acknowledges in community and referral systems are weak.

Key words: *Kind of infertility, In vitro fertilization (IVF) ward, Ahvaz Imam Khomeini Hospital.*

P-170
Attitudes toward menstruation

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Introduction: There has been substantial agreement in the literature that cultural attitudes influence females' reaction to menarche. Recently, growing interest has been shown in the ways cultural traditions affect the response to this event. To date, studies of the emotional impact of menarche and menstruation have involved.

Materials and Methods: This prospective research involved 325 individuals who had been selected by systematic random sampling method from among feminine students at different grades of nursing and midwifery fields at the faculty of nursing and midwifery of Tehran University of Medical Sciences. The data was gathered by a questionnaire consisting questions relating the determination of attitude toward menstruation.

Results: The results of research showed that 57.5% of subjects have positive attitude toward menstruation, 37.9% of subjects reported one somatic symptom and 23.7% of them reported two affective symptoms within five days before menses in each of their three prior menstrual cycles that the most frequent of symptoms were: fatigue, breast tenderness, angry outbursts, depression, abdominal bloating and irritability.

Conclusion: Results of findings showed that, the age is positively correlated with attitude toward menstruation; as the age increases, the positive attitude toward menstruation are more. Attitude toward menstruation had discussed in light of the education related to menstruation. There were cultural differences in the impact of menarche on female lives. The emotional reactions of the women themselves differed widely.

Key words: *Attitudes toward menstruation, Nursing and midwifery students, Tehran University of Medical Sciences.*

P-171
The effects of kind of delivery on women body image concern

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Introduction: Body image is how someone feels about his or her own physical appearance. Negative body image is pervasive among women. High levels of body dissatisfaction are primarily attributed to the existence of social pressures regarding thinness. It has been theorized that kind of delivery may have an impact on body satisfaction. Some women believe that delivery by CS keeps their body shape in order. The aim of the study was to examine the effect of kind of delivery on body image concern.

Materials and Methods: The present study was a descriptive-analytical study. 109 women in the first year after delivery were selected randomly. Of which 56 were delivered by cesarean section and 53 by NVD. Data was gathered by demographic questionnaire and Body Image Concern Inventory which is highly valid and reliable. Data were analyzed using independent sample T- test and U- Manvitny by SPSS 14 software.

Results: The mean age of women delivered by CS and NVD were 29.12±5.6 and 26.3±5.3 respectively. There were no significant difference in gravidity, parity, time of post delivery, weight, height, BMI, job, literacy and lactating between two groups ($p>0.05$). The mean score of body image in women delivered by NVD was 29.73±7.3 and in women delivered by CS was 33.98±10.36 ($p=0.016$). Higher score show the worse body image.

Conclusion: Body image in women delivered by CS was worse than those who delivered by NVD. This study revealed that CS will not result in keeping the body form in order.

Key words: *Delivery, Body image, Women.*

P-172
The prevalence of sexual dysfunction in Iranian pregnant women.

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Introduction: Sexuality is an important part of women's health, quality of life, and general well-being. There are many factors influencing the female sexual function including biological, psychological, physiological, couple relationship, and sociocultural factors. Pregnancy plays an important role in the sexual function and behavior of women. This study aims to evaluate the sexual function and to determine the prevalence of sexual dysfunction among women during pregnancy.
Materials and Methods: A cross-sectional study was conducted between April 2011 and September 2011 using 257 healthy pregnant women, aged18-40years, who attended to the antenatal clinic, Paymaneh Hospital. The Female Sexual Function Index (FSFI) questionnaire was used for sexual function assessment.
Results: The mean age of respondents was 26.45±4.49years. 143, 69 and 45 pregnant women were in their first, second and third trimester. The women sexual function showed a different pattern during the first and second and third trimesters; there was a significant difference in the scores of all FSFI domains when comparing the second and third trimesters. The mean total FSFI scores was 19.9±22.45. One hundred and nintey seven (79.1%) were categorized as potentially sexual dysfunction (FSFI score <26.5) while only 52 (20.9%) had normal sexual function (FSFI score >26.5). The sexual dysfunction among pregnant women was rated 23.4% in the first trimester, 30.5% in the second and 46.2% in the third.
Conclusion: Prevalence of sexual dysfunction is high during pregnancy and reaches higher levels in the third trimester. Pregnant women and their partners need counseling about physical and psychological changes in pregnancy.
Key words: *Sexual dysfunction, Pregnancy, FSFI, Iranian women.*

P-173
Men's experiences of vasectomy: A qualitative research

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Introduction: Irregular population growth is considered as a serious threat to the international community and is also a major obstacle for nations' social and economic development. Thus, one of the ways to control the population is the providing effective contraceptive methods. Vasectomy is one of the most effective contraceptive methods and World Health Organization has confirmed it, as simple and effective contraceptive method. It is important to involve men in order to population control and promotion of reproductive health. So this study aimed to describe the experiences of a group of men who had vasectomy.
Materials and Methods: This qualitative study was conducted using a phenomenological approach. Samples were 14 men vasectomized which were selected through purposive sampling. In-depth and open interviews with participants were conducted to collect data. Data were transcript. Observations were also recorded in comprehensive field notes. Collaizzi method was used to analyze the data.
Results: Four themes have been driven from the obtained results of this study which describe the structures of men's experiences of vasectomy as fallow: opinions about vasectomy, impressions about vasectomy, vasectomy experiences, and recommend to others.
Conclusion: With recognizing of the experiences of vasectomized men, also to determine the positive and negative aspects of this method and design training programs based on research result can take more effective steps for promotion and spread of this method.
Key words: *Vasectomy, Experience, Qualitative study.*

P-174
Knowledge of university students regarding the sexual transmitted diseases in Rasht, Iran

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Introduction: Sexually transmitted diseases (STDs) are a major health problem affecting mostly young people and are the most common infectious diseases in the world, with over 350 million new cases occurring each and year. STDs have far-reaching social, economic and health consequences such as morbidity, infertility, abortions, EP, stillbirths and prematurity. Since young adults are at substantial risk for contracting STD and Community health knowledge played a major preventive role, the aim of this study is to investigate Knowledge of university students regarding to STDs in Rasht, Iran.
Materials and Methods: In This cross-sectional descriptive study, 250non-medical students were participated. Data were collected by questionnaire consisting of demographic and knowledge parts. Achieving scores from knowledge part of questionnaire less than17 classified students in weak, 17-22 moderate and 22-36 in good groups. Data were analyzed statistically by Chi-square in SPSS16.
Results: 132 female (52.8%) and 118 male (42%) were participated in this study. Mean age of students was21.2. Although all the students had heard about AIDS and hepatitis B before, but Knowledge on some aspect of the disease was quite low and results indicated that 45% of participants had weak, 30%

moderate and 25% good knowledge of STDs. Furthermore, there was a significant relation between knowledge and marriage and higher age ($p<0.005$).

Conclusion: According to results mentioned above, it seems that education about contagious diseases and significant health issues in appropriate settings by students own participation is recommended and indicates major attention of healthcare providers for further educational planning.

Key words: *Knowledge, University students, Sexual transmitted diseases.*

P-175

Knowledge and attitude of Iranian university students regarding human papilloma virus

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Introduction: Increasing prevalence of HPV Infection among young sexually active people and its relation with cervical cancer especially in the developing countries makes it necessary to evaluate and promote the public especially medical university students' knowledge about this important health risk.

Materials and Methods: Knowledge, awareness of 669 medical university students was evaluated using a prepared questionnaire in July 2011. Before enrollment, informed written consent was obtained from the participants. Data were analyzed using SPSS-17 software using One Way ANOVA test, $\chi 2$ test or Fisher's exact test and logistic regression model. $P<0.05$ was regarded statistically meaningful.

Results: All participants were Moslem with mean age of 25.59±5.33 years. All of them were familiar with HPV through university courses (90.6%). Most of them knew that HPV is a sexually transmitted disease and a potential cause for genital warts. But they did not know the condition in details. Mean Knowledge score of residents, postgraduate midwifery and nursing students was higher than other groups ($p<0.001$). Expressions indicating the presence of fear or stigma of having contact with those suffering from HPV obtained lower scores. According to the predictions, academic educational level ($\beta=0.21$, $p<0.001$), age ($\beta=0.18$, $p=0.002$,), and smoking ($\beta=-0.11$, $p=0.006$) were regarded as the most important factors relating to the students' knowledge.

Conclusion: Fair knowledge of medical university students about HPV makes it necessary to set effective national public health efforts to promote knowledge and prevent from HPV transmission considering high number of young women susceptible to cervical cancer in Iran.

Key words: *Knowledge, Attitude, University Students, Human Papilloma virus.*

P-176

Midwifery students' awareness on charter rights of pregnant women

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Introduction: Midwifery care is based on respect for their mothers Step towards increasing the satisfaction of maternal health services are provided by staff. Midwifery students in this regard because Importance of their work Early entry to university should be familiar with the rights of pregnant mother Full compliance with those provisions that attempt to rights of pregnant mother.

Materials and Methods: This study was a cross-sectional survey on all discontinuous midwifery students as a census. We used a questionnaire for determine students' awareness of the rights of pregnant women.

Results: The percentage of the knowledge about the rights of pregnant mother was graded: good 37.9%, average 44.9%. Between knowledge and experience, the average GPA with Resource information was not statistically significant ($p>0.05$).

Conclusion: This study was showed 100% students from the International Bill of Rights for women were not aware. Also student's awareness on Content rights of pregnant women level is moderate. This study recommends that Planners, educators and master's degree Midwifery From the very beginning of the school to notify students of midwifery with the rights of pregnant women have a higher priority.

Key words: *Awareness, Students of midwifery, Rights of pregnant women.*

P-177

Evaluation of effect of evening primrose oil on primary dysmenorrhea in selected dormitory of Tehran University in 1389

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Introduction: This study is randomized double-blind controlled clinical trial to investigate the effect of primrose oil on the primary dysmenorrhea in students of Tehran University in 1389 yr.

Materials and Methods: The number of subjects was 100 that were divided randomly and equally into two group of 50. All subjects have primary dysmenorrhea

grade 2, 3 severity of pain was evaluated before and five times after applying capsule. Severity evaluated with visual analogue scale and side effects with verbal scales.

Results: Results showed that severity of pain was statistically significant lower in experiment group compare to control group.

Conclusion: The results of this study suggested that prime rose oil reduced the primary dysmenorrheal without any side effects to student and women.

Key words: *Primary dysmenorrhea, Prim rose oil.*

P-178

The effect of home visit in the first six weeks after delivery on quality of life of primipara women referred to health centers affiliated to Shiraz University of Medical Sciences, Shiraz, Iran

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Introduction: The postpartum period is a stressful transitional period, during which a woman often faces numerous physical and emotional challenges in her new role as a mother. Studies from Sweden and the United States suggested that early postpartum discharge, followed by at least two home visits was as effective as more prolonged hospital stays among carefully selected populations. Early postpartum home visiting is universal in many Western countries. In Iran, where the postpartum periodic rather ignored, objective to determine whether a community-based intervention of postnatal home visits has an effect on postpartum quality of life of primipara women.

Materials and Methods: In this cross sectional study 52 primipara women were randomly allocated in two groups (experiment and control). Experiment group received four home visits and women in control group B received the current standard of care in health centers and both of them had followed up for 6 weeks. Finally, mean score of their quality of life was compared between two groups.

Results: Findings showed that the experiment group scored higher in all aspects of quality of life. Significant statistical difference was noted in physical ($p<0.001$), mental (p 0.001), and social wellbeing ($p<0.001$).

Conclusion: Home visits were shown to have advantages over visits to clinic. Some evidence exists that selected high risk populations, especially primipara women, may benefit from postpartum support. As a conclusion, developing of home visiting in postnatal care system can improve the quality of life of mothers and even their infants.

Key words: *Home visits, First six weeks after delivery, Quality of life, Primipara women.*

P-179

Morbidity and psychosocial consequences of infertility

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Introduction: World Health Organization has expressed infertility is a major problem in reproductive health .Infertility is not a disease but can cause physical and emotional disorder in the individual and cause many complications in individual. Infertile person merit, ability and competence do not see sufficient in him and that this will lead to many complications. The present study aimed to determine social and psychological effects of Infertility and determine ways to reduce the complications of infertility.

Materials and Methods: This article is an overview of the use of reference books and more than 24 articles through the review of computer: Yahoo: Iran medex: Magiran; Google; Pubmed; SID databases using key words infertility, psychological effects and social consequences of infertility has been set.

Results: Several complications may occur after Infertility can affect social behavior. Depression, low self-esteem and confidence, stress and confusion, dissatisfaction sexually are the psychological effects of infertility. Rape, divorce and crime are social effects of infertility in human.

Conclusion: Infertility can lead to decreased sexual satisfaction, and this also causes physical, social and psychological problems for people. So infertile people are need of special protection and should be identified by health workers and support programs should be done about them to the treatment of sexual dissatisfaction in their. At the result prevented the collapse of the warm family foundation.

Key words: *Infertility, Psychological effects, Social consequences of infertility.*

P-180

Egg donation

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Introduction: Clinically a couple is considered to be infertile after at least one year without contraception and without pregnancy. Egg donation is part of the process of third party reproduction as part of ART. Egg donation is the process by which a woman provides one

or several eggs for purposes of assisted reproduction or biomedical research. For assisted reproduction purposes, egg donation involves the process of in vitro fertilization as the eggs are fertilized in the laboratory.
Materials and Methods: We study 118 infertile couples referred to Royan Institute during 2009 – 2010. This includes examining issues such as indications of donation, medical precedence of ART, wife's age, Hormonal tests, ovarian reserve assessing and all the primary health screening for the genetic parent and donors. We discuss legal, social, genetic and moral implications of the donation as well as the medical related health checks and procedures involved.
Results: 132 treatment cycles (IVF/ICSI procedures) successfully completed (ET done) resulted in 65 positive pregnancy test from 8 freeze embryo and others were fresh. There were 14 ET/ freeze that their first cycle by their fresh embryo failed.
Conclusion: As women increasingly delay attempts at childbearing, egg infertility has become more prevalent. Attempts to overcome egg infertility by super ovulation and in vitro fertilization have produced an epidemic of multiple gestations, itself a major public health concern. Donation is therefore a successful treatment for group of women with ovarian failure, advanced reproductive age, heritable conditions or recurrent implantation failure the ability to conceive.
Key words: *Egg donation, Pregnancy.*

P-181
Down syndrome screening methods performance and the factors effect on it among pregnant women referring to Medical Education Center of Alzahra of Tabriz in 2010

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Introduction: Down syndrome is one of the most common genetic diseases that can be prevented by using screening methods. Screening ways for Down syndrome are easy and safe. Screening is suggested to all of the pregnant women, especially pregnant women with up to 35 years old in advanced societies. The aim of this study is performance of Down syndrome screening and effective factors among women referring to Alzahra teaching hospital in Tabriz.
Materials and Methods: This study is a descriptive and analyzed that was carried in 2011. In this study we recruited 400 pregnant women in third trimester that referred to clinic of Alzahra hospital. Sampling method was carried by randomization. The questionnaire was used for collecting data including individual and general characteristics, the information of gestational and delivery, effective factors on screening methods and screening methods in first and second trimester (sonographic and biochemical markers).
Results: The result of this study showed that 28 (7%) of women in first and 26 (6.5%) of women in second and 5 (1.25%) of them in first and second trimester (the fully integrated test) underwent Down syndrome screening. Test showed significant statistical relation between performance of screening methods with age, education, income and the place of prenatal care.
Conclusion: The result of this study represented that screening status of down syndrome in pregnant women was very weak, that it need an essential revision in compilation and representation of training programs for primary prevent of down syndrome.
Key words: *Performance, Screening methods, Down syndrome, Effective factors.*

P-182
Compare attitudes of Iranian fertile and infertile women to surrogacy

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Introduction: Surrogacy is a common form of assisted reproductive technology. In Iran, only the uterus form (pregnancy) of surrogacy has been approved religious authorities. There is little evidence about Iranian fertile and infertile women attitude to surrogacy. This study was designed to compare attitudes of Iranian fertile and infertile women toward surrogacy.
Materials and Methods: Participants include 238 infertile and 183 fertile women who refer to infertility and gynecology clinics during 2008-2009. A validated self-reported questionnaire containing baseline characteristics, maternal history and attitude questions about surrogacy was used.
Results: There is significant difference between two groups in three subsections of the questionnaire. Fertile women had more positive attitude about surrogacy than the other group. Fertile women had more leaning to use the surrogacy ($p<0.05$). They were too optimistic toward surrogacy mother and they were agreement with recommending this method to infertile couple ($p<0.001$). There is a consensus that surrogacy isn't contrary with religious law, and both groups believed that government should have regulations for surrogacy programs. Both groups disagreed with the married

surrogate mother. Infertile women dissent more than the other group that commissioning couple are owner of baby ($p<0.001$).

Conclusion: Iranian fertile and infertile women are optimistic to surrogacy. However, some important parts of their view indicate that more efforts are needed for the surrogacy.

Key words: *Surrogacy, Fertility, Iran, Attitudes, Reproduction.*

P-183
Gestational surrogacy complication

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Introduction: Clinically a couple is considered to be infertile after at least one year without contraception and without pregnancy. Third party reproduction involves using gametes or the uterus of a third person to achieve pregnancy by their own genetic children. The indications for treatment include absent uterus, recurrent miscarriage, repeated failure of IVF and certain medical conditions. Treatment by gestational surrogacy is straightforward and follows routine IVF procedures for the commissioning mother, with the transfer of fresh or frozen-thawed embryos to the surrogate host.

Materials and Methods: We study 106 infertile couples and 78 volunteers of surrogacy referred to Royan Institute from early 2009 until the end of November 2010. This includes examining issues such as indications of surrogacy, medical precedence of ART, wife's age, education etc for the genetic parent and age, number of deliveries, number of healthy children, education, employment status, location, donation records, and donation motivation for volunteers of surrogate host.

Results: 33 volunteers were approved in the screening process. 31 treatment cycles successfully complete of 60% as well as seven healthy babies were born from 5 pregnancies till now and the remaining cycles are being followed.

Conclusion: The right to be a parent, although not constitutional, is intuitive and deeply rooted. The results of treatment are satisfactory and the incidence of major ethical or legal complications has been limited. IVF surrogacy is therefore a successful treatment for a small group of women who would otherwise not be able to have their own genetic children.

Keywords: *Surrogacy, Pregnancy, Donation.*

P-184
The Viewpoint of Iranian Fertile Women Regarding Gestational Surrogacy

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Introduction: Surrogacy is one of the popular forms of assisted reproductive technology and its gestational form is accepted by Iranian religious scholars. There is no evidence about the viewpoint of Iranian fertile women regarding gestational surrogacy. So, the aim of this study was to investigate the viewpoint of Iranian fertile women regarding gestational surrogacy.

Materials and Methods: In a descriptive, cross-sectional study a convince sample of 230 fertile women invited to the study and 185 of them accepted to participate. The data collected by 22 items questionnaire that assess the viewpoint of fertile women in five domains regarding gestational surrogacy. Data were analyzed by descriptive statistic.

Results: Fertile women, in general, reported positive viewpoint toward gestational surrogacy. But, significant percent of women believed that commission couples are not owners of baby, religious barriers need to be solved prior to legal barriers, children born through surrogacy have emotional problems, and adopted child is better than surrogacy.

Conclusion: The negative viewpoints of Iranian fertile women in some key aspects showed that for increase in acceptability of gestational surrogacy the public education is needed.

Key words: *Assisted Reproductive Technology, Gestational surrogacy, Fertile women.*

P-185
A comparison of therapeutic effect between vitamin E and vitamin B1 in severity and duration of pain in primary dysmenorrhea

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Introduction: Primary dysmenorrhea is defined as pelvic pain around the time of menstruation in the

absence of an identifiable pathologic lesion. Prevalence of Dysmenorrhea is seen in about 50-90% of women that associated with significant decreases in academic performance. Main treatment of dysmenorrheal is NSAIDs drugs but they have a lot of side effects.

Materials and Methods: This clinical trial study was carried out on 90 students of Ferdosi University. A questionnaire was used to identify the girls suffering from primary dysmenorrhea. Each girl was randomly assigned to vitamin E and vitamin B1 group. We used Visual Analog Scale for assessment of severity of pain (mild, moderate or severe) and Cox Menstrual Scale for Duration of Pain. Drugs were packed in similar wrapping containing a code which was known only to the principal investigator. This treatment has continued for three months and at the end of that time any change in severity and duration of pain was compared between groups.

Results: The mean age of patient was 22.97 years. The results of this study confirm that severity and duration of pain in each group was relief after treatment which was a statistical significant reduction in each group ($p<0.05$). There was no significance difference in severity and duration of pain in comparison between the two groups ($p>0.05$).

Conclusion: According to the results of this study both vitamin E and vitamin B1 are effective in relieving symptoms due to primary dysmenorrhea with fewer side effects than routine treatment like mefnamic acid.

Key words: *Primary dysmenorrhea, Vitamin E, Vitamin B1.*

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Pregnancy status of women in urban and rural health centers of Robat Karim

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Introduction: Integration programs in the service receivers have integrated programs, such as maternal care program takes shape. Monitoring and evaluation of interventions in order to reduce injustice and review policy reform is essential. This study aimed to determine pregnancy status of women referred to health centers in rural and urban city Rabat Karim.

Materials and Methods: This study is a retrospective study of all pregnant women prenatal care records in the first six months of 1389 in health centers in urban and rural city of Robat Karim. Study sample included 3252 women who were pregnant in urban health centers and 1112 women who were pregnant in rural health centers in Robat Karim.

Results: The results showed that 4.1% of pregnant women in urban health centers were under 18 years old, 6.4% were over 35 years old and 4.9% of pregnant women in rural health centers of Robat Karim were under 18 years old and 9.7% of them were over 35 years. 90% of pregnant women in urban health centers and 81.6% of pregnant women in rural health centers of Robat Karim had not used of care before pregnancy. Statistical X^2 demonstrated significant correlation between health centers in rural and urban area of Robat Karim and current pregnancy status, history of previous pregnancy and delivery ,history of disease or infection ($p<0.05$).

Conclusion: The results showed that the exact implementation of maternal health care requires adequate and efficient system of maternal health services in rural and urban areas.

Key words: *Health centers, Pregnant woman, Urban and rural.*

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The experience of sexuality during breastfeeding among primiparous women

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Introduction: Sexual function today as a multidimensional phenomenon known and affected by many biological factors psychological-social. Pregnancy and the postpartum period, especially the first 6 months postpartum, lactation, menopause, Physical and psychological condition, medical treatments are including this factors. High levels of prolactin, leading to low levels of gonadotropin and Subsequent low levels of estrogen and progesterone And Suppressed ovarian activity and subsequent reduction of androgens will. Androgens seem to be the most important hormone determines sexual desire in both sexes. The aim of this study was to determine the changes of sexual function during 3 months after delivery.

Materials and Methods: 100 women during the exclusive breastfeeding period who refer to selected health centers were randomly selected. The questionnaire was female sexual function index (FSFI). Information was collected after 2-3 weeks of delivery and 3months later.

Results: The results showed significant difference in sexual function and increases in mean of all key dimensions of sexual function including: desire, lubrication, orgasm, sexual satisfaction and dyspareunia ($p<0.05$).

Conclusion: Sexual function measured in a variety of ways improved and approached levels prior by 3 months postpartum.

Key words: *Postpartum breastfeeding, Sexual function.*

P-188

The most important source of information about reproductive health related matters and self assessment knowledge of Oromieh University female students

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Introduction: With the Cairo Program of Action at the ICPD and again with the Beijing Platform at the Fourth International Conference on Women (ICW), the global community resolved to "Protect and promote the rights of young people to sexual and reproductive health information and services".
Materials and Methods: A total of 479 female students who entered to university at 2006-2007, are taken in to the study. The data were obtained through a questionnaire. For assessing of data in this study descriptive test were used. We requested from students that determine their knowledge level of reproductive health. Self assessment knowledge of reproductive health of female students was detected and then were asked from them about the most important source of information on this area.
Results: The first most important source of information on reproductive and sexual health in view of students was mother (33.9%), friends (13.6%), book/magazines (11.8%) and sister (10.8%).
Conclusion: A few percent of students assessed their knowledge of reproductive health in all 4 parts adequate. In compared of selected and preferred sources of information about reproductive health in view of population study, can noticed that the friends are one of the most important sources in reproductive and sexual health that students receive their information but they didn't prefer the friends as reliable source. If we notice to preferred sources of information by students, doctor and nurse/other health workers are preferred by them but they didn't receive information from them because of doctors, nurse/health workers didn't available for them.
Key words: *Important source of information, Reproductive health, Self assessment knowledge, University female students.*

P-189

Gamete donation in infertility treatment and ethics

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Introduction: In the recent years, infertility has been considered as a medical problem as well as a social problem, thus couples have sought medical assistance to overcome childlessness. The gamete donation is one of the most necessary and controversial surrogacy reproduction treatment that needs to be studied on various aspects of medicine, religious, legal, ethics and sociology, so current study was done for the sake of studying ethic aspects of gamete donation.
Materials and Methods: In this study we review Books, papers and articles in various Internet sites about infertility new treatment ways specially gamete donation and its ethical aspects .Then we collected and summarized this information to present important sections of them.
Results: In using gamete donation as infertility treatment, one or both of couples who have gamete problem, are donated a foreign gamete. Using donative ovum is suggested for woman who has uterus; but she cannot make suitable ovum and using donative sperm is suggested for a man who do not sperm or his sperm is not able to fertilize the egg. Many questions are raised about children who were born by gamete donation such as: should the child be aware of process of his genesis? Should the child know the gamete donor? And so on .Such important ethic aspects of gamete donation will be explained in general article.
Conclusion: Before starting to treatment by gamete donation, infertile couples should be made aware of treatment procedures and possible consequences by taking part in consultations. It seems that it is possible to prevent complications by approvals and forming special committees for educating and offering services to the infertile couples. By using the gamete donation we can make stronger the basis of infertile couples' lives.
Key words: *Gamete donation, Infertility, Ethics.*

P-190

Gestational surrogacy: Viewpoint of Iranian infertile women

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Introduction: Surrogacy is a popular form of assisted reproductive technology of which only gestational form is approved by most of the religious scholars in Iran. Little evidence exists about the of Iranian infertile women's viewpoint regarding gestational surrogacy.
Materials and Methods: This descriptive study was conducted at the infertility clinic of Tabriz University of medical sciences. The study sample consisted of 238 infertile women who were selected using the eligible

sampling method. Data were collected by using a researcher developed questionnaire that included 25 items based on a five-point Likert scale. Data analysis was conducted by SPSS statistical software using descriptive statistic.

Results: Viewpoint of 214 women (89.9%) was positive. 36 (15.1%) women considered gestational surrogacy against their religious beliefs; 170 woman (71.4%) did not assume the commissioning couple as owner of the baby; 160 women (67.2%) said that children who were born through surrogacy would better not know about it; and 174 women (73.1%) believed that children born through surrogacy will face mental problems.

Conclusion: Iranian infertile women have positive viewpoints regarding surrogacy. However, to increase the acceptability of surrogacy among infertile women, further efforts are needed.

Key words: *Assisted reproductive technology, Infertility, Surrogacy.*

P-191

The need for unique policy: HIV routine tests during prenatal care from health -care providers perspective

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Introduction: Routine testing during prenatal care increases testing opportunities for women. Health-care providers (in governmental clinics) may not offer HIV routine tests due to policies (Past behavior, and unfaithful relationship may increase the risk of HIV results in maternal test) but in private settings it is routine test without pre test counseling or partner referral system. In order to finding health -care providers perspective this cross sectional study was done.

Materials and Methods: Questionnaires were completed with help of 60 practitioner obstetricians in 3 governmental hospitals via conversation. Data were analyzed with SPSS software.

Results: 80% of providers said routine testing is necessary their causes were: women may be unaware of past high risk behavior of their husbands (90%), by knowing maternal situation we can prototect the baby (100%), by implication this strategy into protocol we can do pre-test counseling (75%), taking informed consent (60%), doing mental support if the woman was positive (60%), making family support system (50%) and helping to protect medical staff who work with women (100%).

Conclusion: This complex strategy which we done in Iran had several complication as reported by providers.
The content of routine prenatal HIV counseling addressed most aspects of HIV transmission and prevention and PMTCT in particular. However the importance of partner HIV testing and of the overall involvement of men within the prenatal HIV counseling and testing process should be considered. Key words: Routine HIV test, Prenatal care.

Key words: *Routine HIV test, Prenatal care.*

P-192

Association of body weight with sexual dysfunction in women in Health Center of Urban Areas Qom, 2009

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Introduction: Sexual difficulties in women appear to be widespread in society; the relationship between female sexual function and obesity is unclear. This study aimed to investigate the relationship between body Weight and sexual dysfunction in women.

Materials and Methods: 77, otherwise healthy women with abnormal values of female sexual function index (FSFI) score (≤28) were compared with 64 control women (FSFI >28). BMI was calculated as weight in kg divided by the square of height in meters (kg/m^2). All women were free from diseases known to affect sexual function.

Results: FSFI significantly correlated with BMI ($p<0.05$). Of the six sexual function parameters, lubrication ($p=0.43$) and orgasm ($p=0.44$) did not correlate with BMI; on the other hand, there was a significant correlation between BMI and arousal ($p=0.03$), desire ($p=0.02$), pain ($p=0.022$) and satisfaction ($p=0.01$).

Conclusion: Obesity affects several aspects of sexuality in otherwise healthy women with sexual dysfunction. Interventional studies aimed at reducing body weight in women with FSD are needed to disclose a cause and effect relation between obesity and FSD.

Key words*: Body Weight, Female sexual function, FSFI, Obesity.*

P-193

The effect of soy diet on hormonal disorders in PCOS women

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Introduction: Polycystic ovary syndrome (PCO) is the most prevalent heterogeneous clinical endocrine disorder. In Iran 15.2% of women suffer from this common disorder. Treatment and control of this disease

have been noticed long ago by researchers. Common drugs are effective in polycystic ovary syndrome but have many side effects and this problem, have put non-drug treatment strategies on focal of further studies. The purpose of this study was collecting the findings of previous studies about the effects of soy on the hormonal disorders in PCOs women.

Materials and Methods: The researchers studied more than 20 papers that examined the results and findings of the impact of soy on hormonal disorders in PCOs women.

Results: In some of the studies, soy consumption was significantly associated with decrease in the levels of LH, DHEAS, and testosterone. Soy will reduce ovarian steroids without having effect on the gonadotrophins. They showed that soy protein significantly reduced LH, FSH in premenopausal women and increased estradiol levels in menopausal women. In another study that was conducted over two years, no change in sex hormone levels was observed. However, estrone and estradiol levels in the first three months15% increased and remained high during the next months.

Conclusion: According to the above studies and regarding that the PCOs women are exposed to various metabolic risks, and also, while dietary recommendations do not impose considerable costs on individuals, society and health system can naturally be useful without side effects of medication.

Key words: *PCO, Sex hormones.*

P-194
Investigation of barriers to infertility treatment

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Introduction: In many countries infertility is not considered a disease and is not covered by public. According to paper by the WHO: 'Reproductive health is a state of complete physical and mental and social well being and not merely the absence of disease or infirmity, Therefore Reproductive health implies that people are able to have a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so.

Results: A more serious commitment today to increasing access to better quality health care services, including infertility treatment, would be a major contribution to global solidarity and equity.

Conclusion: In many countries, there are a number of reasons that might explain the lack of initiatives to facilitate greater access to more 'advanced' techniques is limited; furthermore. For the majority of women, the cost of such treatments is out of reach and women who are unable to bear children are rejected by their husbands and ostracized by society, often living as outcasts and perceived as inferior and useless. Many factors have been suggested that influence a couple's decision to stop infertility treatment despite not achieving their goal of having a baby. Barriers to infertility treatment can be classified into three main categories: accessibility, economic cost, and cultural/ societal factors. It is not unusual for all three to be present simultaneously, creating an almost insurmountable obstacle to adequate reproductive health care. We in this article investige to shed light on these reasons.

Key words: *Barriers, Infertility, Treatment.*

5- Psycology

P-195
Experiences of surrogate mothers in two different situations: altruistic surrogacy for family members and commercial surrogacy

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Introduction: Iran is the only Islamic country which accepts the surrogacy procedure in both altruistic and commercial ways. This study was designed to explore the experiences of surrogates with different motivations.

Materials and Methods: Four different cases of surrogate mothers were chosen: surrogate for her daughter, for her sister, commercial surrogate for the first time and professional donor who began to be surrogate. A deep interview was done with each one of them privately.

Results: Money was the first concern of commercial surrogates (CSs) and their financial problems even one of them was under threat of being jailed. But is altruistic family surrogates (ASs), helping a family member and effort with love was their explanation of this decision. ASs were more confident about their decisions and totally happy. CSs claimed that they suffer many times more than their own pregnancies because they felt that this child belongs to the others. The AS between sisters, the relation, love and closeness of two families were increased and even after birth of the baby they were very closer than before. There was a chance to see and play with the child in the ASs that made them very satisfied but not in the CSs. CSs themselves didn't want to have any relation with the child or client family any more.

Conclusion: It seems that the altruistic surrogacy specially between family members or close relatives is the best situation and has less complications. It is advisable to encourage this type of surrogacy and avoid commercial one.

Key words: *Surrogacy, Altruistic, Commercial, Family.*

P-196
Spiritual care of infertile women: A novel concept in holistic care of infertility

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Introduction: Many patients would like their caregivers to discuss their spiritual beliefs. This study has explored infertile women's expectations from health professionals in the context of spiritual care.
Materials and Methods: In this study using a feminist grounded theory approach 30 volunteer infertile women affiliated to different denominations of Christianity (Protestantism, Catholicism, Orthodoxy) and Islam (Shiite and Sunni) and also seven infertile women with no formal religion were interviewed. Participants were recruited in one Iranian and two UK fertility clinics using theoretical sampling. Data were collected through semi structured in-depth interviews and analyzed using grounded theory.
Results: The majority of participants either religious or non-religious expected health professionals to be honest, sincere, understanding and sympathetic. They criticized depersonalization and approaching people like "numbers" and not human beings. Religious participants had extra expectations like addressing their spirituality and undertaking religious rituals before the treatment procedures by the medical team. They believed that addressing religious and spiritual issues by health professionals would be peaceful, encouraging, positive and not only make the experience satisfying and pleasant but also would have long-term impact on their psychological well-being.
Conclusion: It is suggested that the multidisciplinary team who approach infertile women including doctors, midwives, nurses, psychologists and counselors should be encouraged to be attentive to all dimensions of patients and treat them as a whole person with all physical, social, emotional and spiritual needs. They should develop a basic understanding of the patients' religious and spiritual requirements in order to identify the patients who are struggling with these issues.
Key words: *Infertility, Religion, Spirituality, Holistic care, Grounded theory.*

P- 197
The role of training emotional intelligence on psychology well-beings of infertile women

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Introduction: Infertility is a major negative life event which has deleterious effects on psychology well-beings of infertile women. The purpose of this study was examining the role of training emotional intelligence on promotion of psychology well-beings in infertile women referring to Infertility and Gynecology Clinics in Ardabil city.
Materials and Methods: The current study was an experimental study with pre-test and post-test in two experimental and control groups. Research population was the infertile women referring to Infertility and Gynecology Clinics in Ardabil city during 1390. 60 infertile women selected by using available sampling method and randomly assigned in two experimental (30 persons) and control groups (30 persons). The treatment group (experimental group) received emotional training for 8 sessions. Data were gathered by using, well-being psychology of Ryff and demographic characteristic questionnaires and emotional intelligence training program based Mayer and Solovi ability model. To analysis the hypothesizes multi–variable variance analysis was used.
Results: The results showed that well-being psychology in experimental group were significantly increased in post-test.
Conclusion: Results indicated the effectiveness of training emotional intelligence on improving the well-being psychology in infertile women.
Key words: *Emotional intelligence, Well-being psychology, Infertile women.*

P-198
Comparison of sexual function among infertile and fertile women

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Introduction: Infertility is a reproductive health problem. Turmoil, stress, depression, marital dissatisfaction and sexual disorders are the results of infertility in several studies. Infertility is the bitterest experience of life that in it sexual function is influenced. The aim of this research was comparison of sexual satisfaction in fertile and infertile women referred to Pymanyh Hospitalm Clinical and Educational Center of Jahrom city throughout 2010.
Materials and Methods: This research was a descriptive comparison. So, sexual satisfaction function rate has been compared through simple sampling procedure in 100 infertile women with 100 fertile women. The data was collected by using a questionnaire consisting of three parts includes: demographic characteristics, infertility and sexual function female index questionnaire (FSFI). The data from the study were analyzed by the methods of descriptive statistics, frequency, mean and standard deviation relation and t test for comparing means of groups by using SPSS.5 statistical software.
Results: The average score of the results of sexual satisfaction in both groups was different (fertile women

23.85±4.34 and infertile women 24.83±4.72) but this difference was not significant statistically. 71.4% of infertile women had a history of unsuccessful treatment. 46.4% had primary infertility and 53.5% secondary infertility. In infertile women between sexual desire with age (p=/02, r=-/224), husband age (p=/005, r=-/28), and infertility duration (p=/03, r=-/304) the difference was significant.

Conclusion: Comparison of sexual function in fertile and infertile women difference was not statistically significant. Infertility had no effect on sexual function.

Key words: *Infertility, Sexual satisfaction, Sexual function, Female indx, Fertility, Sexual dysfunction.*

P-199

The effect of stress management based on group cognitive-behavioral techniques on psychological symptoms of infertile women

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Introduction: Infertility has been associated with stigma and negative psychological functioning. Regarding differences of men and women emotional needs, infertility tension has more negative effects on women than men. Some researches have shown continuation of using cognitive-behavioral techniques in infertile women without definite medical and physical reasons, reduces stress, depression, psychological symptoms and fertility in some of them. This research surveys effectiveness of stress management based on group cognitive-behavioral techniques on psychological symptoms of infertile women.

Materials and Methods: This study was a quasi-experimental with a control-group pretest-posttest disign. The sample of research includes 40 infertile women. Easy sampling done through diagnosis and clinical interview by gynecologists of women specialists' clinic in Shahrekord Hajar Hospital, randomly divided into two matched experimental and control groups. Instrument was GHQ-28, used before, after and three months after the last intervention (pursuance) in two groups, including stress management by cognitive-behavioral method in10 sessions last 2 hours on experimental group.

Results: Results showed significant difference between post-test and follow-up means scores of anxiety and sleep disorder, depression, social function and somatic symptoms between two experimental and control groups ($p<0.05$).

Conclusion: Psychological interventions can affect positively on psychological outcomes of infertility, and improve their psychological symptoms.

Key words: *Infertility, Stress management; Psychological symptoms, Women.*

P-200

Evaluation of the effectiveness of stress management skills training on marital adjustment and conflict resolution styles in infertile women

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Introduction: This study aimed to investigate the effects of stress management skills training on conflict resolution styles and marital adjustment in infertile women.

Materials and Methods: Sample was selected using available sampling with random replacement. Statistical research community was infertile women visited Montaserie Infertility Clinic of Mashhad. The number of members was 50 women who were selected by available sampling and then randomly divided into two experimental and control groups of 25 persons each. For data collection marital adjustment questionnaire of Aspanier (1979) and Conflict Management Styles Questionnaire of Rahim (1997) and the scale for measuring coping skills of Zeynalkhany and Karami (2001) were used. After randomly selection of experimental and control groups, the experimental intervention (coping skills training) was conducted on the experimental group for 8 session with 90 minute duration each once in a week. After the training program, the post-test was performed on both the groups. Method of research was Semi-empirical approach and covariance analysis was used to analysis obtained data.

Results: The results of data analysis showed, coping skills training increases marital adjustment in infertile women compared with the control groups which were tested, it was also influential on improving conflict resolution styles in the infertile women.

Conclusion: The results of this study clearly stated that appropriate coping mechanisms, especially in infertile women who are facing critical situations more and more severe, can help them to confront and solve problems.

Key words: *Coping skills, Marital adjustment, Conflict resolution styles, Infertile women.*

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A comparative Study of the quality of life between man and woman in infertile couples

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Introduction: Infertility is a serious disabling condition and medical problem which often leads to many health and social issues and affects couple's quality of life. Studies on the impact of infertility on quality of life mostly focus on the female partner and few of them compare the quality of life between male and female.
Materials and Methods: Comparing the different aspects of quality of life between female and male in infertile couples. This analytical cross sectional study was carried out on one hundred infertile couples referred to Novin Infertility Treatment Center, Mashhad, Iran .Data was collected through interview and questionnaire based on WHOQOL-BREF. The primary outcome measure was score of Quality life in every aspect. Data was analyzed by SPSS 16 software and t-test was used in order to compare men and women's score. $P<0.05$ was considered as the level of significance.
Results: There was a significant difference between men and women in physical and psychological aspects of quality of life ($p=0.002$ and $p=0.001$ respectively).
Key words: *Quality of life, Infertility, Gender.*

P-202
Assessing the effect of Morita therapy on reducing the rate of anxiety in infertile women

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Introduction: Morita therapy is a purpose-focused therapy developed based on the principles of Zen Budhism. Opposite to most Western therapies whose primary goal is to remove or control anxiety symptoms, the key element of Morita therapy is to increase patients' effective knowledge of symptoms without other manipulations and encouraging them to accept the situation to overcome it.
Materials and Methods: This study aimed to find the effects of Morita therapy on reducing anxiety in infertile women who referred to clinical centers in Tehran, Iran. It was an experimental study using pre- and post-test on two groups of case and control. The number of members was 20 women who were selected by available sampling and then randomly divided into two experimental and control groups of 10 persons each. State-Trait Anxiety Inventory for Adults (STAI) was used for data collection. Data were analyzed using the nonparametric method of Mann-Whitney U test.
Results: The difference of anxiety scores due to Morita therapy in the case group is higher than controls and this difference is significant.
Conclusion: The results showed that Morita therapy was effective in reducing infertile women' anxiety.

Key words: *Morita therapy, Infertile women, Anxiety, Cognitive therapy, Zen Budhism.*

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Effect of group reality therapy on the public health and marital satisfaction of infertile couples

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Introduction: Studies show that, psychological factors have dual effects. They can effect on infertility and also they can be effected by infertility. This research studies the impact of group reality therapy on general health and marital satisfaction in infertile couples.
Materials and Methods: This is a quasi-experimental study and the pretest-posttest control group was used. Population included all participants attending the Mashhad Montaserie Infertility Center in spring 90. A sample set of 30 infertile couples was selected by using sampling method based on (available) and randomly divided in two experimental and control groups. General health questionnaire GHO-28 and marital satisfaction Enrich form 47 questions, was used for couples that applying for participation in meeting of a group and androgynous couples who have achieved the quorum in the questionnaires, were randomly divided in two control and experimental groups. The test groups were given eight sessions of group Reality therapy and at the end of each the two groups were tested. Analysis of covariance was used for data analysis.
Results: Comparison of experimental and control group scores showed that Reality therapy is effective significantly ($p<0.0001$) in improving general health and increase marital satisfaction, but there wasn't any significant difference in pretest-posttest scores of control group.
Conclusion: Group Reality therapy is effective on general health and marital satisfaction in infertile couples and also results show that training of Choice theory and Reality therapy in woman and men has equal effect.
Key words: *General health, Marital satisfaction, Reality therapy, Group training.*

P-204
The role of sexual-self concept, Five Factor personality in risky sex behavior

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Introduction: Prevention of risky sexual behavior is one of the important goals to improving the health of the community. Since the risky sexual behavior is influenced by positive and negative aspects of sexual self-concept and Five Factor personality, could it be claimed that these two factors are related to each other and Identify with one another can be controlled the other one? Conclusions of this paper are answer to this question.
Materials and Methods: Cross-sectional study was performed in Yas Marriage Counseling Center of Isfahan. Farsi version of Goldberg Big-Five-factor personality and Snell's Multidimensional sexual self-concept completed by168 people (84 couples in dating). Both responses were based on Likert .Internal consistency analyzed by Cronbach's alpha of the questionnaires.Relations between the two questionnaires' aspects were analyzed by Pearson.
Results: Mean age of women was 23.1 and for men 26.8 years. Cronbach's alpha coefficient of Goldberg questionnaire was 0.65 to 0.86 and for MSSCQ was 0.68 to 0.87. Positive relationship was between sexual esteem and openness to experience ($r=0.46$, $p<0.0001$) and negative relationship was between sexual depression and emotional stability($r=-0.33$, $p<0.0001$). Other aspects of five factor personality and MSSCQ were not significant relationship with each other.
Conclusion: By Looking at the results, this big five factor personality as a fixed and permanent of behavior patterns can be regarded as the underlying cause of the sexual self-concept. Then, for reinforcement positive SSC and reduction of negative SSC and consequent control of risky sexual behavior must be followed by other factors.
Key words: *Sexual self concept, Five factor personality, Risky sex behavior.*

P-205
Psychiatric problems in infertile couples and treatment of them

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Introduction: Infertility is an important problem that may cause some pathological and non pathological psychological reactions and also can be a serious threat for family. Psychiatric intervention differs is related to the stage of diagnosis of infertility, primary diagnosis and diagnostic tests, full diagnosis of infertility, multiple invasive treatment methods, reaction of families for this problem trial period and different outcomes of them. In this article psychological aspects of infertility and their treatment methods are discussed.
Materials and Methods: Review of literature.
Results: Couples with infertility experience many psychosocial problems that affect their life.
Conclusion: Psychosocial problems in infertile couples should have been more noticed.
Key words: *Psychiatry, Infertility.*

6- Ethics and miscelaneous

P-206
Histopatological damages in testes that affected from lead toxicity

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Introduction: Lead is amply distributed in the environment and alters the physiology of Reproductive apparatus. A mouse experimental design was used to determine the effect of lead poisoning on testis and sperm characteristics, comparing blood plasma levels of lead and the alterations of reproductive parameters.
Materials and Methods: male Albino Rats with 5groups, each groups of 8 rats, from onset of embryonic life to sixteenth week, were exposed to 0, 5, 10, 15 and 40mg/L Lead acetate dissolved in drinking water. At the end of 16th week of the treatment, rats were anestesied with chloroform, and then heart blood samples were taken for serum. Hormonal analyzes include progesterone, testosterone, LH and FSH was measurement by ELISA method. For histopatological study by light microscopy, testes fixed in 10% buffer formalin then paraffin blocked frozen section and stained with toluidine blue, Sudan B, H&E, and ALPase. Lead concentration of serum was determinate by atomic reabsorb ion. The groups were compared by (ANOVA) followed by Tukey test (at $p<0.05$ and $p<0.01$) was significant.
Results: compare with controls, decrease in testosterone, progesterone, increase LH, FSH levels, were observed. Microscopic changes have been induced by increasing lead levels in lead exposed including testicular tissues morphology and decreased germ cells layer population. Relationship between testicular dysfunction and increased number of mast cells in the testis.
Conclusion: Lead's influence on male reproduction probably occurs by altering the reproductive hormonal axis and the hormonal control on spermatogenesis. Exposure to lead in utero and in infancy is associated with a risk of impaired cognitive development.
Key words: *lead toxicity, Testes, Histopathology, Hormonal changes.*

P-207
Common cause of infertility in infertile women at Razavi Hospital infertility clinic

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Introduction: Infertility therefore affects approximately 10-15% of couples and is an important part of practice of many clinicians .the most important factor of infertility include: male factor (40%) female factor (40%), both of them (10%) and unexplained infertility (10%). The purpose of this study is evaluation of the cause of infertility in patients who are referred to Razavi Hospital infertility clinic.
Materials and Methods: This study was done according to research variable data was gathered from 500 files which were extracted among 600 files in Razavi hospital infertility clinic during years 1388-1390 by using questioner .The causes of infertility was extracted by patients' doctors. Data was analyzed by frequency test, one-way analysis of variance and tuky test.
Results: According to this research result infertility was caused 20.6% by male factor, 52% by female factor, 12.8% both and 14% was unexplained. There isn't any significant relation between age and causes of female infertility factor. Among male factor the largest portion is allocated to astenospermi and 6.6% of these men had varicocele operation.
Conclusion: The major causes of infertility were female factor, that respectively ovarian factors, uterine factors, tubal factors and hormonal dysfunction have the highest incidence. Pcod was the major cause in ovarian factors.
Key words: *Infertility, PCOD*

P-208
Burden of infertility disease in Iran

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Introduction: Infertility is a global problem particularly in the developing countries and Iran. Disease burden is the impact of a health problem in an area measured by financial cost, mortality, morbidity, or other indicators. It is often quantified in terms of disability-adjusted life years (DALYs), which combine the burden due to both death and morbidity into one index. Measuring infertility burden allows for the comparison of this burden due to various risk factors or diseases.
Materials and Methods: Based on considering the important role of infertility in health, the National Research on Burden of Disease and Injuries and documentation in this arena are reviewed in this study.
Results: According to data from the National Study of Burden of Disease and injuries, in Iran for all age groups of the population, Disability Adjusted Life Years (DALYs) of male and female infertility of the total was 0.451% (YLL=0) . Years of life Lost due to Disability (YLD) of infertility in both sexes is estimated 64770 years (male 10652 and female 54118 years). 97.4 years of life lost per 100000 population is related to infertility.
Conclusion: Considering the burden of infertility statistics especially in women, is an important input to health decision-making and planning processes in infertility prevention and treatment programs. Also there are hidden and emotional burden of infertility that cannot be measured.
Key words: *Infertility, Burden of disease, Iran.*

P-209
Explain the behavior of vasectomy in eligible men of Bandar-Torkman on the basis of behavioral intention model in 2011

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Introduction: According to importance of using contraceptive methods for population control and low rate of vasectomy using as one of the most effective contraceptive methods, the current study was design and done with the purpose of Explaining the behavior of vasectomy in eligible men of Bandar-Torkman on the basis of behavioral intention model.
Materials and Methods: In this descriptive study, 150 eligible men of Bandar-Torkman were selected through stratified sampling methods in 2011. Data were collected by a demographic questionnaire and a questionnaire for the assessment of different aspects of behavioral intention model by interview. Reliability and validity of questionnaire were approved. Data were analyzed through SPSS15 software using descriptive statistics.
Results: mean age of under studied people was 39.54±6.92. Educational level of 41.3% of them was high school and 59.3% of them were self-employed. 3.3% of men had negative attitude, 36.7% moderate attitude and 60% positive attitude toward vasectomy. Wives and vasectomied person was more influential people (subjective norms) on men for doing vasectomy. Only 21.3% of eligible men had intention to undergo vasectomy in the future.

Conclusion: The results indicated that attitude and behavioral intention toward vasectomy isn't in desirable level. Considering the findings of this study, to encourage eligible men to choose vasectomy, an extensive education on the basis of behavioral intention model can be done. Further for doing effective education in this regard, influential people such as wives and vasectomied person can be involved.
Key words: *Vasectomy, Behavioral intention model.*

P-210
Effects of lead acetate consumption during lactation on postnatal development of ovary in offspring Wistar rats

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Introduction: In the recent years, concerns have been raised about the incidence of reproductive disorders in human populations. Therefore, the present study was designed to assess the effects of maternal lead acetate consumption on ovarian follicles development in rat offspring.
Materials and Methods: Pregnant female wistar rats were randomly divided into a control and two experimental groups. The rats in the two experimental groups received 100 and 300 mg/l/day lead acetate via drinking water during lactation. The ovaries of pups were removed at 7, 14, 28 and 60 days of postnatal development; their weights recorded and fixed in Bouin's solution; subsequently 5-6 µm serial paraffin sections were stained with haematoxylin-eosin; the structural changes of ovarian follicles were studied.
Results: The weight of ovaries decreased significantly ($p<0.05$) in the high dose group at all stages of postnatal development. Microscopic results indicated that mean number of primordial follicles increased significantly on days 14 and 28 as did the number of atretic follicles from days 7 to 60 after birth ($p<0.05$) in low and high doses groups. Significant ($p<0.05$) decreases were seen in the number of primary, secondary and antral follicles from day 7 to 60 after birth in the high dose group. Moreover, mean diameter of secondary and antral follicles decreased significantly ($p<0.05$) in high dose group.
Conclusion: Present study shows that maternal Lead Acetate consumption affect histomorphometric development of ovary and can decrease fertility and reproductive efficiency in offspring.
Key words: *Ovary, Postnatal development, Fertility, Lactation, Offspring Wistar rat, Lead Acetate.*

P-211
Prevalence of unwanted pregnancies in under supported women of Gorgan health centers in 2010

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Introduction: A lot of women die each year in pregnancy and childbirth that unwanted pregnancies and unsafe abortion are the most important reason of them. According to importance of unwanted pregnancies, the purpose of the current study is to determine prevalence of unwanted pregnancies in under supported women of Gorgan health centers.
Materials and Methods: In this descriptive-analytical study, 339 eligible women that were under supported of Gorgan health centers were selected through multistage sampling methods in 2010 and were invited through telephone for interview. Data were collected through interview by a questionnaire that it's Reliability and validity was approved. Data were analyzed through SPSS18 software using descriptive statistics and Fisher's exact test.
Results: Mean age and SD of under studied women was 32.05±7.46. 87.3% of women were housewife and 64% lived in urban regions. 45 (13.3%) participants had an unwanted pregnancies, while 294 (86.7%) had a wanted pregnancies. There was significant relationship between location and unwanted pregnancies so that unwanted pregnancies in urban regions were more than rural regions ($p=0.002$).
Conclusion: Incidence of unwanted pregnancies among Gorganian women is relatively high. Therefore, we recommend that eligible women were educated about reasons of unwanted pregnancy, using contraceptive methods and unwanted pregnancy complication.
Key words: *Unwanted pregnancy, Gorgan.*

P-212
Protective effects of American ginseng on cyclophosphamide-induced disorders in sexual behavior parameters and the level of testosterone in adult male rats

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Introduction: In the present study, the effects of cyclophosphamide treatment and American ginseng on the parameters related to sexual behavior as well as changes in the level of testosterone hormone in adult male rats have been investigated.
Materials and Methods: Adult male Wistar rats were divided into four groups containing seven male rats in each group. Rats were given cyclophosphamide (6.1 mg/kg body weight) and American ginseng (500 mg/kg body weight) on daily for 50 days. At the end of the

treatment, testosterone hormone levels and sexual behavior parameters were assessed. The parameters used for this study were: Mount latency (ML), intromission latency (IL), post ejaculatory interval (PEI), mount frequency (MF), ejaculatory latency (EL), intromission frequency (IF), copulatory efficacy (CE) and inter copulatory interval (ICI). The data were analyzed using GB stat software. A probability value of $p<0.05$ and $p<0.01$ were considered significant.

Results: Results demonstrate that the levels of testosterone hormone in the groups that received cyclophosphamide showed significant decreases in compared to the control group. In this group of animals of cyclophosphamide caused significant increases in ML, IL and EL compared to the control group while significant decrease was found in IF, EF, CE and ICI. In current investigation, there was no significant difference in PEI between groups.

Conclusion: It can be concluded that cyclophosphamide affects some behavioral activities and the testosterone level of male rats. American ginseng treatment exhibits a therapeutic capacity to reduce these effects.

Key words: *Sexual Behavior, Cyclophosphamide, American ginseng, Testosterone, Rat.*

P-213

Role vitamine E and C on reducetion of oxidative stress-induce diazinon in rat kidney

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Introduction: Diazinon is the most widely used organophosphates (OPs) in agriculture. Some OPs are capable to produce free radicals and induce disturbance in body antioxidant system. The aim of this study the role vitamine E and C on reducetion of oxidative stress-induce Diazinonin rat kidny.

Materials and Methods: Male Wistar rats were randomly divided into six groups including: control (corn oil as diazinon solvent), DZN group (100 mg/kg, i.p.), vitamin E and C (150 and C mg/kg, i.p.) group and vitamin E+DZN and C+DZN group. 24 h after injection of ether anesthesia to the animals, the kidney was removed. After tissue hemogenation, superoxidedismutase (SOD) and catalase (CAT) and lactate dehydrogenase (LDH) and GST activities, as well as GSHand malondialdehyde (MDA) levels were determined by biochemical.

Results: DZN decreased GSH level in kidny, however, vitamin E+DZN and C+DZN pretreated rats showed increased GSH content. The increased SOD and CAT activities and MDA level in DZN treated rats as compared to control appears to be a response towards increased oxidative stress. Vitamin E and C pretreated animals showed a lowering in these parameters as compared to DZN-treated rats which indicate that vitamin E and C provides protection against DZN-induced oxidative stress.

Conclusion: The data suggest that vitamin vitamin E and C may amelierate DZN induced oxidative stress by decreasing lipid peroxidation and altering antioxidant defense system in kidney.

Key words: *Diazinon, Oxidative stress, Vitamin E and C, Rat, Kidney.*

P-214

Reasons for using withdrawal method as a contraceptive method in women of Gorgan

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Introduction: Using withdrawal method is one of the most important causes of unwanted pregnancies. Unwanted pregnancies make a lot of complications and difficulties for families and society. Therefore, the purpose of the current study is to determine Reasons of using withdrawal method as a contraceptive method in women of Gorgan.

Materials and Methods: In this qualitative study, 339 eligible women that were under supported of Gorgan health centers were selected through multistage sampling methods in 2010 and were invited through telephone for interview. Data were collected through interview by a questionnaire that it's Reliability and validity was approved. Data were analyzed through SPSS18 software using descriptive statistics.

Results: Mean age and SD of under studied women was 32.05±7.46. 87.3% of women were housewife and 64% lived in urban regions. Reasons of using withdrawal method were complications of other methods (35%), opposition of their husband (19.8%), disease (12.7%), failure of other methods (.6%), and fear of infertility (0.3%) respectively.

Conclusion: complications of other methods and opposition of their husband were the most important reasons for using withdrawal method. Therefore, we recommend that appropriate intervention especially educational intervention is conducted for decreasing complications of other methods and opposition of their husband.

Key words: *Withdrawal method, Unwanted pregnancy, Gorgan.*

P-215

Fertility preservation in patients undergoing gonadotoxic treatment or gonadal resection

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Treatment of malignancy, as well as some precancerous and benign conditions, may necessitate

surgical resection of reproductive organs or administration of gonadotoxic chemotherapy or radiation therapy. This often leads to infertility, which is a major quality of life concern. Physicians should discuss with patients the risk of infertility and possible interventions to preserve fertility prior to initiating potentially gonadotoxic therapy. Fertility preservation requires individualization. The optimal approach depends upon the type of gonadotoxic treatment (radiation versus chemotherapy), time available, patient age, the specific disease, and whether the patient has a partner. Cryopreservation of embryos is a proven effective technique for preserving reproductive capacity; cryopreserved thawed embryos are used in about 20% of all ART cycles. Cryopreservation of oocytes and ovarian tissue are promising approaches with reports of live births, but remain investigational. Cryopreservation of the whole ovary with an intact pedicle and vascular supply is also investigational and has not yet resulted in a live birth. In selected patients with non-pelvic tumors and a narrow midline radiation field, simple oophoropexy may be useful for preventing radiation-induced ovarian injury with success rate of 16 and 90 percent. Shielding the ovaries and autotransplantation of a fresh ovary to the upper extremity with creation of vascular anastomosis removes the ovary from the radiation field. In women undergoing chemotherapy, the efficacy of GnRH agonists to prevent ovarian toxicity remains controversial as randomized trials have reported discordant findings.

Key words: *Gonadotoxic, Chemotherapy, Radiotherapy, Fertility preservation.*

P-216
A study of scientific production in reproduction medicine of Iran compared to other Middle East countries (2006-2011)

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Introduction: Increasing rate of infertility in the world and Iran led our study to survey on Iranian scientific profile in the field of Reproduction Medicine. The main purpose of current study is to analyze the trend of scientific output in the field of Reproduction Medicine produced by Iranian authors compared to other productive countries in Middle East region.

Materials and Methods: Using a Bibllometrics analysis, all Medline indexed publication in the field of Reproduction Medicine (2006-2011) was extracted. Then Iranian publication and Middle East countries publication was extracted from all records. Excel used for analyzing data.

Results: Analysis of data showed that a total number of 21905 publications in the field of Reproduction Medicine were indexed in Medline through the period of study. The most prolific year was 2009 which annual output of world scientific publication showed the highest frequency (7394) of indexed publication. Middle East Countries altogether shared 4% of world scientific publication in this field in Medline (2006-2011). Israel (288 Publication), Turkey (240 Publication) and Iran (140 Publication) have the highest scientific publication output in Medline through the period of study. Respectively in Iran the high active center in Reproduction Medicine were: Shahid Beheshti University of Medical Sciences, Tehran University of Medical Sciences and Azad Universities.

Conclusion: The study indicated that world, Middle East counties and Iranian scientific production in the field of Reproduction Medicine has been increased through the period of study with an annual growth of 54.04%, 66.02% and 47.58%.

Key words: *Scientometrics, Reproduction Medicine, Medline, Iran, Middle East Countries.*

P-217
Effect of taurine on cisplatin-induced testicular toxicity in rats

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Introduction: Cisplatin is a platinum-based chemotherapy drug used to treat many different types of cancer, including testicular, head, neck and lung cancer. The cisplatin treatment can affect testicular organ as a major side effect. Taurine (2-aminoethanesulfonic acide) is a free amino acid. This study was designed to investigate the protective role of taurine against cisplatin-induced testicular toxicity.

Materials and Methods: Male Wistar rats (180-220g) were divided into 4groups (n=8) 1) include control, 2) cisplatin-treated (10 mg/kg i.p) 3) group that received taurine (200 mg/kg i.p) 1hr before cisplatin administration and 4) taurine-treated group. The treatment period was 7 days. In the end of treatment rats were anesthetized and the blood was collected from heart for measuring of serum testostrone level and the testes were removed out of the body and were kept in -70^{o}C until further analyses.

Results: The Data showed that cisplatin can decrease serum testosterone level in compared with control group significantly. The administration of taurine (200 mg/kg) to CP-treated rats can increased serum testosterone level. The catalase activity in cisplatin-treated rats was significantly ($p<0.05$) declined and taurine administration could remarkably recover the declined activity of catalase.

Conclusion: It postulated that taurine can prevents the toxic effect of cisplatin on testes and can reverse serum testosterone decreasing in cisplatin treatment. Taurine

have some well known antioxidative effects and so it can prevent the oxidative effects of cisplatin.
Key words: *Cisplatin, Taurine, Testicular toxicity, Testes.*

P-218
Gamete and embryo banks, a necessity or a solution

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Introduction: Today infertile couples who want to have children recourse to special centers and request for getting gametes that this is a confidential process. Confidentiality of information relating to gamete and embryo donation can cause serious ethical problems. In this article has been tried to find a new solution for the problem of embryo and gamete Bank which relies on Islamic rules.
Materials and Methods: In this research different kind of studies was considered such as: relevant books, analytic and review articles applied in different congresses and Internet sites.
Results: To fix these problems, two solutions have recommended: 1) Creating a Bank of gametes. 2) Avoiding security of gamete donation from the beginning, in the other word the necessity of identifying the two families. If you create a bank of gametes, some issues such as incest, is still probable. In some European countries there is a law that limited the donators not to have more than ten receptionist family. The second method emphasizes on recognizing donators and recipients of gametes from the beginning. This will prevent all the probabilities and unwanted effects of security of gamete donation. In most Muslim countries, this solution seems to be more logical because there is not any tolerable reason on the dissimulating the information of donor and recipient of gametes.
Conclusion: So to prevent problems mentioned above and to clarify the paternity of people who are produced from this assisted method, it is recommend avoiding security of gamete donation.
Key words: *Bank of gametes, Privacy, Assisted reproduction, Parentage, Ethics.*

P-219
A comparing between differentiation process and reproductive cloning

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Introduction: Differentiation process is an important subject in medical science, which is accomplished by use of embryonic or somatic cells. Reproductive cloning or organismal cloning is an interdisciplinary subject that is done by several methods: Bacterium cell division, Plant Grafting (apomixis), Natural Twining, Blastomere Separation, Embryo Splitting, Nuclear Transplantation or Transfer Cloning, Therapeutic Cloning. We are researching for replying to this question that "Is there any different between differentiation and reproductive cloning?" Human cloning is forbidden in many scientific councils and religious agoras, so it's necessary to reply above question.
Materials and Methods: This research is mainly based on an analytic methodology, descriptive and library study.
Results: Embryonic cells alter to stem cells in differentiation process. Cloning is an agamete reproductive cell or molecular groups that are similar to their common ancestor, so they are genetically identical. It seems there is no relation between differentiation and reproductive cloning in first view, but with pay attention methinks that these two processes are essentially similar. Their difference is in process kind, the cell nuclear transfer in reproductive cloning.
Conclusion: If the essence of the reproductive cloning and differentiation be unique, arbitrate between them in forbidden or permission should be same. So difference lodgment against them isn't acceptable.
Key words: *Reproductive cloning, Differentiation, Stem cells, Embryonic cells.*

P-220
Stem cell trafficking between mother and fetus

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Microchimerism is the existence of a number of genetically distinct cells within a host. During pregnancy, it can take place between mother and fetus. Presence fetal cells in mother refer to fetomaternal michrochimerism (FMC) and presence maternal cells in the fetus refers to maternal microchimerism (MMC). FMC is first observed as early as 4-6 weeks of gestation and its cell number increases with gestational age. After delivery, FMC reduce but remain in the mother transiently or for several decades in some women. Some of FMC having multi-lineage potential also termed pregnancy-associated progenitor cells (PAPCs). PAPCs include stem/progenitor cells such as

hematopoietic progenitor cells, mesenchymal stem cells and endothelial stem cells. After some injuries, PAPCs home to tissue damage both during and after pregnancy. They acquire cellular characteristics of damaged tissue and precipitate in maternal tissue repair; therefore, PAPCs may influence longtivity women than men. Several evidence suggest a correlation between FMC and a number of human autoimmune-related diseases and cancers. FMC can induce immunological tolerance. Also, a significant number of MMC such as progenitor cells traffic to fetus, but pathological states influence the incidence of MMC. The impact of FMC and MMC remain uncertain. It could be that FMC is an epiphenemon of pregnancy, or be a mechanism by which the fetus makes sure maternal suitability so as to increase its own chance of survival. More detailed understanding of the biology of FMC may proceed improvement towards tissue repair, transplantation and anticancer and immunotherapy.

Key words: *Fetal microchimerism, Maternal microchimerism, Pregnancy, PAPCs, Tissue repair, Maternal and fetal health.*

P-221
Effect of *vitex agnus* essential oil on sperm quality and quantity in mice

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Introduction: *Vitex agnus* has a long history as a medicinal plant in folk medicine. Currently, it is used as a dietary supplement for treatment of hormone imbalance. This study was conducted to investigate the effects of *vitex agnus* essential oil on male reproductive system.

Materials and Methods: In this study, 20 adult male mice were divided in to four groups: group 1 as control, group 2 received 75 mg/kg, group 3 received 1000 mg/kg and group 4 received 1500 mg/kg essential oil via gastric gavage for seven consecutive days. Animals were housted at a controlled condition in accordance with humane care and animal welfare. After this time, animals sacrificed by cervical dislocation. The epididymes dissected out and spermatozoa expressed out by cutting the distal end of the cauda epididymidal tubule. For in vitro fertilization, superovulation induced by HMG and HCG (10 IU) in normal female and oocytes recovered from ampulla.

Results: Results showed that sperm motility, density and viability were significantly decreased in the animals which received vitex agnus essential oil ($p<0.05$). This reduction was dose dependent. In group 4, most sperms were death and have abnormal morphology.

Conclusion: It can be concluded that *vitex agnus* essential oil can affect on spermatogenesis and reduce quantity and quality of sperms.

Key words: *Vitex agnus, Sperm, Essential oil, Phytoestrogen.*

P-222
Taking comprehensive history before IVF; was that IVF necessary?

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Introduction: Infertility is a common problem affecting one couple in six. It can be defined as the incapacity to achieve pregnancy after a reasonable period of sexual intercourse without contraception. There are many causes lead to infertility.

Materials and Methods: In this review study we searched some attributable keywords in various data bases finding related articles. We found 25 articles and at last analyzed them.

Results: There was a unique definition in all articles; inability to achieve pregnancy after a reasonable period of sexual intercourse without contraception. There are many causes leading to infertility such as; delayed childbearing, alterations in semen quality due to habits such as cigarette smoking and alcohol, changes in sexual behavior and elimination of most taboos, ovarian cancer, tubal occlusion, PID, chromosomal aberrations and single gene mutations, luteinized unruptured follicle syndrome (LUF) and others.

Conclusion: Because of the presence of a unique definition and the various causes of infertility, it is not common sense to do IVF for every new married couple. Take notion to that reasonable period and what happens in it.

Key words: *Infertility, IVF, Couples.*

P-223
Ethical issues about sperm donation

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Introduction: The majority of countries that support the use of donor insemination in artificial reproductive technology.Assisted reproductive technology has become increasingly popular over the past several

decades.The advances in human sperm cryopreservation in the past 50 years and the creation of sperm banks have facilitated the increase in artificial insemination with donor sperm In cases of severe male infertility, the use of donor sperm is the only approach to infertility treatment.

Materials and Methods: An overview of using articles the results on the siteis obtained.

Results: general agreement among different agenciesthat sperm donors should undergo rigorous medicalevaluation or screening to ensure that no diseases (specifically, sexual or genetic diseases) are passed onto potential offspring. The screening process usuallyincludes taking a medical history from the donor andperforming laboratory tests on the semen sample. FIGO recommends that donors of genetic material should behealthy persons of normal reproductive age who arefree from sexually transmitted diseases and hereditarydisorders.in addition to adequate history taking and exclusion ofindividuals at high risk for human immunodeficiencyvirus and other sexually transmitted infections,Sperm donors should have good health status and no genetic diseases in their family, whose age should be over 22 years and fewer than 45 years, because male aging is associated with a progressive increase in the number of aneuploidy sperm.Forany donor, it is necessary to consider limiting the number of donor offspring, testing the donor and donor sperm for diseases, age requirements.

Conclusion: The goal of reproductive medicine is to help infertile couples conceive healthy children.

Key words: *Ethics, Donor, Sperm bank, Sperm donation.*

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Severe Ovarian hyperstimulation syndrome leading to Alzahra Hospital's ICU admission

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Introduction: Ovarian hyper stimulation syndrome, is an iatrogenic, serious complication of ovulation induction therapy, and only occurs after stimulation with human chorionic gonadotropin (HCG). Most of OHSS is mild and has a little signs. However, the sever forms should be critical and associated with morbidity and occasionally mortality. The range of OHSS symptoms are from nausea, vomiting and mild abdominal discomfort to severe disease with ascites, plural and pericardial effusion, pulmonary edema, pulmonary embolism and renal failure.

Materials and Methods: Alzahra Hospital is the main teaching hospital of Tabriz University Medical School. Patients are referred their multidisciplinary ICU. Retrospectively, we studied 21 women admitted to this ICU from 1908-1911. Data collected patients age, medical history, the positive history of in vitro fertilization, complications developed and outcome of the patient in the ICU. The specific interventions recorded were direct arterial and central venous pressure (CVP) line, mechanical ventilation, paracentesis, and thoracocentesis were noted in (ARDS).

Results: The severe cases requiring ICU admission in Alzahra Hospital's ICU, there were 21cases of severe OHSS, who were admitted during 4 years. Their clinical manifestations ranged from severe ascites, pleural effusion to acute respiratory distress syndrome (ARDS). ARDS was seen in two patients and presented with severe ascites and respiratory distress including dyspnea, tachypnea and low Sao2.The aim of their treatment were ventilatory support, medical management with intravascular volume expansion to maintain circulatory function and prevent of hypovolemia and hypercarbia and organ dysfunction. These management including with tracheal intubation with ventilator support, crystalloid infusion Albumin therapy, abdominal paracentesis and pleuracentesis for lowering ascites and pleural effusion, antibiotics and deep vein thrombosis prophylaxis. The general condition of the 2 patients improved gradually and they were discharged from ICU without any complications. There was not seen any mortality from OHSS in this period of time.

Conclusion: Severe OHSS should be considered in any women presenting with ascites and pleural effusion with history of controlled ovarian stimulation. OHSS can result in serious health complications and admission to ICU may occasionally be necessary, though, the intensives should be managed this syndrome with multidisciplinary approach.

Key words: *Ovarian hyperstimulation syndrome, Ascites, Pleural effusion, ARDS.*

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A Systematic glance on “Medical ethics in Islam”

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Introduction: Islam is a religion committed to provide the prosperity and happiness of mankind both in this world and the hereafter containing laws and regulation concerning man's deeds and actions and behaviors from among which medical ethics can't be an exception. In this article we have in mind to take a short glance on this important topic from the viewpoint of Islam.

Materials and Methods: This research is mainly based on an analytic methodology and library study.

Results: In order to achieve such an important goal, we will have to have the following parameters in mind: 1)

The Islamic perceptions and attitudes in this field of study, which are referred to as the philosophy of medical ethics. 2) The Islamic instructions in this respect will be explained and clarified known as the doctrine of this religion in this area. 3) The religious institutions involved in this subject will be specified and their goals described and clarified. 4) The strategies for putting them into action and causing them to be realized will be explained.

Key words: *Medical ethics, Islam, System, Doctrine, Strategy.*

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Conscious sedation for pain control during outpatient hysteroscopy

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Introduction: Diagnostic hysteroscopy is a standard method for studying intrauterine pathology. It is usually performed as an outpatient procedure under either local, general or no anesthesia. The purpose of this study was to evaluate the efficacy and safety of conscious sedation with remifentanil and propofol for outpatient hysteroscopy.

Materials and Methods: Sixty patients scheduled for hysteroscopy were randomly allocated into two groups: conscious sedation group (n=30) received total intravenous anesthesia by midazolam followed by remifentanil and propofol infusion until Ramsay sedation scale III-IV. During maintenance of anesthesia these patients ventilated by face mask. Those in general anesthesia (GA) group (n=30) were given midazolam, fentanyl, and loading dose of propofol. Then patients were intubated by laryngeal mask airway. For maintenance of anesthesia in GA group propofol infusion was used. Induction and recovery time of anesthesia, stay in the post-anesthesia care unit, and MAP, HR, SpO2, RR were recorded. All patients were reviewed for satisfaction after the operation.

Results: The time of anesthesia induction, time of recovery from anesthesia and stay in PACU in conscious sedation group were shorter than those in GA group ($p<0.001$). Propofol consumption was significantly less in the conscious sedation group ($p<0.001$). Greater MAP was observed in GA group during intubation ($p<0.01$). Fewer patients had respiratory depression in conscious sedation group. The rate of patient-rated satisfaction was significantly higher in conscious sedation group ($p<0.01$).

Conclusion: Conscious sedation with remifentanil and propofol for hysteroscopy is safe and reliable, which can be a good alternative for anesthesia in outpatient setting.

Key words: *Outpatient hysteroscopy, Anesthesia, Conscious sedation, Patient's outcome.*

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Comparison of Preventive and Pre-emptive Analgesia for Pain Control after Diagnostic Gynecologic laparoscopy

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Introduction: The use of local anesthesia during laparoscopy for postoperative pain control recently has generated. This study compared the efficacy of local anesthetic infiltration at before or the end of procedure on postoperative pain after outpatient diagnostic gynecologic laparoscopy.

Materials and Methods: Forty women were randomized to receive 40 mL of intra-peritoneal sub-diaphragmatic 0.5% lidocaine immediately after insertion of trocar (Pre-emptive group; n=20) or before closure of incision (Preventive group; n=20). All patients received general anesthesia with laryngeal mask airway before beginning of surgery. Postoperative pain by linear visual analogue scale and amount of analgesic use were measured.

Results: The women in the preventive (pre-closure) group had significantly lower overall pain score during 24 hours than those in the pre-emptive group ($p<0.01$). The pain score at 24 hours in the preventive group was significantly lower than that in the pre-emptive group ($p<0.01$). There was significant difference in the post-operative analgesic requirement among the two groups.

Conclusion: The preventive analgesia is better than pre-emptive analgesia after diagnostic gynecologic laparoscopy.

Key words: *Diagnostic gynecologic laparoscopy, Intra-peritoneal local anesthetic infiltration, Pre-emptive analgesia, Preventive analgesia.*

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The effect of daily and frequently consumed plants on human reproductive system

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Introduction: In Iranian Traditional Medicine (ITM), the impact of nutrition on human systems is very important. Reproductive tract function can be affected by various nutrients in various ways. Plants are the main part of our daily food intake, from rice and wheat through pepper and ginger. According to ITM, many of

these plants could have some effects on functions of human reproductive system. We decided to look for these plants and their impacts.

Materials and Methods: Five ITM reference books, including Canon of medicine, Zakhire-Kharazmshahi, Tohfeh, Makhzan-Aladvyh, Alhavy and Plant sciences were reviewed. Plants, including fruits, seeds, legumes, spices and vegetables, which are consumed daily, were chose. Key words for selecting plants were: fertility, miscarriage, Emmenagogue, libido, impotence, contraception, erectile disorder, semen.

Results: 70 plants were found with having effect on at least one of the above mentioned entities. Half of them boost sex drive and increase libido and 32 of them have emmenagogue effect. 20 plants can induce abortion and 16 can affect semen production. The effects of these plants on reproductive organs are dependent to route of administration, amount of usage, the part of plant which is used, adjuvant food or drugs, gender and temperament of people.

Conclusion: There is a need for more investigation to elucidate the underlying mechanism of plant effects on reproductive system. By knowing the potential effects of these daily used plants, there can be simple and non-expensive ways of therapies for reproductive problems. In addition, some unwanted effects of these plants on reproductive system can be prevented.

Key words: *Iranian Traditional Medicine, Plants, Nutrition, Reproductive system.*

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Induction of lipid peroxidation in rat testes by cyclophosphamid: amelioration by American ginseng.

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Introduction: Lipid peroxidation reaction induced by oxidative stress is a consequence of the production of excess free radicals, and this reaction produce marked damage to the structure and function of cell membranes. Spermatozoa membranes are sensitive to oxygen induced damage mediated by lipid peroxidation. Despite its wide spectrum of clinical uses, anti-neoplastic drugs such as Cyclophosphamide causes increased ROS production. Inhibition of oxidative damage with antioxidant and/or free radical scavengers might reduce these disorders. In this study, we investigated the effect of American ginseng against chronic testis damage induced by cyclophosphamide in rat.

Materials and Methods: A total of 28 healthy male Wistar rats were divided in to four groups. Control group (group C) received physiological saline as placebo. Toxication group was injected by i.p. (groupCP) (6.1 mg/kg/day) for 50 consecutive days. Protection group (group GIN) (500 mg/kg/day) was feeding through an orogastric tube for 50 consecutive days. American ginseng plus cyclophosphamide group (group CP+GIN) was received cyclophosphamide and American ginseng (1 h prior to CP administration). At the end of the treatment, lipid peroxidation in testes and plasma, sexual hormone, histological and biochemical changes in testis were assessed.

Results: The serum testosterone concentration were significantly decreased whereas the level of malondialdehyde (MDA) was significantly increased in testis and plasma of animals in cp group compared with those in the control group. Co-treatment with American ginseng improved these parameters in cp+ginseng group. In addition, seminiferous tubules of testis were severely damaged in the cyclophosphamide group but American ginseng administration improved the testicular structure in cyclophosphamide + American ginseng group.

Conclusion: cyclophosphamide induced reproductive toxicity via the generation of reactive oxygen species. American ginseng used alone or in combination with cyclophosphamide treatment protects critical cellular structures against oxidative damage.

Key words: *Cyclophosphamide, American ginseng, oxidative stress, testes structure, testosterone, rats.*

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Intraoperative low- dose Remifentanil decreases apnea and postoperative shivering in patients anesthetized for transvaginal ultrasound guided oocyte retrival

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Introduction: Remifentanil is a short-acting opioid with predictable and rapid recovery, recently have been used for most outpatient procedures including transvaginal oocyte retrival. However intraoperative apnea and postoperative shivering are frequent problems, were seen in patients receiving high dose Remifentanil infusion which can interfere with intraopretive patients safety and postoperative recovery and discharge. The aim of this study was to compare intra and postoperative profiles of low-dose versus high-dose Remifentanil infusion in patients anesthetized for outpatient transvaginal oocyte retrival.

Materials and Methods: In this prospective study 50 patients underwent for transvaginal oocyte retrival, randomly divided in two groups. Group 1 received low-dose Remifentanil (0.1μ/kg/min) and group 2 received high-dose Remifentanil (0.25 μ/kg/min) in Propofol-based anesthesia. Frequency and duration of apnea was assessed as well as postoperative recovery profiles, mostly postoperative shivering.

Results: Frequency and duration of apnea and postoperative shivering were significantly lower in low-dose Remifentanil group ($p<0.05$).Total propofol use was similar in both groups ($p>0.05$). Postoperative pain scores were higher in low-dose than high-dose group, but it was not statistically different ($p>0.05$).frequency of other postoperative complications such as nausea-vomiting or sedation were not different between groups ($p>0.05$).

Conclusion: Low-dose Remifentanil-Propofol anesthesia is associated with lower episodes of intraoperative apnea and better intraoperative safety. Postoperative shivering is also reduced with using low-dose versus high-doseRemifentanil, so can effectively impress patient's satisfaction and rapid and safe recovery for rapid discharge.

Key words: *Remifentanil, Propofol, oocyte retrival, shivering, intraoperative apnea.*

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How socio-cultural beliefs affect making use of assisted reproductive donation procedures by infertile couples

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Introduction: Assisted reproductive donation procedures have not been recognized yet as acknowledged therapeutic approaches for infertility among men and women across the world. Socio-cultural beliefs are seemed to be obstacles in public recognition of these procedures. This study therefore aimed to investigate how socio-cultural beliefs affect making use of assisted reproductive donation procedures among infertile couples in 2010 in Mashhad, Iran.

Materials and Methods: This corelational study was carried out on 115 infertile couples (115 male/ 115 female) who were selected using convenience sampling from Montaserieh Infertility Research Center in Mashhad. Socio-cultural beliefs and also couples' decision to use donation procedures were measured using valid and reliable self structured questionnaires. Data were analyzed using statistical tests including t-test, Mann-Whitney and Pearson' correlation coefficient.

Results: There was no difference between the mean score of socio-cultural beliefs in both groups of women who selected or refused to use donation procedures. However, men who used these procedures had a higher score of socio-cultural beliefs ($p<0.006$). There was also a direct correlation between socio-cultural beliefs and age, infertility length and knowledge of infertile women and men regarding using donation procedures ($p<0.000$).

Conclusion: The findings suggest that positive socio-cultural beliefs related to infertility affected men's decision to use donation procedures. So it is recommended to take into account these beliefs in order to enhance the social recognition of donation procedures as therapeutic approaches for infertility.

Key words: *Socio-cultural beliefs, Infertility, Assisted reproductive donation procedures.*

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The role of Methylenetetrahydrofolate Reductase (MTHFR) A1298C polymorphism in Iranian infertile men

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Introduction: Male infertility in humans has been acknowledged as the cause of couple's inability to have children in 20-50% of total cases. Male infertility is a heterogeneous disorder, with various and environmental factors that contribute to the impairment of spermatogenesis. In spite of the attention that has been given to the research on mechanisms underlying male infertility, molecular events important for the onset and development of this disorder are still poorly understood. MTHFR catalyses the reduction of 5, 10-methylenetetrahydrofolat to 5-methylenetetrahydro folat, which is the methyl donor for remethylation of homocysteine to methionine. Methionine is in turn converted to S-adenosyl methionine, a methyl donor used in many reactions whereby substrates such as DNA, RNA, hormones and lipids are methylated. Methylenetetrahydrofolate reductase (MTHFR) is a key regulatory enzyme involved in folate metabolism, DNA synthesis and remethylation reactions. We evaluated whether A1298C polymorphism is associated with male infertility.

Materials and Methods: Molecular analysis was performed in a case group of 131 infertile Iranian patients and a control group of 130 Iranian men. Genomic DNA was extracted by salting out procedure. The single-nucleotide polymorphism (SNP) determined by PCR-RFLP.

Results: The frequencies of AA, AC, and CC genotypes in patients were 55 (41.98%), 53 (40.45%), 23 (17.55%) and in controls were 46 (35.38%), 72 (55.38%), 12 (9.23%) respectively. So this polymorphism in infertile patients were not significantly higher than controls.

Conclusion: Our findings suggest that there is no significant association of SNP A1298C in the MTHFR gene with male infertility, indicating that this polymorphism does not play a role in Iranian patients.

Key words: *MTHFR, Gene polymorphism, Male infertility.*