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Title: RELEVANCE OF URODYNAMICS IN SPINAL DYSRAPHISM MANAGEMENT

Background:

Early Urodynamic examination in spinal dysraphism is associated with subjectivity of the history and physical exam, technical difficulties regarding performing the study and controversies in interpretation. Since the bladder behavior is the ultimate determinant of renal function preservation there is a need to periodically re evaluate the relevance of Urodynamics in spinal dysraphism patients. More importantly prevention and proactive approaches have become the mainstay of the therapy of these children.

Aims of study:

To assess the role of early Urodynamics in children with spinal dysraphism, either symptomatic or otherwise, to facilitate management strategies.

Methods:

In this study we have evaluated clinical and Urodynamic data of 64 children who presented, at our centre. Standard work up included history recorded in a questionnaire, S. Cr, ultrasound examination for kidneys, bladder characteristics, post-void residue and urine culture. Patients with renal failure, hydronephrosis or significant residue for age were excluded from the analysis (n=12) The remaining had only minor symptoms of frequency, bedwetting and urgency with no objective evidence of complications.

Results:

These 52 children showed abnormal Urodynamic findings even in the absence of complications listed above. Those with minor voiding symptoms alone, showed abnormality in one or more of the following parameters on Urodynamics - bladder capacity, overactivity, low compliance, high pressures during voiding and DSD.

Conclusions:

Standard accepted regime of starting CIC with or without anticholinergics has been the main stay of management in these children. Classical indications for invasive Urodynamics have been the occurrence of upper tract changes, renal deterioration, presence of large post void residue, change in voiding habits or after the age of 5 years. All the children in our study (included in the analysis) had none of these attributes. That they had unfavorable Urodynamic behavior in spite of standard management would justify a more proactive role in terms of early Urodynamic evaluation, to plan early management strategies.

This study was supported by an educational grant from Laborie Medical Technologies

