IS3-05 Detection of associated anomalies in children with Hypospadias.
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Objectives: To study the patients with hypospadias for urinary tract anomalies, bladder function and the anatomical changes in the urethra, bladder and ureters.

Patients and methods: 65 cases of untreated hypospadias (14 anterior, 46 mid penile, 5 posterior penile) presenting between 1-14 year age, were evaluated with ultrasonography, Urodynamic study, uroflowmetry and intraoperative cystourethroscopy. These included.

Results: Ultrasound showed abnormalities in 12/65 (18.46%) with mild unilateral hydronephrosis-2, bilateral hydroureteronephrosis-2, small dysplastic kidney-1, single kidney-1, epididymal cyst-1 and cystitis in 5. Urodynamics done in 60/65 (narrow meatus in 5), showed median maximum voiding pressure 32 (8.75) cm H2O. The median average and maximum urinary flow rates were 7 (1-19) and 11 (5-28) ml/sec respectively. Normal capacity with normal bladder pressure was seen in 34 children (56.6%). 13 children (21.6%) had large capacity bladder with normal pressure. Two children showed large capacity bladder with high pressure. A large capacity with low pressure in 3 and a small capacity with high pressure in 8 (13.3%). Detrusor overactivity was seen in 28 (46%) patients, 11 of these had meatal stenosis. Cystourethroscopy done in 60, revealed 34 abnormalities in 18 (30%) patients. Undescended testis was seen in 7, inguinal hernia in 6, retractile testis in 3 and hypoplastic testis in 1. Associated VUR (Deflux) and Bladder abnormalities were treated with hypospadias repair.

Conclusion: Preoperative ultrasonography, urodynamics and cystourethroscopy detects associated abnormalities in children with hypospadias, albeit asymptomatic, irrespective of location of meatus.