ABSTRACT:

INTRODUCTION: Hypospadias is a congenital anomaly of male urethra. Out 250 live births 1 patient is affected. More than 600 surgical procedures are being adopted to correct this deformity. All of these procedure aims to correct the abnormal anatomy and to create a sound urethra. This retrospective study was done to compare the effects of Bracka’s technique with Wehrbien-Smith technique in the management of hypospadias in our setup.

METHODOLOGY: A retrospective comparative study was carried at the Department of Plastic & Reconstructive Surgery, Liaquat University of Medical and Health Sciences, Jamshoro, from April 2006 to May 2009. Forty four patients with moderate to severe form of hypospadias and in whom either Bracka’s or Wehrbien-Smith procedure was performed, were included in the study. All variables of interested including type of hypospadias and in whom either Bracka’s or Wehrbien-Smith procedure was performed, were included in the study. All variables of interested including type of hypospadias, complications including fistulae, stenosis, stricture, and graft or flap necrosis were noted on a predesigned proforma and data was later on analyzed through SPSS 17.

RESULTS: Age of the patients ranges from 4 - 22 years with mean age of 11 years. Majority of the patients suffered from proximal penile form of disease 40%. Fourteen cases of penoscrotal and perineal hypospadias 31% and 13 cases of mid penile hypospadias 30% were included in the study. The complications rate was common with Wehrbien-Smith as compared to Bracka’s. An increased incidence of urethrocutaneous fistula 27.77% was found patients who underwent Wehrbien-smith technique.

CONCLUSION: Bracka’s Two-Stage repair for hypospadias offer superior results as compared to Wehrbien-smith’s technique as complication rates in patients who underwent Bracka’s two stage repair is significantly lower than Wehrbien-smith’s technique specially in terms of fistulae formation.

KEYWORDS: Hypospadias, Bracka’s two stage repair, Wehrbien-Smith technique, hypospadias fistulae
2009. Forty Four patients with moderate to severe form of disease and in whom either Bracka’s or Wehrbien-Smith procedure was performed, were included in the study. Patients, who did not show compliance to both stages of the procedures, were excluded. The variables including type of hypospadias, severity of the disease and graft site complications, were recorded on a pre-designed proforma and data was later on analyzed through SPSS 17.

RESULTS:
At the end of our data collection and calculation, we have found a large difference in the efficacy of the two procedures, commonly practiced in our set up for the correction of hypospadias. Patients who underwent Wehrbien-smith technique was assigned the label of Group A, whereas those for Bracka’s, Group B. In our study the age of the patients ranges from minimum 4 years to maximum of 22 years (mean 11 years). Majority of the patients suffered from proximal penile form of disease (40%). Then in descending order of frequency 14 cases of penoscrotal and perineal hypospadias (31%) and 13 cases of mid penile hypospadias (30%) were included in the study. The complications rate was common with Wehrbien-Smith as compared to Bracka’s. We have observed an increased incidence of urethrocutaneous fistula in patients, who underwent werbein-smith technique, 6 out of 22 patients developed this complication. One of these patients had to go through revisional surgery. Rest of them responded well to conservative treatment. Whereas, in-group B, only 3 patients suffered from urethrocutaneous fistula post operatively. Urethral stricture and graft failure was only observed in patients belonging to group A, with 2 patients suffering from each problem respectively. In contrast to this, urethral diverticula were seen in one of the patients operated by Bracka’s technique. None of the patients in Group A (Wehrbien smith) suffered from this problem. We have found that 15 patient in group B went home without any complication. This was less than 15 patient in group A (Wehrbien smith) operated by Bracka’s technique. None of them responded well to conservative treatment. Whereas, in-group B, only 3 (13%) faced the complication of urethrocutaneous fistula utilizing Bracka’s technique. This is more in comparison with case series reported by Obaidullah et al but is half of the number observed in our own case series of 22 patients, who were managed with Wehrbiem –smith technique. There was marked difference noted in the development of postoperative urethrocutaneous fistula formation utilizing and comparing both techniques. In our series of 22 patients, only 3 (13%) faced the complication of urethrocutaneous fistula utilizing Bracka’s technique. This is in contrast to the above mentioned case series reported by Obaidullah et al but is half of the number observed in our own case series of 22 patients, who were managed with Wehrbiem –smith technique. Meatal stenosis was more and urethral diverticula were observed only, with Bracka’s technique. Metal stenosis is near important. This study showed that, those patients who underwent Bracka’s technique for the treatment of hypospadias, suffered less from morbidity as compared to Wehrbiem –smith technique. There was marked difference noted in the development of postoperative urethrocutaneous fistula formation utilizing and comparing both techniques. In our series of 22 patients, only 3 (13%) faced the complication of urethrocutaneous fistula utilizing Bracka’s technique. This is in contrast to the above mentioned case series reported by Obaidullah et al but is half of the number observed in our own case series of 22 patients, who were managed with Wehrbiem –smith technique.

CONCLUSION:
Bracka’s Two-Stage repair for hypospadias has an edge over Wehrbiem-smith’s technique as postoperative complication rates in patients who underwent Bracka’s two stage repair is significantly lower than Wehrbiem-smith’s technique specially in terms of fistulae formation.

REFERENCES: