

INTRACTABLE VOIDING DYSFUNCTION AND HIGH PRESSURE BLADDER: EVALUATION OF PATIENTS WITH NORMAL AND ABNORMAL SPINAL IMAGING

Hypothesis / aims of study

Voiding dysfunction (VD) is a common clinical entity The aim of the current study is to discover additional pathologic factors that presented with intractable VD in children with normal and abnormal spinal imaging.

Study design, materials and methods

Between January and September 2012, 20 patients followed-up for resistant VD with normal spinal imaging (Group I), and 12 patients with tethered cord malformation (Group II) were enrolled in the study. All children were evaluated with USG and DMSA and fluorourodynamic studies.

Results

In groups I and II, 3 and 7 children had a detrusor leak point pressure (DLPP) below 20cmH₂O, respectively. Among children with a DLPP below 20cmH₂O, 3 patients for Group I and 0 patient for Group II had scars in their renal scan. Among patients with DLPP above 20cmH₂O, 6 had scars for Group I and 2 in Group II had scars in renal scans. Of the 8 patients with vesicoureteral reflux(VUR), 5 in group I and 2 in group II had DLPP above 20cmH₂O. Demographical properties and urodynamic findings of patients are shown on table.

Interpretation of results

	Group I	Group II
Mean Age (min/max)	8.75 (6/11)	8.42 (4 / 11)
Gender	7 M / 13 F	4 M / 8 F
RENAL SCAR IN DMSA	4	1
NO RENAL SCAR IN DMSA	16	11
MEAN CYSTOMETRIC CAPACITY	229.8 cc (range 89 – 441 cc)	179.25cc (range 45-302 cc)
MEAN DLPP	28.75 cm H ₂ O (range 6 cm H ₂ O - 136 cm H ₂ O)	30.92 (range 8-76 cm H ₂ O)

Concluding message

Patients who were resistant to symptomatic treatments tend to have more upper urinary tract damage if their LPP was above 20 cmH₂O. Children with tethered cord malformation were found to have less upper urinary tract deterioration which might be attributed to earlier detection of the condition and better urological care compared to children with a normal spine.

Disclosures

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