with serial PSA monitoring. As this report indicates, the therapy is often prompted by a "chicken switch" reaction. Until data is available, and it is unlikely that it will be in the foreseeable future, careful evaluation of prognostic variables as the authors describe, provide the therapist with at least a logical approach to triggering the switch to androgen deprivation. Pretreatment of Gleason score and PSA and post-treatment progression indicators as PSA level and doubling time currently provide the trigger for the delivery of androgen deprivation to those for whom it will benefit most and withhold it from those who are at sufficiently low risk that the morbidity consequence to the therapy equals or outweighs the benefits that androgen therapy could deliver. Clinical trials will provide the most useful and unbiased information.

Some of the current Phase III trials addressing the issue of PSA recurrence are continuous vs intermittent androgen deprivation after irradiation (JPR7 – NCI, Canada); androgen deprivation and immediate vs delayed chemotherapy (RTOG, P0014), androgen deprivation ± thalidomide (NCI-00-C0080) and for patients with a rising PSA after androgen deprivation but without evidence of metastatic disease, a trial comparing second line hormone therapy (ketoconazol + hydrocortisone) to chemotherapy (docetaxel and estramustine – ECOG 1899).

Other agents are being investigated to address the rising PSA; i.e. Provenge, Atrasantin (endothelin-A inhibitor), Avastin (angrogenesis inhibitor).

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FEMALE UROLOGY

Percutaneous tibial nerve stimulation in the treatment of overactive bladder: urodynamic data

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Aim: The aim of this study was to evaluate urodynamic changes after percutaneous tibial nerve stimulation (PTNS) for the treatment of complaints related to overactive bladder syndrome and to search for urodynamic-based predictive factors.

Methods: Ninety consecutive patients with symptoms related to overactive bladder syndrome were enrolled in this study. Patients underwent 12 PTNS sessions. For evaluating objective success, the primary outcome measure was a reduction in number of urinary leakage episodes of 50% or more per 24 hours. Patients' request for continuation of therapy was considered subjective success. This study focused on urodynamic features at baseline and on changes found after 12 PTNS treatments.

Results: The objective success rate was 56% (leakages/24 hours). Subjective success rate was 64%. Frequency/volume chart data and quality of life scores improved significantly ($P < 0.01$). Pre- and posturodynamic data were available from 46 participants. Detrusor instabilities (DI) could be abolished in a few cases only. Increments in cystometric bladder capacity and in volume at DI were significant ($P = 0.043$ and 0.012, respectively). Subjects without detrusor instabilities at baseline were 1.7 times more prone to respond to PTNS (odds ratio, 1.75; 95% confidence interval [CI], 0.67-4.6). The more the bladder overactivity was pronounced,

the less these patients were found to respond to PTNS, the area under the receiver operating curve was 0.644 (95% CI, 0.48-0.804).

Conclusion: PTNS could not abolish DI. PTNS increased cystometric capacity and delayed the onset of DI. Cystometry seemed useful to select good candidates: patients without DI or with late DI onset proved to be the best candidates for PTNS.

Editorial Comment

The authors studied 90 patients with symptoms of OAB and performed 12 percutaneous tibial nerve stimulation (PTNS) on them. Their goal in obtaining objective success was a diminution of urinary leaking episodes by 50% or more per 24 hours. When available, the authors examined urodynamic features at baseline and after the course of therapy were completed. They found that patients without any evidence of detrusor overactivity had a 1.7 times more chance of responding to this therapy than patients with detrusor overactivity. In addition, the more pronounced the detrusor activity, the less chance of success would be obtained through this modality.

Sacral nerve stimulation has now established itself as an option of therapy in patients with severe OAB, especially those who have failed pharmacologic therapy. Some urologists are somewhat reticent to become involved in sacral nerve stimulation secondary to the methods of preliminary testing or application of the technology. Into this niche, there may a position for PTNS. Percutaneous tibial nerve stimulation should be reviewed by all urologists for a potential addition for an office therapy, especially if they treat a significant number of patients with voiding dysfunction secondary to detrusor overactivity. The great value of this paper is both as an introduction to percutaneous nerve stimulation as well as helping to identify the sub-populations of patients with voiding dysfunction who this therapy may assist. Long term questions to be answered include its success in the different populations of male vs. female, detrusor activity and voiding dysfunction as well as the durability of the therapy after the multi week course of therapy has been completed. I advise all physicians who are interested in developing or introducing nerve stimulation in their practice to read this article and consider trying this therapy.

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Delayed treatment of bladder outlet obstruction after sling surgery: association with irreversible bladder dysfunction

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Purpose: Our urethrolysis cohort demonstrated an unusual delay time to surgical treatment of bladder outlet obstruction. We determined whether urethrolysis outcomes, i.e. persistent bladder symptoms, were associated with time between sling and urethrolysis surgeries.

Materials and Methods: Retrospective analysis of all patients who underwent urethrolysis for post-sling voiding dysfunction between June 1997 and June 2002 was performed. We excluded from study 6 patients with a known history of overactive bladder symptoms, neurogenic bladder dysfunction and use of anticholinergic pharmacotherapy before stress incontinence surgery. The remaining 15 patients were stratified into 2 outcomes

groups based upon the absence or presence of post-urethrolysis bladder storage symptoms. Patients (7) in group 1 have no current bladder symptoms. Patients (8) in group 2 still require anticholinergic drug therapy for significant bladder symptoms of frequency and urgency. Data collected for the 2 groups included mean age, existence of urinary retention before urethrolysis, mean time to urethrolysis in months, urethrolysis outcome based upon subjective bladder symptoms and followup duration. For comparison of mean age between groups, the standard t test was used. Fisher's exact test was used to compare frequency of urinary retention before urethrolysis between groups. Lastly, the Mann-Whitney U test was conducted to compare time to urethrolysis between groups. All statistical analyses were conducted using the SPSS software package (SPSS, Inc., Chicago, Illinois).

Results: There was no statistically significant difference between the groups with respect to age or frequency of urinary retention before urethrolysis. Time to urethrolysis for the whole cohort ranged from 2 to 66 months. Mean followup after urethrolysis was 17.3 +/- 22.9 months. Comparison of mean time between incontinence and urethrolysis surgeries between group 1 (9.0 +/- 10.1 months) and group 2 (31.25 +/- 21.9 months) demonstrated a statistically significant difference ($p = 0.01$).

Conclusions: This urethrolysis population demonstrated an unusual delay time to surgical treatment of bladder outlet obstruction. We categorized the cohort according to absence or presence of persistent bladder storage symptoms, and found a strong association between persistent bladder symptoms and greater delay to urethrolysis.

Editorial Comment

The authors review their specific population of urethrolysis patients and retrospectively analyze the response to surgery and its relation to the passage of time between the original sling and the subsequent urethrolysis. The analysis revealed a strong association between persistent bladder symptoms and greater delay to urethrolysis.

This paper is very timely in view that it raises the issue of when should one intercede for relief of obstruction secondary to an outlet procedure. The paper may have a had a greater degree of illumination had there been more definition of the urinary symptoms preoperatively and postoperatively. During the review of the paper, one may infer that the authors assume that all their urethrolysis patients were surgically successful and that the continuation of symptoms was basically due to anatomic/physiologic changes associated with obstruction as opposed to technique failure. Nevertheless, the take home message from this paper is that as soon as the diagnosis of infravesical outlet obstruction is diagnosed it should be definitively remedied; this may be valuable advice indeed when deciding when to intercede with this specific subset of patients.

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PEDIATRIC UROLOGY

The ambitions of adolescents born with exstrophy: a structured survey

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