Management of ureteral stone with minimal invasive techniques in St. Gabriel General Hospital, Addis Ababa, Ethiopia

Lavelo Samodai, Kassaye Ketsela.

St. Gabriel General Hospital, Addis Ababa, Ethiopia

Background: 2-3 decades ago near all of ureteral stones operations were performed by open surgery. For the time being this trend has changed and if there is indication to remove the ureteral stone, in the most of cases it is managed by minimal invasive technology (MIT) mostly by extracorporeal shock wave lithotripsy (ESWL) and ureterorenoscopy (URS). For first the time in Ethiopia our hospital has started to use these techniques. This paper reports on our experiences after treating more than hundred patients with ureteral stones by minimal invasive techniques.

Patients and methods: Since July 2001 to January 2003 105 patients were treated with ureteral stones in our hospital. Two open ureterolithotomy was done (1.9%) In 22pts (20.9%) ESWL was used (15 proximal 4 mid 3 distal part of ureteral stones). ESWL apparatus was Dornier Delta. In 81pts (77.1%) URS was used to remove the ureteral stones. Ureterorenoscopy was 9.8Fr Olympus.

In 41pts (39%) the stones were removed only by URS (6 proximal 7 mid 28 distal ureteral stones). The stones were removed with Dormia basker in 19 cases and were crushed by Storz pneumatic lithotripter in 21 cases. In 40 patients (38%) combination techniques was applied after URS guided stone push back, double-J was inserted and the stones were crushed by ESWL (proximal 27 mid ureter stones 11).

Result: Total in 6pts the procedures were failed, in 3pts in URS group (3/81, 3.7%) and in 3pts in the ESWL group (3/22, 13.6%), but these latter cases were treated successfully by URS so only three pts treatment were unsuccessful among the 103 pts treated by MIT. Stone free status was in our pts 97.9% (100/103). Removing the ureteral stone only one intervention was enough in the URS group (41pts) and in the combination group (URS + ESWL, 38pts), needed two procedures in 36 pts and 3 procedures were necessary in two pts to get stone free status. In ESWL group (22pts) one lithotripsy was performed in 16pts, two lithotripsy were done in 3pts and three lithotripsy were necessary in one patient.

Complication in URS group was minimal, no severe complication occurred (no reoperation, ureter perforation, and no stricture). Slight bleeding occurred in 3 cases, stone slipped to renal pelvis in 3 cases and operation failed in 3 cases and in one patient temporally urinary retention occurred. After ESWL in 3 cases the stone didn't disintegrate and additional URS was necessary, 4pts had renal colic after ESWL and one patient had fever due to pyelonephritis.

Conclusion: Minimal invasive technology should be the first choice for removing ureteral stones. In our series 97.1% stone free status was achieved by MIT. URS has some advantage compare to ESWL. Higher success rate can be achieved and it needs only one intervention to cease the ureteral obstruction and patient's symptoms can release prompt. However URS is more invasive that ESWL. In the future in the ureteral stone surgery extensive use of minimal invasive technology is recommended in Ethiopia.

Complete Bilateral Duplication of the Urinary Tract with Bilateral Ectopic Ureters - a case report.

Adam E. Groeneveld
ASEA Institute of Urology KCMC, Moshi

Ectopic Ureter is defined as a ureter with an orifice in an abnormal position. If that abnormal position is distal to the sphincter mechanism, incontinence ensues. Bilateral complete duplication of the urinary tract is quite rare. Our patient had complete bilateral duplication with one ectopic orifice beyond the
sphincter on each side. Several surgical options were available in this case to cure the incontinence. Since the upper moiety of the duplicate kidney was of good quality on either side, we chose bilateral end to side pyelo-ureterostomy with exclusion of the ectopic ureters from the urinary stream in an attempt to preserve as much renal tissue as possible.

Cushing's Syndrome: A case report.
J.O. Fualal, A.M. Gakwaya, J. Tindimwebwa Mulago Hospital, Kampala Uganda.

A 13-year-old male Ugandan male child was brought to hospital with severe headache, convulsion and excessive sweating. He was a known asthmatic but not in an attack. He was found to be semiconscious and restless with a hypertension of 210/140 in a recumbent position. He was given hydralazine infusion and sublingual nifedipine for the Hypertension. His fits were managed with diazepam. Although he had no fever, he was on IV infusion of quinine on the basis of a positive blood slide.

Investigations done pointed to a diagnosis of a left suprarenal tumor. Eventually the patient BP was controlled on Carvedilol, prazocin and nifedipine. A left adrenalectomy was done and the patient has so far done very well thereafter.

Cushing's Syndrome. Case Presentation.

Cushing’s Syndrome is a condition, which affects female more than males. Estimates of the incidence of Cushing’s syndrome are imprecise, however it occurs in 1 in 100,000 people in the population. Adrenal tumors have a bimodal age distribution, with small peaks in the first decade of life for both carcinoma and adenoma and a second a round age 40 and 50 respectively.

The case we report was a nine-year-old female patient who presented in our surgical department with Cushing Syndrome. Surgery was the treatment of choice. Postoperative management was a challenge in a patient with established secondary effects of the disease.

Unilateral exophthalmos in thyrotoxicosis.

J.O. Fualal, Mulago Hospital, Kampala, UGANDA

Over a period of 12 months, 215 patients with goitre were seen in the Endocrine Surgical Clinic at Mulago Hospital. Forty-two [19.5%] of them were thyrotoxic either clinically or biochemically. Of these, two females [4.8%] presented with unilateral exophthalmos. One of them aged 46 had clinical and biochemical hyperthyroidism which was failed to respond to carbimazole and propranolol. She did, however, respond to 131I but developed unilateral exophthalmos. Subtotal thyroidectomy was done.

The second patient aged 62 years of age; was biochemically euthyroid. She had a left thyroid lobectomy for a massive left lobe enlargement. Both patients had a short history of two months of onset of unilateral proptosis. This paper discusses the incidence and pathology of unilateral exophthalmos in patients with thyroid disease.


A. Borissov, K. Borissov. Mbuya General Military hospital; Orthopaedic department, Mulugo hospital. Kampala, Uganda.

The purpose of the paper is to show potential of the operative treatment with instrumentation for correction of traumatic and non-traumatic spinal deformities. Between July 2001 and September 2003 total of 53 patients with spinal disorders were operated on, including 30 with traumatic and 23 with non-traumatic lesions.

The age of the patients ranged from 2 to 66 years; 47 had neurological deficit: A - 12, B - 8, C - 9, D - 18 (by Frankel, 1969).

Anterior approach with decompression and bone grafting was done in 15 patients while thirty-four patients were treated with different variants of posterior approach with instrumentation: transpedicular fixation (TPF) and 10 with wiring. Different types of autologous bone grafts were used. Intraoperative complications were in 2 cases. Early complications - in 8.
It is suggested that in cases of severe destruction of the vertebral body with significant kyphotic deformity, combined approach would be the best option. TPF is the method of choice in fracture-dislocations and burst fractures of thoracic and lumbar spine. Superior reposition and rigid fixation can provide best conditions for rehabilitation of the patients with severe neurological deficit. Every patient is to get differential approach depending on type, localization of the disorder and neurological status.

**Complete Bilateral Duplication Of The Urinary Tract With Bilateral Ectopic Ureters - A Case Report.**

A. E. Groeneveld
ASEA Institute of Urology KCMC, Moshi - Tanzania.

Ectopic Ureter is defined as a ureter with an orifice in an abnormal position. If that abnormal position is distal to the sphincter mechanism, incontinence ensues. Bilateral complete duplication of the urinary tract is quite rare.

Our patient had complete bilateral duplication with one ectopic orifice beyond the sphincter on each side. Several surgical options were available in this case to cure the incontinence. Since the upper moiety of the duplicate kidney was of good quality on either side, we chose bilateral end to side pyelo-ureterostomy with exclusion of the ectopic ureters from the urinary stream in an attempt to preserve as much renal tissue as possible.

**Laparoscopic Approach Of Adrenal Tumours; Our Experience**

Unit of General and Laparoscopic surgery, Department of surgical sciences, University of Chieti
Dir. Prof. Paolo Innocenti

Introduction. Laparoscopic surgical therapy of adrenal tumours is already in an advanced stage. The advantages offered by a Mini-invasive approach can now be utilized in adrenal surgery with confidence.

Patient and Methods. From May 2000 to September 2003 in the operative unit of General and laparoscopic surgery of The University Hospital of Chieti, 12 patients were subjected to laparoscopic adrenalectomy using trans-peritoneal approach. Five patients had right adrenal adenomas and 7 had left adrenal adenomas. Of the 12 patients, 8 cases were found positive for Conn’s syndrome (primitive hyperaldosteronism) while the remaining 4 cases were non-secreting adenomas. The mean surgical time was 150 minutes. It was not necessary to convert from the laparoscopic to the traditional laparotomy since there were no intra-operative complications. The mean measurement of the removed tumours varied from 1.7cm to 3.5cm. No postoperative mortality or morbidity was noted in all cases. All patients were well and discharged by the 3rd or 4th Postoperative day.

Conclusion. Laparoscopic approach is extremely advantageous in the surgical treatment of adrenal adenomas but its application in case of malignancy and/or metastatic disease still causes perplexity.

**Establishment And Development Of The Tanzania Heart Institute: Lesson Learned.**

F.B. Masau,
Tanzania Heart Institute

Tanzania Heart Institute was established and registered in Tanzania as a non-governmental organization in 2000 and as a hospital in 2002. Its establishment was mainly based on the fact that cardiovascular diseases are increasingly becoming a major cause of death and economic loss worldwide.

Since its establishment, a wide range of service provisions has been achieved. These include management of heart, blood vessels, chest and other related diseases. Others include continuous in-house training of local staff and formation of bases for cardiovascular research areas.

These achievements however have been hindered by various limitations. Therefore, this paper highlights the achievements, problems encountered and future plans of Tanzania Heart institute establishment.

**Cardiovascular Surgery in Tanzania: One year experience at Tanzania Heart Institute Hospital.**

Masau, F.B. and Makene V.W,
Tanzania Heart Institute

From March 2002 through July 2003, 24 patients with various cardiovascular diseases conditions were
surgically corrected at Tanzania Heart Institute Hospital. Out of the 24 patients operated 13 patients were male and 11 were female. The mean age was 25 years with range from 4 years to 75 years. Out of the 24 patients operated 14 were open-heart surgery and 10 were closed heart surgery operation. Of the open-heart surgeries, mitral valve (MV) replacement was the commonest operation (6 patients), Atrial septal Defect (ASD) closure (2 patients), and one patient each for Ventricular Septal Defect (VSD) repair, Aortic Valve (AV) replacement, Pulmonary Valve (PV) replacement and Ebstein Anomaly repair. Of the closed heart surgery, Patent Ductus Arteriosus (PDA), closure was the commonest procedure performed in 4 patients, followed by pericardiectomy (3 patients), pericardial window (2 patients) and pacemaker implantation in one patient. Postoperative mortality (30 days) was (41.7%). The causes of mortality were: renal failure (2 cases), intraoperative haemorrhage (2), heart failure arrest (3), brain ischemia (1), oesophageal obstruction and respiratory distress (1) and multi organ failure (1).

In conclusion, this paper reviews initial results of the cardiovascular operations performed at Tanzania Heart Institute Hospital in general and further describes open-heart surgery operations performed for the first time in Tanzania.

Management of Ebstein's Anomaly: a case study

Masau F.B. and V.W. Makene

A 12 years old boy was presented with a history of distended abdomen since 1999, swollen legs and was on anti-tuberculous treatment since April 02. On clinical examination there was gross swollen abdomen, groin and palpable liver. Echocardiograph revealed massive right atrium dilation, tricuspid valve abnormality with septal leaflet mildly displaced apically, posterior leaflet more severely displaced with low velocity, and tricuspid regurgitation originating from posterior into the right ventricle apex. Also, had right cardiac failure leading to liver congestion and ascites. At operation tricuspid valve was found severely deformed beyond repair. The tricuspid valve was replaced with 29mm Carpentier-Edwards bio-prostheses and the right atrium reduced. Six months post-operative follow up shows that the patient is doing well, ascites disappeared, good functioning valve with mild pericardial effusion. This paper records the successful management of ascitis after replacement of tricuspid valve and reduction of right atrium in Ebstein's anomaly.

Pseudo aneurysm Of The Descending Aorta In A Hypertensive Adult Male: A Case Report.

A case of pseudo aneurysm of the descending aorta deviated to the left side in a hypertensive male adult is reported due to the rarity of the condition. The patient was referred with a diagnosis of aneurysm of descending aorta for appropriate management. On detailed clinical investigation, deviation of the descending aorta to left side with normal size was observed.

The findings emphasize the importance of using more accurate noninvasive diagnostic investigations in addition to radiography due to their similarity with aneurysm of the aorta. Thus the use of non-invasive computerized tomography (CT) scanning for confirmation of aortic diseases before attempting management such surgery should always be considered.

Congenital Diaphragmatic Hernia in a Child Presenting with Umbilical Hernia and Herniation of Right Ventricle. A case report

Masau F.B. and Makene V.W

A 5 months old male child (date of birth: 23rd Jan. 2002) presented with pulsating supraumbilical mass. Clinical investigations revealed the child to have Congenital Diaphragmatic Hernia (CDH) associated with umbilical hernia (exomphalus), herniation of the right ventricle to the abdominal cavity and herniation of intestines in the right chest cavity.

Although cases of CDH have been reported worldwide, the literature did not reveal any report of similar case in Tanzania. Successful surgical correction was carried out. This case report records CDH associated with other malformations namely, umbilical hernia and herniation of the right ventricle in the abdomen.

The importance of thorough investigation of patients presented with congenital malformation to detect other co-existing congenital defects is emphasized. Honey-Ghee Dressing versus Collagen Dressing In The Management Of Superficial Burn Wounds In Children Peter Ongom, M.MED Surg. Dept. of Surgery, Makerere University Medical School
A randomized controlled clinical trial was conducted in Mulago Hospital, Kampala to compare Honey-Ghee dressing and Collagen dressing in the management of superficial burn wounds.

A total of 52 children with superficial burn injury were studied to assess the efficacy and the safety of Collagen as a dressing in comparison with Honey-Ghee dressing. The mean duration of wound healing of the 26 patients dressed with Collagen was 9.9 days while that for the 26 patients dressed with Honey-Ghee was 12.3 days. Collagen dressed wounds healed significantly faster than Honey-Ghee dressed wounds. Four (15.38%) patients of the 26 patients dressed with collagen developed wound infection while 5 (19.23%) of the 26 patients dressed with Honey-Ghee dressing developed wound infection.

There was no significant difference between the percentages. The organisms causing wound infections were Staphylococcus aureus (33.3%), Pseudomonas aeruginosa (33.3%), Citrobacter freundii (22.2%) and Escherichia coli (11.1%).

### Spectrum of pelvic injuries at queen Elizabeth central hospital, Malawi: a 11-year review.

**Background.** An 11-year (1992 - 2002) retrospective review of 87 patients admitted at Queen Elizabeth Central Hospital, Blantyre with a diagnosis of pelvic fracture was conducted. Case notes of 87 patients were studied and the results reported.

The average age was 34 years, 64 out of 87 patients were male (73.6%). The commonest cause of pelvic fractures was a road traffic accident (RTA). 42 patients were managed conservatively while a laparotomy was done in 5 patients for intractable haemorrhage. Associated genitourinary visceral damage required a repair in 9 patients. Twenty-six patients died (29.9%), mostly as a result of early death from severe haemorrhage.

**Conclusion:** Pelvic fractures are associated with high-energy injury from road traffic accidents. Early diagnosis and prompt management of pelvic fractures reduces mortality and morbidity. The popularization of road safety measures/techniques would drastically reduce the number of pelvic injuries. Additional measures such as the regular and prompt management of pelvic injuries would help reduce the number of amputations and limit the number of pelvic complications.

**Triple Arthrodeses in Children for Severe Neglected Deformity**

*Bitariho, D., Penny N.*

*Children’s Orthopaedic Rehabilitation Unit, Kampala, Uganda*

Severe foot deformity in children is common in Africa due to poverty, lack of awareness and neglect. Triple arthrodeses is often the only surgical means to gain correction of severe fixed deformity. Traditionally, triple arthrodeses has been reserved for children older than 12 years of age to avoid shortening the foot too much. This study follows up 42 feet in 36 patients aged 6 - 20 years who underwent triple arthrodeses, 18 for polio deformity, 15 for neglected clubfeet and 9 other. There were 64% good results. 38% of patients had some degree of residual pain, and more than half had some degree of residual pain, and more than half had some degree of residual deformity. While the results cannot be considered perfect, 92% of patients felt much improved in function and were happy with the result. There was no significant difference in outcome between children under age 10 and those over, and excessive shortening of the foot was not seen. Triple arthrodeses remains an acceptable, but not perfect, salvage for severe fixed foot deformity. A method of triple arthrodeses in neglected clubfoot is described, utilizing a modification of the Lambrinudi triple arthrodeses and aggressive resection of the anterior process of the calcaneus.

The technique is, however, complex and lengthy to implement. We describe 5 cases of Ilizarov Pelvic Support Osteotomy in adolescents, four for post septic hip destruction of the hip and 1 for sickle cell avascular necrosis. All had severe pain, limited function, shortening and inability to walk unassisted pre-operatively. All but 1 gained independent ambulation and appropriate limb length post-operatively.

While complex and lengthy to implement, Ilizarov Pelvic Support Osteotomy provides a dramatic improvement over alternative surgical salvage procedures for post-septic hip destruction.
The Clinical Utility Of The Mangled Extremity Severity Score In The Severely Injured Lower Limbs In Mulago Hospital.

Background: High-energy trauma to the lower extremity presents challenges with regard to reconstruction and rehabilitation. Failed efforts at limb salvage are associated with increased patient mortality and high hospital costs. The decision to amputate or salvage a severely injured limb is difficult. Attempt to quantify the severity of the trauma and to establish several authors who have proposed different guidelines have made numerical guidelines for decision to amputate or salvage the limb based on retrospective data and on small samples.

Materials and Methods: A prospective study therefore was designed to quantify the severely injured lower limbs according to MESS, to evaluate the validity of MESS in the decision to amputate or salvage a mangled lower limb and to determine the validity of MESS in predicting limb viability. The study was carried out in Mulago Hospital between December 2001 and March 2002.

Thirty five patients with 35 mangled lower limbs were recruited in the study. There were 30 (85.7%) males and 5 (14.3%) females with an average age of 29.3 years (range 5-55 years). The injuries were quantified according to MESS. The attending surgeon was blinded from the score. He or she took amputations, 28 limbs (80%) took the salvage pathway and were followed up for 14 days; five of these limbs had delayed amputations within the 14 days and 23 limbs continued with the salvage pathway.

Data was entered and analysed with help of EPI-INFO version 6.0 (2000) programme, and using chi-square for analysis. Significance was given to p-Values of: ≤ 0.05.

Results: It was found that the MESS accurately quantified the severely injured lower limb (p-Value = 0.000), had a very high sensitivity for amputation (100%) and had a high strength in predicting limb viability (91.3%). However the MESS had a relatively low specificity (78.6%) and positive predictive value of 54% for amputation.

Conclusion: The MESS therefore is a simple tool which should be used as quantitative guideline to supplement the surgeon’s clinical experience in decision making when managing mangled lower limbs.

The Prevalence And Risk Factors Of Deep Vein Thrombosis In Patients With Musculoskeletal Trauma Admitted To Mulago Hospital.

Objective: The objective of the study was to determine the prevalence and risk factors of deep vein thrombosis in patients with musculoskeletal trauma admitted to Mulago Hospital so as, to improve awareness and ultimately patient care.

Methodology: Between June and December 2002, a cross sectional prospective study was carried out to establish the prevalence of deep vein thrombosis in patients admitted with musculoskeletal trauma to Mulago Hospital. 161 patients who sustained musculoskeletal trauma were clinically evaluated and underwent compression venous ultrasonography of the lower limbs for the diagnosis of DVT. Data collected was entered using EPI INFO (6.0) computer software and analysed using SPSS (10.0.) and tested for statistical significance using 95% confidence interval and chi-square test.

Results: Twenty-three of 161 patients (14.3%) developed deep vein thrombosis (DVT). DVT was diagnosed averagely 17.61 days following trauma. Immobility was found to be significant risk factor for DVT. Others were surgery, severity of injury, medical factors such as hypertension and oral contraception and social habits like smoking and alcohol consumption. The latter was a major contributing factor to road traffic injury predisposing to immobility.

It was established that the prevalence of DVT in patients who sustained musculoskeletal trauma admitted to Mulago Hospital is 14.3%. This corresponds to that reported in the literature. The study recommends the development of a protocol for anticoagulant prophylaxis for these patients.

The Prevalence And Presentation Of Cervical Spine Injuries In Patients With Head Injury In Mulago Hospital.

Objective: The objective of the study was to determine the prevalence and presentation of c-spine injuries in patients with head injury at Mulago Hospital so as to improve medical personnel awareness and ultimately patient care.
Methodology:
It was a cross sectional descriptive study done in the Accident and Emergency unit plus orthopaedic and Neuro-surgical units of Mulago Hospital on all patients with head injury due to trauma during the period of the study. Data was collected using Questionnaires and analysed using EPI-INFO-6 statistical computer software.

Results:
A total of 217 patients with head injury were studied. 31 patients (14.29%) had radiological evidence of C-spine injury, 22 of these (71%) had cervical symptoms. Twelve patients had clinical evidence of neurological injury. Road traffic crush was the main cause of this injury with 22 patients. The middle C-spine was the most involved with the majority of the injuries at the 5th and 6th cervical vertebrae (20 patients). Most injuries were caused by a flexion mechanism (15 patients). Tenderness (20 patients) was the most prevalent symptom in patients with C-spine injury.

It was established therefore that, the prevalence of C-spine injuries in head injury patients at Mulago hospital was 14.29% and all injuries occurred in patients above 13 years. They were mostly caused by road traffic crush. There is a significant number of patients who may have no symptoms of neck injury yet with radiological evidence (9 in this study). The study recommends the intensification of awareness to medical workers and the performance of routine cervical spine radiology on all patients of head injury presenting with altered consciousness.

Surgical Reconstruction Challenges After Excision Of Giant Cell Tumour Of Bone.

Giant cell tumour of the bone is a benign tumour whose pathoaeiology is not yet fully established. It is a commonly located around the knee joint. Less commonly it is located at the distal radius and even rarely it is located in the proximal femur. Though benign, it is a locally aggressive tumour and has been known to metastasise. Recurrence of local excision is common.

Reconstruction after excision of the tumour can be a challenge. 3 cases of Giant Cell tumour of bone are presented to illustrate surgical options available for treatment.

- Giant cell tumour of the femoral neck treated by excision and total hip replacement.
- Giant cell tumour of the distal radius treated by excision and reconstruction with a non-vascularised free fibula graft and wrist arthrodesis.
- Giant cell tumour of the distal femur treated by curettage and packing with bone cement.

All patients recovered well and had good functional outcomes.

Bone And Joint Tuberculosis At QECH 1986 To 2002.

The number of reported cases of TB has been progressively on the increase since the mid 1980s due to the HIV/AIDS pan epidemic. An audit of all cases of bone and joint TB registered in the TB office at QECH starting from 1986 to 2002 was conducted. This was a retrospective study using the TB office records. The aim of the study was to quantify the proportion of bone and joint TB among TB patients registered at Queen Elizabeth Central Hospital; and observe the trends of bone and joint TB over this period, which coincides with the HIV/AIDS pandemipidemic.

A total of 37075 TB cases were recorded with 599 (1.9%) involving the musculoskeletal system. 90% of musculoskeletal TB involved the spine. During this study period it is noted that absolute numbers of musculoskeletal TB have remained relatively constant, fluctuating between 14 and 58 cases per year, while the total number of all TB cases has progressively increased from 657 in 1986 to 3469 in 2002.
Reconstruction Of The Ankle Joint Mortice Using A Reversed Proximal Fibula Graft After Excision Of The Distal Fibula Aneurysmal Bone Cyst.

A locally aggressive aneurysmal bone cyst of the distal fibula in a 16-year-old girl necessitated excision of the tumour. This would cause disruption of the ankle mortice and loss of ankle joint stability. A method of reconstructing the ankle joint mortice using a reversed proximal fibula graft and lateral collateral ligament reconstruction using peronius brevis tendon is presented. The outcome one year after surgery has been satisfactory with the patient having normal functional outcome.

Prevalence And Presentation Of Musculo-Skeletal Brucellosis In Patients With Musculoskeletal Pain Attending The Orthopaedic Surgical Outpatient’s Clinic At Mulago.

Background: Brucellosis is a zoonosis that affects both animals and man. The musculoskeletal system is commonly affected, but the prevalence globally is not known. Presentation is non-specific and diagnosis requires a high index of suspicion.

Objectives: The study was intended to establish the prevalence and presentation of musculoskeletal Brucellosis at Mulago Hospital.

Methods: Two hundred and one patients with musculoskeletal pain were consecutively enrolled into a cross sectional study conducted over a period of three months. Patients with obvious causes of pain were excluded. Data was collected from history, physical findings, radiography and Brucellar antibody detection and titration by the tube agglutination method.

Results: The prevalence was 20% and average duration of symptoms was 4.8 years. Presentation included: Pain (100%), fevers (75.6%), night seats (65.9%), headache (48.5%), anorexia (7.1%), chills (14.6%) social habits included contact with potentially infected domestic animals of their products and the spine was commonly affected.

Conclusion: Musculoskeletal Brucellosis is quite common and most patients present later. Diagnosis requires a high index of suspicion.

Use Of Over-Penetrated Radiographs In The Assessment Of Chronic Osteomyelitis In Children.

A variety of imaging techniques have been described to identify sequestra in long bones affected by chronic osteomyelitis. These include plain radiographs, tomograms, sinograms, computer tomography, MRI and radioisotope bone scintigraphy. We have found that purposefully over-penetrated plain radiographs highlight sequestra and Brodie’s abscesses otherwise not clearly shown on standard film, and contribute to preoperative planning. Several examples are shown. The advantage of this technique is that it can be used in any hospital with x-ray facilities.

Bone Overgrowth In Chronic Osteomyelitis In Children.

Overgrowth of a limb after fracture in children is well described in the literature but to our knowledge has not been reported as a result of chronic osteomyelitis. Shortening and angulation secondary to growth plate damage have been well described.

We report on early findings from a prospective study of consecutive cases of chronic osteomyelitis in children presenting to the named consultant. Data has been collected on 13 patients with 16 infected limbs including 5 tibias and 4 femurs. An average overgrowth of 1.5cm (0.5-3cm) of the affected limb has been recorded in 9 cases and 1.5cm shortening in 2 cases. All 5 affected tibias in the study showed some degree of overgrowth. One other patient presented with varus deformity of the ankle secondary to 1.5cm overgrowth of the affected distal fibula.

Kaposis Sarcoma of the Lung.

Pulmonary Kaposi sarcoma is a rare condition. Its diagnosis may be difficult due to its similarities in clinical and radiological features with pulmonary opportunistic infections as well as other lung lesions. Treatment of Kaposi’s sarcoma includes radiotherapy chemotherapy and / or immunotherapy whereby lung Kaposi’s sarcoma respond well to chemotherapy. An immunocompetent 68-year-old man was admitted with clinical, radiological and bronchoscopic features of bronchogenic carcinoma. However, the histological result revealed Kaposi’s sarcoma of the lung. The patient was treated with radiotherapy and recovered well.
Subtotal Pericardiectomy Via Anterolateral Thoracotomy For Constrictive Pericarditis.

Objective: To review the outcome of subtotal pericardiectomy via anterolateral thoracotomy for constrictive pericarditis (CP).

Summary: A retrospective consecutive cohort of cases of CP was carried out from 1st September 1998 to 30th April 2003 at Mulago National Referral Hospital. All cases that had undergone subtotal pericardiectomy via a left anterolateral thoracotomy with confirmed constriction at surgery were reviewed. There were a total of 33 cases.

Abdominal Tuberculosis in Chingola-Zambia

D.D. Mugala M.Med FCS (ECSA)

Objective: To study the pattern of presentation of abdominal tuberculosis in Chingola - Zambia.

Design and Setting: A prospective study of the patients who presented with the condition. Nchanga South Mine Hospital Nchanga Government Hospital.

Results: In five years, 35 patients were seen: 19 males and 16 females, ages ranged from 7 to 75 years, mean age 32 years. The females presented at a younger age (below 30 years) than the males. Abdominal pain was the predominant complaint (91.4%) followed by weight loss (71.4%) and fever (63.0%). Physical examination revealed abdominal tenderness in all the patients and abdominal masses in 62.9% of the patients.

Investigations: 31 (88.6%) were HIV positive, 27 patients had ascitis. Diagnostic laparatomy was done in 17 patients and all but one had tuberculosis peritonitis. There were 12 patients who had extra abdominal TB. All were started on treatment; 26(74.3%) had good response, 14.3% responded poorly, 11.4% died.

Conclusion: Abdominal tuberculosis was HIV related in our patients (88.6%). Pain was the predominant feature and 96.4% of the patients had moist TB. It responded well to treatment in 74.3% of patients.

Patterns and outcomes of Pedestrian Road traffic Injuries in patients admitted to Mulago Hospital

Objectives: To determine the pattern and short-term outcome of pedestrian Road traffic injuries admitted to Mulago Hospital.

Setting: The study was carried out in the Accident and Emergency Unit and Surgical Wards of New Mulago Hospital.

Patients and Methods: A prospective and descriptive study in the period August 2000- January 2001. Pedestrians injured by vehicles and admitted to New Mulago Hospital within 24 hours of injury. Data was collected using questionnaires analyzed using Epi-Info and SPSS statistical computer software.

Results: A total of 129 patients were studied. The peak ages of incidence were in the 6 - 10 and 16 - 25 age brackets. He body regions most affected were the head/face and distal extremities. Multiple injuries were the most common pattern seen (78%). There was a significant difference in outcome according to the number of AIS body regions injured (p value 0.001).

Mean injury scores of the victims were: ISS - 13.03, RTS - 30.80, and GCS - 13.45. There was a significant difference in outcome according to each of the Injury scores (p value 0.001 or less). ISS was the only factor which, showed relevance to outcome after multivariate analysis.

Conclusions: Peak age incidence was in the age brackets 6 - 10 and 16 - 25. Most injuries occur in the Afternoon/evening. Multiple injuries are the most common pattern with head/facial injuries being the most common. The study recommends an intensification of public awareness about pedestrian safety on the roads.

Endoscopic features of patients presenting with dysphagia .

I.Kakande, M. Oketcho, J. Lubega.

Objectives: To determine the endoscopic and histological diagnoses and treatment methods of patients seen.

Setting: Nsambya Hospitals in Kampala.

Patients and methods: A prospective descriptive study in the period 2001-2002. Patients sent for endoscopy for dysphagia were recruited into the study. Data was collected using questionnaires and analyzed using Epi-info statistical software.

Results: A total of 118 patients were studied. Their mean age was 60.7 years with a mode of 60. The male to female ratio was 1.19:1. Malignancies and dysplastic...
This pyomyositis study is part of a larger project to investigate and challenge the anecdotaly reported association between surgical sepsis and HIV and presumed poor outcome.

The predominance of the intestinal type of gastric cancer points to a strong environmental factor in the etiology of gastric cancer in this region of Uganda. More work is needed in this area to identify the key players.

Apart from one case, the rest underwent successful double ligation, with dramatic haemodynamic improvement. There was one Hospital mortality.

The study confirmed that surgical ligation via a posterolateral thoracotomy is a safe and effective treatment for symptomatic PDA.

**Cancer of the stomach at Mbarara**

A retrospective study of all patients seen at Mbarara University Teaching Hospital between January 2001 and December 2002 with histological evidence of gastric cancer was done. The objective of this study was to determine the number of patients diagnosed with gastric cancer, their presentation, histological type and management. The patients' medical and pathology records were studied.

A total of 29 patients were seen during this period. Thirteen (45%) of the patients were males and 16 (55%) were females. The age at presentation ranged between 27 - 85 years with a mean of 57 years. The main presenting complaints were epigastric pain (89.7%) and vomiting (82.1%). The pylorus and antrum were the most common sites accounting for 51% and 31% respectively. Twenty-five (86.2%) patients had the intestinal variety on histology. Eighteen (62%) of the patients had surgery done. One patient had total gastrectomy, 3 had Billroth 2 procedure and 9 (50%) only had a drainage procedure.

The study confirmed that surgical ligation via a posterolateral thoracotomy is a safe and effective treatment for symptomatic PDA.

**Conclusions and Recommendations**

Malignancies are a leading cause of dysphagia. The most common histological type is the squamous cell carcinoma. Most treatment options are palliative. Patients presenting with dysphagia should be aggressively investigated for oesophageal cancer.

**Surgical Ligation Of Patent Ductus Via Postero Lateral Thoracotomy At The Uganda Heart Institute, Mulago Hospital Uganda. A Seven Years' Experience.**


The objective of this study was to determine the outcome of surgical ligation of patent ductus arteriosus via posterolateral thoracotomy performed at the Uganda Heart Institute at Mulago Hospital over a 7-year period beginning April 1996. A total of 106 Patent ductus arteriosus cases that were operated on were reviewed. The ages ranged between 2 months and 29 years with a mean of 3.1 years. The mean weight was 6kg. The female to male sex ratio was 1.8:1. All patients had the diagnosis confirmed by Echocardiography (2D Echocardiography and Doppler), with a left to right shunt.

The majority of patients had isolated PDA without associated intracardiac defects. The notable associated lesions included ASD, VSD, combined ASD & VSD, A-V canals and valvular incompetencies. Associated syndromes included Rubella and Down's.

Apart from one case, the rest underwent successful double ligation, with dramatic haemodynamic improvement. There was one Hospital mortality.

**HIV and Pyomyositis: A Prospective Case-Control Study At Queen Elizabeth Central Hospital, Blantyre, Malawi.**

Callaghan M, Liomba G, Borgstein E, Walsh A

Study Site: Queen Elizabeth Central Hospital, Blantyre, Malawi. College Of Medicine Research Laboratories, Blantyre, Welcome Tropical Research Unit, Blantyre, Microbiology Department, Royal Liverpool, University Hospital, Liverpool.

**Background:** Research into the effects of HIV on surgery in Africa has been far behind that in medicine. This pyomyositis study is part of a larger project to investigate and challenge the anecdotaly reported association between surgical sepsis and HIV and presumed poor outcome.

Pyomyositis is common (2.8% of our admissions).
In Africa some studies suggest a strong HIV association. This study furthers this work.

Aim:
To determine among patients with pyomyositis:
1) The association with HIV and at what stage of HIV disease it occurs?
2) The infecting microorganisms and outcome of present treatment.

Method
A case-controlled prospective study from 28/04/99 to 4/03/2000. Patients and controls were tested for HIV after informed consent. Patients had incision and drainage in theatre, and clinic follow-up. Specimens were taken for histology and microbiology.

Results
Eighty patients presented with 90 cases of pyomyositis over 10 months. 80% ((64/80) were HIV positive, compared with 39% (31/80) controls (P<0.001). Patients were in WHO Stage 3 for clinical staging of HIV disease. The mean and median CD4 counts were 337 and 279 respectively. Staphylococcus aurous was the most common organism found. Mortality was at least 6.25% and only occurred in the HIV group. Morbidity was high.

Conclusion
Pyomyositis is strongly associated with HIV and occurs late in the disease. Outcome is worse in the HIV positive group. It is not known whether different treatment would improve outcome.