

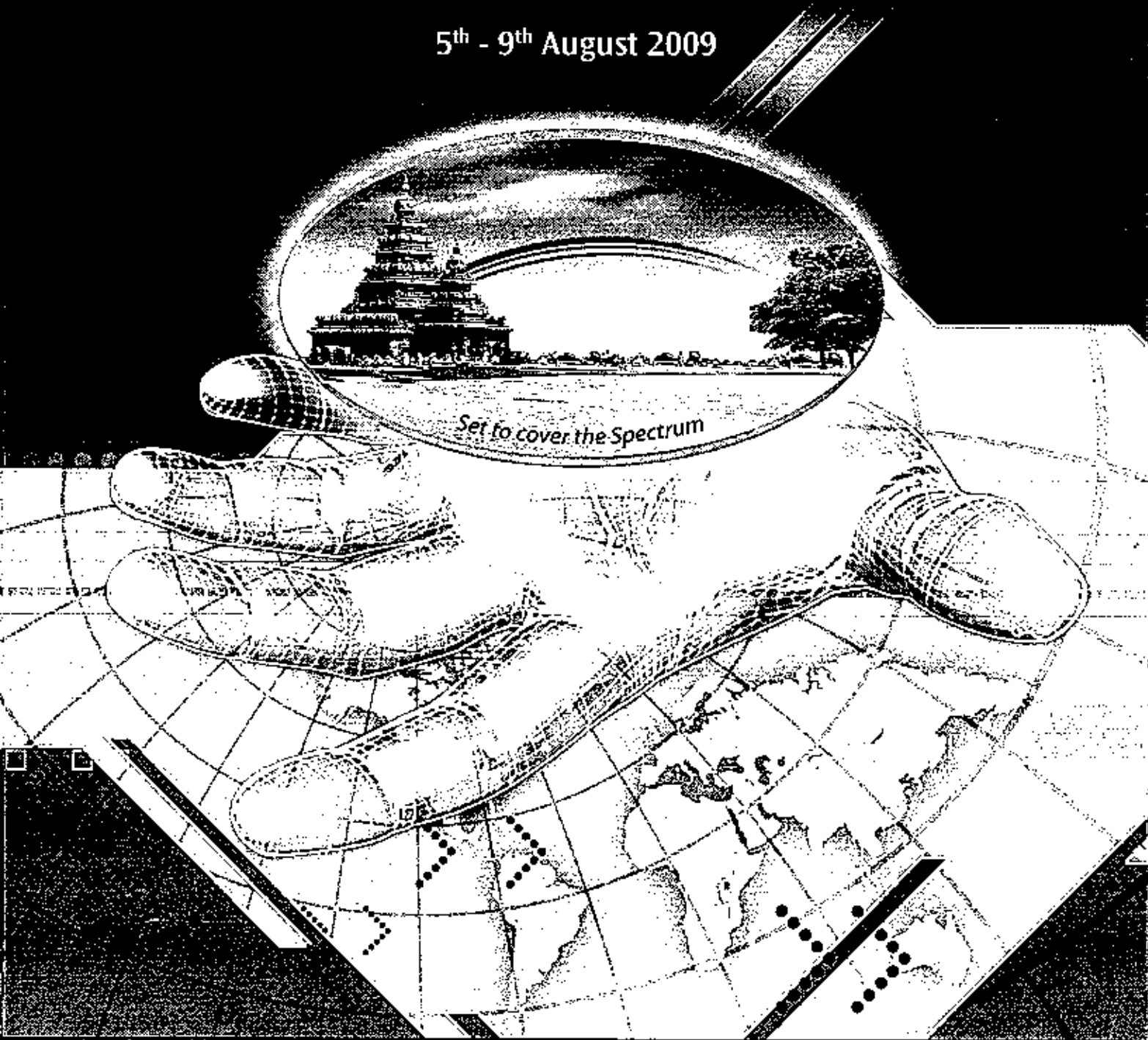


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SCIENTIFIC TRANSACTIONS

EXPERIENCE OF MICROSURGERY IN PAEDIATRIC PATIENTS OUR EXPERIENCE

Dr. Yog Raj Handoo

With the advancement of technology and confidence of success rate with micro surgical free tissue transfers, age no longer is barrier for microsurgery where-ever indicated. Presenting our experience of microsurgery in pediatric age group of 2 to 14 years. Flaps included are fibular flap,

anterolateral thigh flap, latdorsi flap, Gracilis and dorsalis pedis flap. In twenty flaps only one flap was lost. There were no mortality or age specific complications in this series.

Conclusion: Microsurgery is safe in pediatric age group without any complications related to age.

Y TO I REPAIR OF CORPUS SPONGIOSUM FOR BUTTRESSING OF URETHRAL REPAIR AND CORRECTION OF CHORDEE IN HYPOSPADIAS REPAIR

Dr. Yog Raj Handoo

One hundred and eighty eight patients of hypospadias underwent primary urethroplasty between 1996 and 2006, chordee was present in fourteen patients (7.4%), moderate (>15-300) in twenty three patients (12.23%) and severe (>300) in 28 patients (14.86%). Forked corpus spongiosum straddling ectopic urethral meatus and inserting into glanular wings and in severe cases being fibrotic and contributing to chordee occurs in 5.31% of patients. corpus spongiosum was found to be fleshy in 34 patients where fork was elevated off the cavernosal body and brought to midline and sutured over the urethral tube as buttress. This additional buttress resulted in reduction of fistula rate. In distal hypospadias insertion of fork results in glanular tilt without any obvious fibrotic band or tissue. Separation of this fork from the glanular wings helped in correction of tilt.

We are presenting experience of more than three hundred patients of hypospadias along with

complications and results.

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ELECTRO-PHYSIOLOGICAL AND HISTOLOGICAL CHANGES IN THE MUSCLES PROXIMAL TO PBC IN LIMBS

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Post burn contractures involving upper limb constitute approximately 4% of the plastic surgery OPD in our institute. Thirty such patients have been studied involving various joints. It was observed clinically that in long standing cases of various grades, there was significant atrophy in proximal unburnt areas evidenced by reduction in circumference of the limb. This led us to study the structural and functional status of the muscles and nerves to find the effect of disuse proximal to the site

of contracture. This pilot study throws light regarding the functional recovery after corrective surgery and physiotherapy.

The contractures were clinically graded in three categories - mild, moderate and severe. Prior to surgery, the nerve conduction velocity (NCV) test was done for the median and ulnar motor component. Then electromyography (EMG) of the concerned group of muscles was done. During corrective procedure, muscle biopsy was taken from the proximal unburnt

areas. The observations were analysed and correlated with the duration and severity of contractures. The atrophic changes in muscle biopsy was proportional to the severity and duration of contractures. There was significant reduction in normal and increase in abnormal NCV and EMG findings depending upon the histological grading. In NCV, there was deviation from the normal findings in the form of increase in distal latency, decrease in conduction velocity and decrease in amplitude. Similarly, in EMG, deviation from normal was in the form of decrease in amplitude, decrease in duration and reduction in interference.

Our being referral centre, there was high incidence of upper limb contracture. The reason for severe grades of contractures was due to delay in treatment, poor compliance to splinting and physiotherapy in peripheral hospitals. Majority of the patients were within thirty years with right extremity predominance. Nineteen out of thirty patients had more than one year duration. On histopathology, atrophic muscle changes of variable nature were noticed in twenty two cases. They were in the form of reduction in size of muscle fibers, small nuclei, cytoplasmic disruption, intramuscular fat, intramuscular collagen, hyperplastic muscle fibers

and hypertrophic nerve fibers. These findings were consistent with experimental work in animal models in the literature. Features like hyperplasia of muscle fibers were suggestive of attempt to regeneration. Hypertrophy of nerve fibers was probably response to denervation. With increase in the reduction in diameter, there was increase in grades of atrophy. With increase in grades of severity of atrophy on histopathology, there was decrease in normal NCV and increase in abnormal NCV. This was probably because with increase grades of atrophy in the muscle tissue, there was decrease in response to electrical stimulation supplying the atrophic muscles. Similarly, with increase in severity of atrophy, there was increase in abnormal EMG. This was because of atrophic muscles showing decreased response to electrical stimulation.

Thus, we concluded that there were significant changes in the proximal unburnt muscles and nerves about which clinicians pay less attention. The realization of these secondary effects to the long standing contractures is essential. This study, therefore, certainly emphasized that early corrective surgery, followed by adequate physiotherapy to ensure complete recovery in cases of upper limb contractures.

LIPOABDOMINOPLASTY-AN EXPONENTIAL ADVANTAGE

Dr. Roy Kanjor

Combining liposuction while doing abdominoplasty has become a definite advantage in the primary procedure and has improved the overall outcome. Conventional abdominoplasty with extensive dissection and wound healing problems were a major plastic surgical procedure requiring blood transfusion many a times

Liposuction of the entire abdomen has obviated the extensive dissection but at the same time achieving good sliding which helps to excise excessively. Liposuction which treaded very cautiously into the area of abdominoplasty withstood the test of time and continues to be associated with it. Because of the good sliding of robust flaps the dissection can be confined to the midline where only the divarication of the recti muscles to be addressed. Concomitant repair of any abdominal wall herniation and reconstruction of umbilicus has helped functional as well as aesthetic look of the abdomen. Good tumescence and limited dissection has restricted the need for blood transfusion, complications of seroma and hematoma are less. Above all the ischemic necrosis of the flap is unknown.

Keywords: lipoabdominoplasty, tumescence, liposuction, sliding, limited dissection

Conventional Abdominoplasty is still practiced with its extensive dissection and the grave complications like skin necrosis, chest complications and deep vein thrombosis. When the tumescence became the major role of liposuction the blood less liposuction progressed into major practice. The physiology of liposuction started become more obvious where the subcutaneous tunnels created by the liposuction using the blunt small caliber cannulae not only shed the excess fatty tissue but helped the skin to slide down retaining the robust neurovascular bundles. Thus the necessity for extensive lateral dissection can be avoided by adding good liposuction. The dangerous zones as described by Huber has become obsolete and good liposuction of the entire upper abdomen and the lateral segments help in the sliding process. This led to the necessity for the limited midline dissection to repair the diastases of the recti muscles. The neurovascular bundles skeletonised by the liposuction becomes more robust to supply the remaining tissues thereby vascular compromise has