

History

The history of the plastic surgery department, K.E.M. Hospital, Mumbai, India

Kuldip Singh Goleria, Roshani E. Rana

Department of Plastic Surgery, Seth G. S. Medical College & K.E.M. Hospital, Parel, Mumbai - 400 012, India.

Address for correspondence: Dr. Roshani E.Rana, Department of Plastic Surgery, Seth G. S.Medical College & K.E.M. Hospital, Parel, Mumbai - 400 012, India. E-mail: infoplasticsurgery@gsmc.edu

ABSTRACT

The history of the Department of Plastic Surgery, K.E.M. hospital, Mumbai, is presented from its inception in 1961, to date. The initial struggle, hard work and complete dedication have been mentioned. Fond, cherished memories of personalities, faculty and students along with their contributions are revived.

KEY WORDS

Plastic Surgery Department, K.E.M. Hospital.

THE BEGINNING

The Plastic Surgery Department at Seth G.S. Medical College and K.E.M. Hospital (Figure 1a, b, c) was inaugurated in December 1961 through the initiatives of Dr. C. J. T. Pinto, with the active support of Dr. S. V. Joglekar, the then Dean. Mr. Eric Peet of Oxford was actively involved during the first three months of its existence and for a month each during the next two years, thus contributing to the establishment of the department. The emphasis on maintaining departmental records is evident from the operation notes we find in Mr. Peet's handwriting. These notes speak of his dedication, and illustrate the importance of records. Dr. Anant Puranik, the first Surgical Registrar and Dr. Deodutt Bendre, the first House Surgeon put in their very best to firmly establish this tradition.

Our department had an excellent start. We had about

30 dedicated beds in a consolidated unit, no floor beds (a common prevalent practice in those days) and a dedicated operation theatre. The last was a gracious gesture of Dr. H. N. Dastur, the then Professor and Head of the Department of Neurosurgery. The OT was shared



Figure 1a: Seth G. S. Medical College and K.E.M. Hospital



Figure 1b: Seth G. S. Medical College and K.E.M. Hospital



Figure 1c: Seth G. S. Medical College and K.E.M. Hospital

between the two departments at this stage, but as soon as the present new Neurosurgery OT Complex was commissioned, we were vested with the exclusive use of this OT complex.

THE OT COMPLEX

Geographically, the OT complex occupies the center of our department and it would not be out of place to say that our growth has been centred on it. The large window occupying its northern wall provides a soothing background of greenery and of birds hopping around. Unfortunately, the same glass window absorbed the rays of the morning sun, making the OT

complex unbearably hot. In fact, Mr. Eric Peet during his visits would often operate in shorts - of course with a sterile gown! However, summer or winter, the work went on. Two decades later the theatre was renovated and air-conditioned. However, from the very inception, we were well equipped. We had an electric dermatome way back in 1965, we were the first to have a flash sterilizer and an operating microscope and power instruments for craniofacial surgery.

THE BUILDING OF A TEAM

In April 1962, less than four months after its inception, Dr. K. S. Goleria joined the unit as Honorary Assistant Professor, an appointment welcomed by Dr. Pinto and Mr. Eric Peet, who were happy that they had already initiated the process of consolidation. On the same day that Dr. Goleria joined our department, Dr. Mrs. Divekar, who had experience in Plastic Surgery anesthesia, joined our OT and remained with us as a dedicated anesthesiologist for several years. Sister Solomon, trained abroad in Plastic Surgery, assumed charge of our OT from the very beginning. A few years later Mrs. Sheth, who not only had the skills of a dedicated Speech Therapist but also a special concern for our cleft patients, joined us. Dr. C. V. Mehendale, after a long stint in the UK joined our department as a 'Pool Officer' in 1966, and after a short while was absorbed in the Faculty. In short, pains had been taken to ensure that a dedicated team was in place.

DEPARTMENTAL LIBRARY

The departmental library houses a large number of books and journals pertaining to our specialty. Right at the start we were able to borrow some classics from the Bacha Memorial Library of our Hospital and these are our prized possessions. A number of books autographed by the authors are a valued part of this collection e.g. "The Essentials of Plastic Surgery" by Eric Peet and Tom Patterson (Figure 2).

THE GROWTH

Realizing the importance of exposure to trauma management in the training of a Plastic Surgeon, the management of hand and maxillofacial trauma was

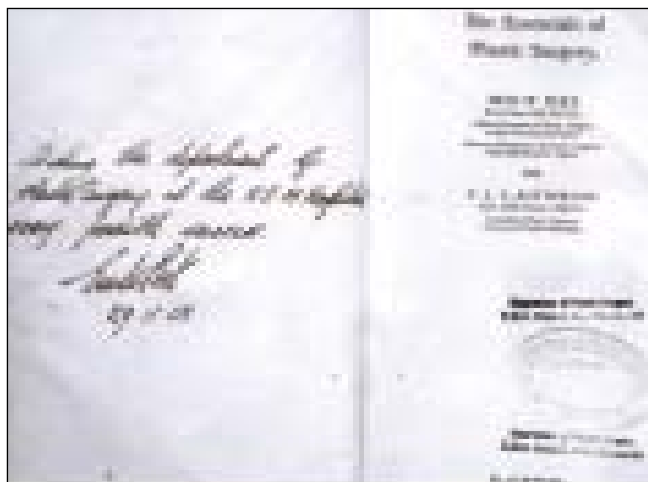


Figure 2: The book "Essentials of Plastic surgery - By Peet and Patterson" bearing comments and signature of Eric Peet

brought within the purview of our department in 1965. The year 1965 also brought with it the specter of an Indo-Pakistani war. Mumbai was under threat. We were asked to be prepared to receive up to 25 burn casualties. Things moved fast. The eastern part of our floor (now Wd 16 A) was immediately handed over to us. While the threat lasted we acquired an electric dermatome and a new operation table. Fortunately, the threat was soon gone. It was logical, to convert the preparations we had made into a permanent burns facility. The authorities also agreed. Dr. Pinto asked Dr. Goleria, who had earlier drawn a plan to create such a facility for the Nair Hospital, to draft a proposal expeditiously so that it could be submitted within a week. The plan was ready in the stipulated time. The latter's suggestion, that given a week more, we could have comments on our plans from Mr. Jim Evans who was heading the new burns unit at St. Mary's, London was readily accepted. Mr. Evan's detailed suggestions came within a week. The whole file was duly forwarded but was never seen again!! The burns unit finally came into being, only 15 years later, in 1980.

INDIVIDUALS, LEADERSHIP AND CONTRIBUTIONS

Dr. Charles J. T. Pinto (Figure 3)

The speed and the methodical manner in which this department was established, speaks volumes for the vision, dedication and tenacity of its founder. Dr. Pinto



Figure 3: Dr. Pinto and Dr. Goleria at an ASI conference in late 60's

was a kind person, a compassionate human being, a loyal friend and an ever-willing fighter for justice. He was widely loved and respected. His memory lives not only in the department that he founded, but also in the Dr. Charles Pinto Centre dedicated to the treatment of cleft lip and palate, founded by Dr. Hirji Adenwalla at Trichur, Kerala and in the CME programme of the Association of Plastic Surgeons of India which was dedicated to him years after he passed away.

He had an abiding interest in the management of cleft lip and palate. The workload of clefts was heavy. One of the earliest dissertations from the department (Dr. P. C. Acharya-1971) was an epidemiological study based on 412 cases.

Following the cleft lip repair, we had the problem of ensuring the timely repair of the palate. To cope with this non-compliance; we began doing both lip and palate simultaneously. Dr. Pinto, using golf terminology, called this a 'Hole-in-one Repair', a concept that became dear to the heart of his successor. A joint paper on this subject has been acknowledged in the proceedings of the 5th International Congress of Plastic Surgery held in Melbourne, 1971.

Another joint paper at the same conference dealt with 16 cases of Median Cleft of the upper lip and illustrated the method evolved by Dr. Goleria to deal with this deformity. The Pinto-Peet procedure for urethroplasty in Hypospadias was widely used in the department till the early seventies.

Dr. Pinto's love for the department was unlimited. He passed away on 9th September 1970, at the age of 54 - as he would have wished - in-harness and within the department, soon after completing an operation. The attack came when raising his voice against injustice to a colleague.

Dr. Kuldeep Singh Goleria

Soon after Dr. Goleria's selection, Mr. Peet, talking to Dr. Pinto in Dr. Goleria's presence, had expressed his confidence of the latter being an able successor. This confidence in Dr. Goleria extended to Dr. Pinto's family, whose fullest trust in Dr. Goleria is evident from what happened after Dr. Pinto's heart attack in the department. The medical team had spent almost 5 hours in resuscitation, but then when brain damage was beginning to be noticed, the Dean and the Professor of Cardiac Surgery sought Mrs. Pinto's permission to withdraw the support systems. Mrs. Pinto left the decision to Dr. Goleria - indicating the level of trust that was reposed in him by the family.

Shortly thereafter the mantle of heading the department fell on him. The suddenness of Dr. Pinto's demise, his expectations of him, his exhortation a few months before his death, to ensure that the department was never divided, placed a heavy burden on Dr. Goleria's shoulders. During Dr. Pinto's leadership he had enjoyed full intellectual freedom. He cherished that tradition and upheld it till he retired in 1989.

Dr. Goleria's interest in the 'Hole-in-one repair' of the cleft lip and palate has been an abiding interest for over 40 years. In the initial stages the *raison d'être* was the socio-economic need. Today it is the dictate of the local morbid anatomy. These thoughts were well documented in his guest lecture titled "40 years of Unilateral Cleft Lip and Palate - One-stage repair" at the 8th Asian Pacific Congress of IPRAS held in Taiwan, April 2001. His objectives in cleft surgery also changed from a "good lip" to a "natural lip" and now to a "familial lip". In these developments, Braithwaite's thoughts and principles introduced in the department by Dr. Tambwekar proved valuable.

This was the time the world witnessed a number of

dramatic developments and we soon became party to some of this change. A single-stage Horton's repair of Hypospadias was adopted as early as 1971 against heavy peer opposition, rooted in tradition. We were probably the first in the country to adopt single-stage repair of Hypospadias. About five years later, while the opposition to one-stage repair was still alive, we had changed to Asopa repair.

The work of O'Brien on microvascular surgery and of Tessier on Craniofacial surgery witnessed at the 5th IPRS had aroused a desire to establish these specialties in the department. Dr. Tambwekar was interested in micro-vascular surgery. During a fellowship with Ohmori in 1976, he gained further insight into the technique and its potential. By 1979 we had an OPMI-6 microscope and micro-vascular surgery was an established discipline. However, the exacting requirements of specialized instrumentation, advanced monitoring techniques and integrated team work, delayed the advent of craniofacial surgery till 1983 - even then, a pioneering venture as far as our country was concerned. In this work the co-operation of the Departments of Neurosurgery, Anesthesiology and Pediatric Surgery was invaluable. This early work was documented by Dr. Abbas Mistry (Dissertation -1990).

Dr. Chintamani V. Mehendale

Dr. Mehendale's association with our department had spanned two decades, when he retired in 1986. Essentially an individualist, he was a dedicated personality, intense in whatever he did and totally devoted to the welfare of the patients under his care. Improvisation and a quest for technical perfection were inbuilt in his personality. Endowed with a scientific mind and a fund of scientific knowledge, his inputs were wide-ranging, from creating awareness of the requirements of Medical photography to the development of Surgical Instrumentation. The collapsible vaginal mould that he devised, in the seventies, for Vaginoplasty, both for intra-operative and postoperative use, is widely plagiarized to this day. The details are a part of Dr. Indu Kochhar's dissertation (1982). Of the surgical instruments that he developed, a palate needle holder (generally useful for deep suture) and a pencil wire twister have proved both useful and

popular. Dr. Mehendale's work on the preparation of plaster mouldages was published by Dr. Rana in IJPS 2003. His interest in Indian classical music and his knowledge of the physics of sound production was unique and manifested itself in developing "Anil Vadyam" a new musical instrument.

Dr. Suresh R. Tambwekar

Dr. Tambwekar's interest in micro-vascular surgery grew into a passion after acquisition of the microscope. Replantations and free-flaps began to appear on our operation list in increasing numbers. An interest was aroused in the subject and Dr. Dhumale's dissertation (1981), under his guidance, on "Experimental micro-vascular anastomosis" was one of the earliest experimental studies on this subject in our country. Later, Dr. Basutkar's Dissertation on 'Micro-vascular digital replantation' (1984) carried forward this work. It will be fair to say that not only was Dr. Tambwekar one of the pioneers of micro-vascular surgery in India, but he also led the battle for the establishment of an organized training programme that attracts trainees from all over the country.

His sharp and observant mind provided important inputs into some of our problems. A visit to China re-aroused his interest in the management of filarial lymphedema. Under his leadership, the ovens used to provide the treatment in China were evolved into special chambers for providing heat therapy. In intractable cases, MRI venography led him to observe perivenous fibrosis in some cases. These improved after venolysis (Dissertation - Dr. Vinod Vij, 1995). Incidentally, an evaluation of increased blood flow in lymphedema was carried out by Dr. Pradeep Pai (1983).

A joint study was carried out by Dr. Tambwekar with Professor Edwin Turkof of Vienna, on the identification of the level of nerve blocks in Leprosy (for the purposes of selecting the site for nerve decompression) by the use of intra-operative evoked potential studies. This work was published in Lancet (1994), and was the subject of dissertation of Dr. Deepak Scindia (1994).

Logically, he extended the scope of this technique to identify and release similar conduction blocks in

diabetic feet, thereby adding a new dimension to the management of this entity.

Dr. Roshani E. Rana

Dr. Rana, an alumnus of our college, had joined our department as a postgraduate student in 1975 and has been deeply involved in the departmental activities since then. Her Dissertation on 'Epispadias' (1978), based on a study of 14 cases was one of the largest series reported till then. After her postgraduation she continued in the department as a Lecturer, steadily grew in experience and stature and in 1989, on the retirement of Dr. Goleria assumed the responsibilities of Professor and Head of the department and continues in this capacity till today, ensuring that new technologies are absorbed, enhancing the quality of medical relief and updating the training program.

Her interest in the treatment of vascular malformations has been enriched by the support of an excellent interventional radiology department. Two dissertations from the department dealt with this subject (Manjiri Dasgupta, 1996 and Naveena Rao, 2003).

The availability of a fibre-optic bronchoscope has enormously helped the work on ankylosis of the temporo-mandibular joint. The covering of the new articular surfaces with fascia lata on either side has made the postoperative course of treatment pain-free. The department continues to attract patients from other parts of India for the management of Mullerian agenesis and other intersex problems.

STUDIES

Publications from the department have been few. However, the faculty and the postgraduate students have conducted a fairly large number of interesting studies.

Dr. Goleria had done pioneering work on the surgical treatment of severe trismus in sub-mucous fibrosis by release and skin grafting and had presented his work at a meeting of the Plastic Surgery Section of the Association of Surgeons of India, 1964. This operation is still in vogue in similar situations.

On an empirical basis he found the use of Perideca (a combination of periactin and dexamethasone) effective in arresting the progress of submucous fibrosis. Under his guidance, a detailed double-blind study carried out by the late Dr. Sudhir Karmarkar (1975) confirmed the empirical observations. Dr. Satyavati Sirsat of the Tata Cancer Research Centre collaborated in this study and noted that the clinical observations were supported by histology findings.

A Review article under the title 'A History of the Pedicle Flap', published in the Indian Journal of Surgery, 1968 gave an exhaustive coverage of that subject till then.

With the advent of impedance audiometry, Dr. Gopalkrishna (1979) carried out a study of middle ear function in cleft palate with the help of our Speech Therapist, Mr Ashok Raje. This work formed the basis of his article titled "Middle ear function in cleft palate" published in the British Journal of Plastic Surgery, 1984. In 1979, Dr. Savita Chandra studied pneumatization of mastoids in cleft palate patients. Recently, Dr. Narender Kaushik has carried out a detailed analytical study of epidemiology based on the data from a series of un-operated cases of cleft lip and palate.

Dr. Ajit Rao carried out a study of the melanocyte behavior in the repigmentation of the donor sites in close collaboration with the Department of Anatomy (1976). Dr. Venkatesh studied the various applications of cultured keratinocytes in the treatment of burns and giant pigmented naevi in collaboration with Dr. Manoj Mozamdar, the Chief Scientist at the National Centre of Cell Sciences in Pune, (1993).

In 1994, Dr. Jasmine Seth carried out research in collaboration with the late Dr. Sharadini Dahanukar and Dr. Urmila Thatte of our Ayurveda Research Centre, on the efficacy of *Tinospora cordifolia* on serum immunoglobulin levels in burns (this drug was later marketed as Immumod). An epidemiological study of burns in adult females was carried out by Dr. K. Bhaskara (1999) and was later published in IJPS 2000 and PRS 2003. A study of Electrical Injuries was carried out by Dr. Surendra Patil (2001). Dr. Manish Deshpande studied firecracker injuries in 2002, revealing a falling

incidence of this injury. This study still continues. There were many other studies related to burn contractures and management of donor areas.

The hand received its due attention from our postgraduates, starting with Dr. Parvati Ramani who studied Plastic Moulding Machine injuries (1973), and later scholars covered fractures, distraction, external fixators, tendons and soft tissues.

The facial skeleton received its due share of attention, starting with Jose Tharail who dealt with fractures of the mandible; others dealt with various aspects of facial fractures and TM joints. Compartment syndromes, nerve recovery and skin cover of extremities also did not escape their attention.

Suffice it to say that these studies covered a wide range of Plastic Surgery topics illustrating the wide span of this horizontal specialty.

OUR ALUMNI

Our alumni are spread out widely across the globe and have done us proud. Dr. Deodutt Bendre headed the Department of Plastic Surgery at Harlem Hospital, New York. Dr. Vibhakar Baxi has settled in the US and yet year after year conducts a Plastic surgery Camp at Chitrakoot. Dr. Leela Joshi, the first lady Plastic surgeon in Mumbai, has settled in Pune. Many have headed Plastic Surgery Departments in the country: The late Dr. Sudhir Karmarkar at St. George Hospital, Dr. Tambwekar at Bombay Hospital, Dr. Ravin Thatte at LTMG Hospital, Dr. Ajit Rao at Cooper Hospital, Dr. Hosi Bhatena at Tata Memorial Hospital, Dr. Bimal Mody at Hinduja National Hospital and Dr. Sunil Keswani at the National Burns Centre at Airoli; all in Mumbai. Outside Mumbai, Dr. Norman Guido in Bangalore; Dr. Savita Chandra in Jaipur; Dr. Shrirang Pandit in Pune; Dr. Santosh Raibagkar in Ahmedabad; Dr. A. Gopalkrishna in Hyderabad; and Dr. Poornima Aiyer in Sri Lanka are all our eminent alumni.

Some of the alumni who transited through our department as a part of their surgical training have risen to great heights. An illustrative and outstanding example is Dr. Snehlata Deshmukh who reached the

peak of her academic career by becoming the Vice-Chancellor of the University of Mumbai.

CONCLUSION

Teamwork has been a matter of faith in our department through the years. This paper would therefore be incomplete without recognizing the contribution of all past and present residents, lecturers, and of course our associate professors, Dr. Poornima Aiyer who is now in Sri Lanka; and Dr. Amresh Baliarsing and Dr.

Vinita Puri who are very much there. We have a rich legacy, and we sincerely hope that future generations will continue to maintain our rich traditions, attain greater heights and conquer new horizons.

ACKNOWLEDGEMENT

We are grateful to our dean, Dr. Neelima Kshirsagar for allowing us to publish the manuscript and the photograph of the institution. We are also grateful to Dr. Suresh Tambwekar for going through the manuscript and confirming the facts on history and Dr. V. A. Puri (Assoc. Prof.) for helping in editing the text.

Announcement

The Lebanese Society of Plastic, Reconstructive, and Aesthetic Surgery (LSPRAS) in collaboration with the Mediterranean Council for Burns and Fire Disasters (MBC), a WHO Collaborating Center, is organizing in Beirut, Lebanon, on November 11-12, 2005, an Instructional Course about Burn Management.

November 11-12, 2005

State of the Art in Burn Treatment - Instructional Course

Sponsors LSPRAS / MBC

Dr. Bishara Atiyeh, Course Director

American University of Beirut Medical Center

Beirut - Lebanon

Fax: 961-1-363 291

E-mail: aata@terra.net.lb

Website: <http://www.medbc.com>