

to surgery, radiation, or conservative management for the treatment of localized prostate cancer. Lu-Yao and colleagues assessed the association between PADT and disease-specific survival and overall survival in men with localized prostate cancer.

Data were extracted from the Surveillance, Epidemiology, and End Results Medicare-linked database. Men diagnosed with stage T1 to T2 prostate cancer from 1992 to 2002 were included in the study. All were at least 66 years of age. Patients who had received no localized treatment in the first 180 days after diagnosis were included in the analysis ( $n = 19,271$ ). The authors measured prostate cancer-specific survival and overall survival.

Within the analysis cohort, 41% of the men (median age, 77 years) had been treated with PADT. The median follow-up was 81 months. During the follow-up period, there were 1560 prostate cancer deaths and 11,045 deaths from all causes.

The researchers found that use of PADT for localized prostate cancer was associated with lower 10-year prostate cancer-specific survival (80.1% vs 82.6%) and no increase in 10-year overall survival compared with conservative management. However, in a prespecified subset analysis, PADT use in men with poorly differentiated cancer was associated with a borderline improved 10-year prostate cancer-specific survival (59.8% vs 54.3%), but not overall survival (17.3% vs 15.3%).

In conclusion, PADT is not associated with improved survival among the majority of elderly men with localized prostate cancer when compared with conservative management. Given these results and the fact that PADT is associated with significant adverse effects as well as financial costs, the authors recommend that physicians give careful consideration before initiating PADT in older patients with localized prostate cancer.

### **Finnish Multicenter Study Comparing Intermittent to Continuous Androgen Deprivation for Advanced Prostate Cancer: Interim Analysis of Prognostic Markers Affecting Initial Response to Androgen Deprivation**

Salonen AJ, Viitanen J, Lundstedt S, et al.

*J Urol.* 2008;180:915-919.

Although the initial response rate of prostate cancer to ADT can be up to 80%, most patients experience disease relapse, with many developing androgen-independent prostate cancer cell lines. Preclinical evidence suggests that intermittent androgen deprivation (IAD) could possibly preserve the androgen-dependent state of the tumor. Furthermore, IAD includes attenuation of its known side

effects through the off-treatment phases and reduced treatment expenses.

To determine the proportion of patients who might benefit from intermittent ADT, Salonen and colleagues assessed hormone sensitivity by administering ADT for 24 weeks to 856 men with locally advanced or metastatic prostate cancer.

Patients found to have hormone-sensitive disease, defined as a prostate-specific antigen (PSA) decrease to less than 10 ng/mL or by more than 50% if less than 20 ng/mL at baseline, were then randomly assigned to receive continuous or intermittent ADT.

At baseline, the average PSA level was 383 ng/mL, the average alkaline phosphatase (ALP) level was 462 IU/L, and the average testosterone level was 14.9 nmol/L.

Thirty-four percent of the patients did not have hormone-sensitive disease and were not assigned further treatment.

Patients with non-hormone-sensitive disease had, compared with hormone-sensitive patients, significantly higher PSA and ALP levels. Furthermore, non-hormone-sensitive patients were also significantly more likely than hormone-sensitive patients to have T4 tumors (37% vs 24%), poorly differentiated cancers (39% vs 26%), metastatic disease (82% vs 51%), and more than 5 skeletal "hot spots" in M1 disease (72% vs 42%).

The authors determined that patients with the most advanced prostate cancer and poorest prognosis do not show adequate biochemical PSA response to ADT, and therefore nonendocrine treatment modalities should be considered for them. ■

---

## **Overactive Bladder Syndrome**

---

### **Is Behavioral Therapy Plus Antimuscarinic Better Than Drug Alone to Treat Overactive Bladder?**

Reviewed by Michael B. Chancellor, MD, Deborah L. Hasenau, RN, BSN, MS, OCN

*Department of Urology, William Beaumont Hospital, Royal Oak, MI*

*[Rev Urol.* 2008;10(4):306-308]

© 2008 MedReviews®, LLC

**U**rinary incontinence affects more than 10 million Americans and accounts for billions of dollars annually in societal costs. Antimuscarinics and behavioral treatments are both safe and effective first-line

treatments for urge incontinence. Most patients do not achieve complete continence with either therapy alone. Adding behavioral training to pharmacologic treatment is an appealing approach to improving outcomes and to possible discontinuation of drug therapy. Evidence for the efficacy of combination therapy over either treatment alone is scarce and inconclusive. Here we review 3 new journal articles that examine this controversy from different perspectives.

### **Behavioral Therapy to Enable Women With Urge Incontinence to Discontinue Drug Treatment: A Randomized Trial**

**Burgio KL, Kraus SR, Menefee S, et al.**

*Ann Intern Med.* 2008;149:161-169.

This National Institutes of Health–sponsored study evaluated whether combining antimuscarinic drug therapy with supervised behavioral training, compared with drug therapy alone, improves the ability of women with urge incontinence to achieve clinically important reductions in incontinence episodes and to sustain these improvements after discontinuing drug therapy. This was a multicenter, randomized clinical trial at 9 university-affiliated outpatient clinics and included women with urge-predominant incontinence.

A total of 307 women received 10 weeks of open-label, extended-release tolterodine. Research participants were randomized into 1 of 2 treatment groups. One group received tolterodine alone ( $n = 153$ ). In addition to the medication, the second group also received behavioral training ( $n = 154$ ). The primary outcome, measured at 8 months after treatment, was no receipt of drugs or other therapy for urge incontinence and a 70% or greater reduction in frequency of incontinence episodes. Secondary outcomes were reduction in incontinence, self-reported satisfaction and improvement, and scores on validated questionnaires measuring symptom distress and bother and health-related quality of life. Six months after the treatments were discontinued, 41% of women in both groups reported that they were still off drug therapy and still had at least 70% reduction in the frequency of incontinence episodes (compared with baseline) without additional treatment. It is important to keep in mind that only 68% of the women completed the 10-week treatment.

Study results conclude that the addition of behavioral training to drug therapy may reduce incontinence frequency during active treatment, but does not improve the ability to discontinue drug therapy and maintain improvement in urinary incontinence. However, behavioral

intervention was insufficient to help women stay off drug therapy and sustain treatment gains after short-term drug therapy.

### **Prospective Randomized Comparison of Oxybutynin, Functional Electrostimulation, and Pelvic Floor Training for Treatment of Detrusor Overactivity in Women**

**Arruda RM, Castro RA, Sousa GC, et al.**

*Int Urogynecol J.* 2008;19:1055-1061.

The purpose of this study was to compare the effectiveness of oxybutynin, functional electrostimulation (FES), and pelvic floor training (PFT) for treatment of women with detrusor overactivity. Sixty-four women were randomized to oxybutynin ( $n = 22$ ), FES ( $n = 21$ ), or PFT ( $n = 21$ ) and treated for 12 weeks. Seventy-seven percent of the women treated with oxybutynin, 52% with FES, and 76% with PFT reported subjective symptomatic improvement. Sixty-four percent of women treated with oxybutynin, 52% with FES, and 57% with PFT reported urgency resolution. Results from urodynamic evaluation were normal in 36% treated with oxybutynin, in 57% treated with FES, and in 52% treated with PFT.

This study concludes that all treatments were equally effective. Subjective reduction of urge incontinence episodes was associated with symptomatic improvement.

### **A Comparison of the Efficacy of Darifenacin Alone vs. Darifenacin Plus a Behavioural Modification Programme upon the Symptoms of Overactive Bladder**

**Chancellor MB, Kianifard F, Beamer E, et al.**

*Int J Clin Pract.* 2008;62:606-613.

This study assessed the benefit of adding a behavioral modification program (BMP) to treatment with darifenacin for relieving the symptoms of overactive bladder (OAB). This was a 12-week randomized, open-label, parallel-group, multicenter study of male and female subjects with OAB, who underwent a 2-week washout and 1-week screening period for OAB followed by 12 weeks of darifenacin (with voluntary uptitration from 7.5 mg daily to 15 mg daily at week 2) alone or in combination with a BMP.

The primary outcome measure was the change in the number of micturitions per day. Secondary outcomes included urge urinary incontinence episodes per day,

urgency episodes per day, pads used per day, and nocturnal voids per day. Health-related quality of life was also assessed. Of 592 patients screened, 395 were randomized: 190 to darifenacin alone and 205 to darifenacin with BMP. Darifenacin alone and darifenacin plus BMP both produced significant and comparable reductions in micturitions per day. A similar result was seen in the secondary efficacy variables, which included urge urinary incontinence episodes, urgency episodes, pads used, and nocturnal voids.

A key finding of this study was that treatment with darifenacin provides a degree of normalization of micturition frequency and an improvement in health-related quality of life that cannot be further enhanced by behavioral therapy.

The take-home message from these 3 different studies is that behavioral and antimuscarinics both work for OAB symptoms, but the addition of behavioral therapy to an appropriate antimuscarinic is not always justified. Two treatments are not always better than one. ■