carefully and be compared to the above cited on.

Again, outcomes for low, intermediate and high-risk patients are given as PSA-progression-free survival data (defined as 3 consecutive PSA increases, ASTRO criteria).

In low-risk patients around 95% had no progression after 140 months. For intermediate risk patients roughly 12% and for high-risk patients roughly 45% had biochemical progression after 140 months. Interestingly, the curves do not show any further decrease and remain linear 75 months after treatment. With these 2 papers in mind, brachytherapy can no longer be considered an inferior therapeutic option to radical prostatectomy in men with localized prostate cancer.

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FEMALE UROLOGY

Preoperative pressure-flow studies: useful variables to predict the outcome of continence surgery

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Objective: To determine whether the acceleration of flow rate (AFR), pressure flow variables and urethral pressure profilometry (UPP) measurements might have a role in evaluating women with urodynamic stress incontinence (USI), to predict the surgical outcome and de novo detrusor overactivity after Burch colposuspension.

Patients and Methods: Women with a urodynamic diagnosis of USI (209) who had a modified Burch colposuspension were assessed retrospectively. The AFR, the opening (ODP) and closing detrusor pressure (CDP), DP at maximum flow rate and UPP values were calculated for each woman before surgery.

Results: The preoperative AFR was significantly higher in women who developed de novo detrusor overactivity after surgery. The women who had persistent USI after colposuspension had significantly lower preoperative ODP and CDP than women who were continent after colposuspension. Other variables were not significantly different between the groups of women.

Conclusions:The AFR and ODP appear to be useful preoperative measures to predict the outcome of continence surgery and the emergence of de novo detrusor overactivity.

Editorial Comment

The authors review a population of patients who underwent Burch colposuspension and analyze urodynamic variables (acceleration of flow rate, pressure flow variables and urethral pressure profiles) both preoperatively and postoperatively. The findings were then used to examine their predictive power for surgical outcome and de novo detrusor overactivity. The authors found that acceleration of flow rate and opening detrusor pressure appears to have promise as a preoperative gauge in the incidence of de novo detrusor overactivity while urethral pressure profiles did not provide any particularly illuminating factor.

The authors should be commended for their thorough review of urodynamic variables to help assist the surgeon in predicting and potentially avoiding inadvertent outcomes from anti-incontinence surgery. Their discussion of acceleration of flow rate is interesting for this urodynamic test does not have an extremely popular

penetration as a preoperative urodynamic study. That the authors noted that the urethral pressure profiles were not particularly useful is not overly surprising in view that past authors have found no significant difference in resting urethral pressure profile and functioning urethral profile before and after anti-incontinence surgery (1). In addition, the potential puzzling nature of urethral pressure profiles pre and post operatively has been discussed by others (2).

The authors should be complimented on their discussion section, especially their thoughts on the association of opening and closing detrusor pressure and successful surgery. I recommend this paper highly to those surgeons actively performing active anti-incontinence operations as well as those with an active interest in urodynamics.

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Randomized, double-blind placebo- and tolterodine-controlled trial of the once-daily antimuscarinic agent solifenacin in patients with symptomatic overactive bladder

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Objective: To assess in a phase 3a trial the efficacy of solifenacin succinate, a once-daily oral antimuscarinic agent in development at 5-mg and 10-mg dosage strengths, for the treatment of overactive bladder (OAB) (Yamanouchi Pharmaceutical Co. Ltd, Tokyo, Japan) compared with placebo in patients with symptoms of OAB, i.e. urgency, incontinence, and frequency, with additional objectives being to assess the safety and tolerability of solifenacin and to compare the efficacy and safety of solifenacin with tolterodine 2 mg twice daily.

Patients and Methods: The study was an international, multicentre, randomized, double-blind, tolterodine- and placebo-controlled trial conducted at 98 centres. Adult patients with symptomatic OAB for > or = 3 months were eligible; after a single-blind 2-week placebo run-in period patients were randomized equally to a 12-week double-blind treatment with either tolterodine 2 mg twice daily, placebo, solifenacin 5 mg or 10 mg once daily. Efficacy variables included change from baseline in the mean number of urgency, incontinence and urge incontinence episodes, and change from baseline in voids/24 h and mean volume voided/void.

Results: In all, 1281 patients were enrolled, 1081 randomized and 1077 treated; 1033 were evaluated for efficacy. Compared with placebo, the change from baseline (-1.41, -32.7%) in the mean number of urgency episodes per 24 h was statistically significantly lower with solifenacin 5 mg (-2.85, -51.9%) and 10 mg (-3.07, -54.7%; both $P < 0.001$), but not with tolterodine (-2.05, -37.9%; $P = 0.0511$). There was a statistically insignificant decrease in episodes of incontinence with tolterodine (-1.14; $P = 0.1122$) but a significant decrease in patients

treated with solifenacin 5 (-1.42; P = 0.008) and 10 mg (-1.45; P = 0.0038). Compared with placebo (-1.20, -8.1%) the mean number of voids/24 h was significantly lower in patients receiving tolterodine (-1.88, -15%; P = 0.0145), solifenacin 5 (-2.19, -17%) and 10 mg (-2.61, -20%; both P < 0.001). The mean volume voided/void was also significantly higher with all three active treatments (P < 0.001). Solifenacin was well tolerated; compared with placebo (4.9%), dry mouth (the most common side-effect), mostly mild, was reported in 18.6% of patients receiving tolterodine, 14.0% receiving 5 mg and 21.3% receiving 10 mg solifenacin.

Conclusion: Solifenacin 5 and 10 mg once daily improved urgency and other symptoms of OAB, and was associated with an acceptable level of anticholinergic side-effects. Solifenacin demonstrated significantly favourable efficacy to side-effect ratio in treating symptomatic OAB.

Editorial Comment

The authors present data on a once a day antimuscarinic agent (solifenacin) and compared variable doses as well as the b.i.d. dose of tolteradine and placebo in an international multi-center, randomized double-blind trial. The investigators used the twice daily tolteradine as opposed to the once a day dose as the latter formulation was not commercially available at the time of the initiation of the study. The authors found that the solifenacin, both the 5 mg and 10 mg dose, was well tolerated and effective for treating the symptoms of overactive bladder.

As all urologists have realized, the armamentarium for the treatment of overactive bladder continues to expand at an aggressive pace. Solifenacin is a once a day antimuscarinic with greater M3 selectivity than M2 selectivity. Secondary to this greater M3 selectivity, the potential for bothersome side effects such as xerostomia may be diminished. A question arises when reviewing this affinity in the setting of pathophysiologic changes in the roles of M2 and M3 receptors in the abnormal micturitional state. With diabetes, denervation injury or bladder outlet obstruction there could be a change in the sensitivity of the muscarinic receptors. In addition, the aging process can have a similar effect as the disease states. Hedge et al. reported that in the denervated rat bladder there is significant increase in the M2 receptor density without a change in the M3 so the role of M2 receptors for detrusor contraction may be heightened in a denervation (1). In addition, the M3 specific antagonists may be at a disadvantage due to the M2 up regulation in the diseased bladder state. The feline model has demonstrated greater potency of M2/M3 antagonists on the bladder when compared with an M3 selective antagonist in the diseased bladder (2). The potential for disadvantage of the M3 selective agents in the denervated bladder over the M2 receptors has been noted by others as well (3). It is for the above reasons that it will be of significant clinical and economic interest to note if these M3 selective agents will be able to assist patients in an equal or superior way over other broadly selective antimuscarinic agents.

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