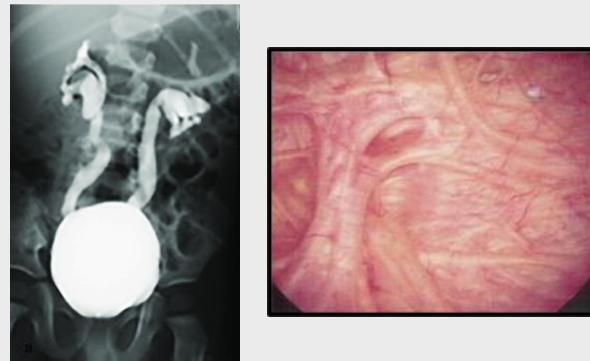


MINI-INVASIVE ENDOSCOPIC MANAGEMENT OF VESICO-URETERAL REFLUX IN PEDIATRIC NEUROGENIC BLADDER IS A SAFE AND EFFECTIVE THERAPEUTIC OPTION

Background

Vesicoureteral reflux (VUR) is common to observe in children with neurogenic bladder (NB). VUR management in NB is still unclear and challenging to treat.

Aim of this study is to evaluate the long-term results of a total endoscopic management (TEM) with simultaneous injections of onabotulinum toxin-A (BTX-A) and subureteric dextranomer/hyaluronic acid (Deflux).



Methods

Retrospective evaluation of TEM procedure, with ≥ 18 months of follow-up.

Outcomes:

1. urinary tract infections (UTIs) post-TEM
2. resolution of VUR
3. need for surgery
4. incidence of iatrogenic ureteral obstruction

Results

A total of 23 patients (pts), 30 ureters, were enrolled:

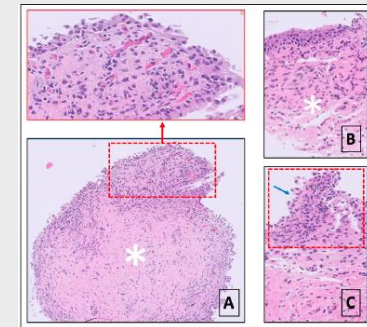
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VUR grades treated: I: 6%; III: 30%; IV: 54%; V: 10%

Mean age at surgery: 6.9 years; mean follow-up: 45 months

1. UTIs post-TEM: none
2. resolution of VUR: 22 ureters (73%)
3. need for surgery: 4 pts
4. incidence of iatrogenic ureteral obstruction: none

Failures mostly in Grade IV–V VUR and low compliant bladders with severe fibrosis



Implications

TEM is safe and effective in the management of VUR in NB without severe fibrosis and with low-grade VUR.

Effectiveness seems higher respect to subureteric Deflux injections alone.

An early treatment could be useful to increase TEM success. We suggest to perform TEM in all patients with NB and VUR from the diagnosis, instead of BTX-A alone.