Title: Use of Urodynamics in children-

Purpose: Urodynamic study (UDS) has not been used widely in paediatric patients with lower urinary tract (LUT) dysfunction unlike in adults. Our early experience in paediatric UDS is described.

Methodology: From patients referred for UDS for four years from 2006, data such as indications, age at UDS, types of urodynamic abnormality detected and the outcome on patient management based on UDS results were collected.

The difficulties peculiar to paediatric UDS including time of referral, its performance and interpretation were noted.

Results: 32 patients had successful UDS. Majority were between 5-12 years age (range 8 months to 13 years). Spinal dysraphism with neurogenic bladder was the most common indication (88%). Spinal trauma, posterior urethral valve and recurrent UTI in a boy were the other indications. Postoperative UDS following augmentation was needed in one patient.

In 7 patients referred for UDS, the procedure could not be completed in the first time due to technical (instrument related) and non technical factors.

UDS results suggested change of management (either alteration of therapeutic regime or need for further investigations) in 6 of the patients while in others the existing management was continued (81%).

Conclusion: UDS helps to validate the therapeutic management in most patients with LUT dysfunction but in nearly 20% alteration in existing therapy or further investigations were needed.

More awareness on the role of UDS in children among those dealing with paediatric urological problems is required for early referral, particularly in spinal dysraphism.

A dedicated setup with paramedical staff increases the rate of successful study.