

## PEDIATRIC UROLOGY

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### **Evolution of Endoscopic Management of Ectopic Ureterocele: A New Approach**

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**Purpose:** We report the evolution of endoscopic treatment of ectopic ureteroceles from the unroofing technique to a novel approach using concomitant ureterocele double puncture and intraureterocele fulguration. We also compare the results of different endoscopic modalities at a single center.

**Materials and Methods:** We reviewed the records of 46 children with ectopic ureteroceles who were treated endoscopically between 1995 and 2005. The patients were divided into 2 main groups. Group 1 included 17 patients who underwent common endoscopic treatments, including ureterocele incision (4 patients), single ureterocele puncture (4), and single puncture with insertion of a Double-J stent (9). Group 2 included 29 children who underwent ureterocele double puncture and fulguration of the anterior and posterior walls of the collapsed ureterocele after insertion of a Double-J stent into both punctured sites. We also managed concomitant vesicoureteral reflux by endoscopic injection of tricalcium phosphate ceramic into the subureteral region.

**Results:** Total success rates in group 1 were 0%, 25% and 33% in patients who underwent ureterocele incision, single ureterocele puncture and single puncture with insertion of a stent, respectively. Total success rate in group 2 was 90% ( $p < 0.05$ ). New onset vesicoureteral reflux developed in 8 patients (47%) in group 1, of which 6 were in ureterocele moieties, and in 8 patients (28%) in group 2, with none in a ureterocele moiety ( $p < 0.01$ ). A total of 13 patients (76%) in group 1 required open surgical intervention, compared to 3 (10%) in group 2 ( $p < 0.05$ ).

**Conclusions:** This new endoscopic approach is highly effective in the treatment of children with ectopic ureteroceles.

### **Editorial Comment**

The treatment of ureteroceles has for the last decade and a half has swung towards endoscopic incision with subsequent management as necessary. Success rates vary significantly and there are articles such as Ben Meir et al. (1) suggesting that intravesical ureteroceles do very well with incision techniques while ectopic ureteroceles do not have such good results.

I think this manuscript is remarkable in that only 10% of the patients with the new approach needed open surgery and the remainder of the ectopic ureteroceles could be managed endoscopically. Preoperative and postoperative reflux can be a problem. These authors successfully managed it with injection therapy in many patients. There is concern that the ureteroceles have poor muscular backing and that this procedure in the long-term may lead to bladder diverticula. One would expect with 8 years follow up in some of their patients that perhaps some of those would have been seen by now. Presumably, the longest term follow up patients were the ones with incisions were not the ones with the two incisions and the double-J stent placement.

### **Reference**

1. Ben Meir D, Silva CJ, Rao P, Chiang D, Dewan PA: Does the endoscopic technique of ureterocele incision matter? J Urol. 2004; 172: 684-6.

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### **Initial Trial of Timed Voiding is Warranted for All Children with Daytime Incontinence**

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**Objectives:** To analyze the relationship between potential prognostic factors and early success after treatment of childhood daytime urinary incontinence without anticholinergic medication.

**Methods:** A total of 63 patients with daytime urinary incontinence met the inclusion criteria for a retrospective review of the effect of a timed voiding regimen. The severity, duration, and frequency of wetting, along with age, sex, and uroflow parameters, were recorded. Statistical analysis was used to determine the factors predictive of improvement in wetting without anticholinergic treatment.

**Results:** Of 315 children evaluated with daytime incontinence, only 24% were treated with nonanticholinergic methods. At the first follow-up visit, 6.3% of patients treated without anticholinergics became dry, 38.1% showed significant improvement, 36.5% were slightly improved, and 19.0% were unchanged. Age, sex, duration or severity of wetting, constipation, bladder capacity, and uroflow pattern and parameters were not predictive of early improvement with timed voiding. Patients with good compliance with timed voiding were significantly more likely to improve than those with poor compliance ( $P = 0.014$ ).

**Conclusions:** The results of our study have indicated that anticholinergic therapy appears to be overused as a first-line treatment for children with daytime urinary incontinence in our clinic population. The lack of reliable predictive factors regarding the response to nonanticholinergic treatment suggests a trial of timed voiding should be used as an initial treatment for all children with daytime urinary incontinence. Almost 45% of our patients had significant improvement in the frequency of wetting within 4 months without anticholinergics.

### **Editorial Comment**

It is interesting in this study to have nearly 45% of the patients have significant improvement without pharmacotherapy and this study would suggest that patients who come to the office for evaluation of daytime incontinence should all have an initial treatment of timed voiding and elimination diaries and a follow up visit prior to instituting drug therapy. Since compliance was the only positive correlate, it would suggest that all efforts in a urologists' office to encourage parental and patient compliance should be attempted to gain the best outcome.

It is surprising in this manuscript that constipation did not have any correlation. Other studies suggest that this is highly correlated but perhaps with the highly selective group and small numbers the authors were not able to find this correlation.

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