

material utilized as the sling as opposed to the actual technique has been commented on in previous reports. With regards to the actual tension-free vaginal tape procedure and the findings of erosions, it was noted that using a tape of polytetrafluoroethylene or polyethylene terephthalate, Ulmsten & Petros reported a 10% rate of erosion (2). When TVT has been performed utilizing different materials, the erosion rate was markedly diminished (3). It is with great probability that the same phenomenon regarding diminishing erosion rates and the transobturator technique will be noted in view of the evolution to new tapes such as Aris™ that is knitted and has a larger pore size of 550 x 170 microns. Lastly, though the sling removal was completed it did not seem to affect the continence status (78%). This rate mirrors other reports of continence levels after sling excision or urethrolisis including those performed after using a retropubic technique and is quite thought provoking in view that the TOT does not really affect a retropubic fibrosis (4).

#### References

1. Kobashi KC, Govier FE: Management of vaginal erosion of polypropylene mesh slings. *J Urol.* 2003; 169: 2242-3.
2. Ulmsten U, Petros P: Intravaginal slingplasty (IVS): an ambulatory surgical procedure for treatment of female urinary incontinence. *Scan J Urol Nephrol.* 1995; 29: 75-82.
3. Klutke JJ, Klutke CG: The tension-free vaginal tape procedure: innovative surgery for incontinence. *Curr Opin Obstet Gynecol.* 2001; 13: 529-32.
4. Petrou SP, Young PR: Rate of recurrent stress urinary incontinence after retropubic urethrolisis. *J Urol.* 2002; 167: 613-15.

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## PEDIATRIC UROLOGY

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### **Congenital adrenal hyperplasia and lower urinary tract symptoms**

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**Objectives:** To assess urinary symptoms in adult women with congenital adrenal hyperplasia (CAH), as feminizing surgery in infancy is current standard practice for CAH and one of the indications for surgery is to reduce urinary symptoms.

**Patients, Subjects and Methods:** In a case-control study, 19 women with CAH, of whom 16 had had childhood feminizing genital surgery, and age-matched women with no CAH, were evaluated. Subjects and controls completed the Bristol Female Lower Urinary Tract Symptoms (BFLUTS) questionnaire.

**Results:** Urge incontinence was reported in 13 (68%) patients and three (16%) controls ( $P = 0.003$ ); stress incontinence was present in 47% and 26%, respectively ( $P = 0.31$ ). Results from the controls were comparable with those documented in larger studies on normal populations. Nine of the patients felt that their urinary symptoms had an adverse effect on their lives, compared with only one of the controls ( $P = 0.008$ ).

**Conclusion:** Patients with a diagnosis of CAH are more likely to have significant urinary symptoms than normal controls. At present it is not clear whether this is a result of surgery or an effect of CAH. In at least two-thirds of patients surgery did not achieve the objective of reducing urinary symptoms.

### **Editorial Comment**

The authors perform a questionnaire study of lower urinary tract symptoms in patients with congenital adrenal hyperplasia. They found a strikingly high rate of urge incontinence and an increased rate of stress incontinence in these patients compared with controls. Almost 50% of patients were bothered by their urinary tract symptomatology.

This is an important first step in reporting urinary tract function in women with CAH. The results point to a significant problem and demonstrate that this is an issue that we should assess more carefully in the future treatment and evaluation of these patients.

However, there are certain caveats. Only 19 CAH patients were evaluated and 3 had not had any genital or urinary tract surgery. Moreover, in the others, it is very unclear what exact surgery these patients had undergone and whether the procedure was performed by a specialist. Moreover, the same group has reported that many of these operations were inadequate in a similar group of patients. Because this was a questionnaire study (which may have the benefit of eliciting more symptomatology by virtue of its anonymity), we know nothing about urinary flow, residual urine or any other objective parameters of voiding. Strikingly, despite the fact that 47% felt the symptoms had an adverse effect on their lives, the patients apparently had not sought evaluation or treatment. Clearly more study is needed.

Overall, this is an important study that reminds us of the need to be aware of these possible symptoms. It highlights how important it is for all of us to be aware of this issue and to offer evaluation and treatment for these problems.

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### **Dysfunctional elimination syndrome as an etiology of idiopathic urethritis in childhood**

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**Purpose:** Idiopathic urethritis (IU) of childhood or urethrorrhagia is a common problem characterized by blood spotting in the underwear between voiding. A clear etiology has not been established and treatments vary. We postulate that idiopathic urethritis is a manifestation of underlying dysfunctional elimination syndrome (DES).

**Materials and Methods:** During a 5-year period we reviewed the records of all children diagnosed with IU in our practice. In total 72 children fit the analysis criteria. There were 68 boys and 4 girls. All children presented with either gross blood per urethra or microhematuria. Children with active infection, immunodeficiency, neurogenic bladder, vesicoureteral reflux, infravesical obstruction, urethral trauma or other genitourinary anomalies were excluded. Evaluation included thorough history and physical examination, urinalysis and urine culture. Renal and bladder ultrasound, voiding cystourethrogram and uroflow/electromyogram/post-void residual volume were obtained in select patients. Study children were divided into 2 cohorts. The first cohort (group 1, 37 patients) was treated with traditional remedies using antibiotics, urinary analgesics and/or anticholinergics. The second cohort (group 2, 35 patients) was treated by bowel and bladder regimens, laxatives when necessary, and biofeedback and/or alpha-blockers when sphincter dyssynergia was identified.

Results: A total of 13 patients in group 1 (35%) had a full response to treatment, 6 (16%) had a partial response and 18 (49%) failed to respond. A total of 29 patients in group 2 (83%) had a full response to treatment, 2 (6%) had a partial response and 4 (11%) had no response. It took an average of 12.1 months to respond fully in group 1, while in group 2 the same full response took an average of 5.2 months. Of the 18 children who crossed over from group 1 to group 2, 15 (83%) had a full response with an average response time of 7.3 months.

Conclusions: Our data clearly reveal a higher cure rate when children with urethritis are treated according to DES guidelines. IU of childhood is a manifestation of underlying DES and should be treated as such.

### **Editorial Comment**

The authors provide a new theory as to the etiology of idiopathic urethritis. This is a frustrating condition that leads to significant parental and patient anxiety and occasionally results in urethral stricture. In a previous era, patients were over-investigated and rarely was a significant cause discovered. Recently patients have been treated primarily with reassurance with some benefit but considerable skepticism.

Hence, the advent of a new theory is welcome. The authors propose that dysfunctional elimination is the basic cause. This abnormal pattern of voiding leads to high velocity, turbulent flow in the posterior urethra that results in the hematuria and dysuria. They also demonstrate that treating these patients for dysfunctional elimination results in greatly improved resolution of symptoms.

Although welcome, there are some questions about the validity of the theory. Symptoms in their patients were frequent. For example, approximately 40% had urgency/frequency, 20% had constipation and about 20% had infrequent voiding. However, if symptoms like these are actively sought, how many of their patients with undescended testes or hernias would also have these symptoms? Similarly, the treatment of dysfunctional elimination is much more involved than reassurance. Could the added attention and ongoing personal interest have helped in the reported resolution? Despite these questions, this is an important contribution and those of us caring for these children should strongly consider this possibility.

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