Behavioral therapy program reduces incontinence following radical prostatectomy

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For men with incontinence for at least one year following radical prostatectomy, participation in a behavioral training program that included pelvic floor muscle training, bladder control strategies and fluid management, resulted in a significant reduction in the number of incontinence episodes, according to a study in the January 12 issue of JAMA. The researchers also found that the addition of biofeedback and pelvic floor electrical stimulation provided no additional benefit.

"Men in the United States have a 1 in 6 lifetime prevalence of prostate cancer. Although survival is excellent, urinary incontinence is a significant morbidity following radical prostatectomy, often the treatment of choice for localized prostate cancer. Patient surveys indicate that as many as 65 percent of men continue to experience incontinence up to 5 years after surgery. Loss of bladder control can be a physical, emotional, psychosocial, and economic burden for men who experience it," according the background information in the article. "Although behavioral therapy has been shown to improve postoperative recovery of continence, there have been no controlled trials of behavioral therapy for postprostatectomy incontinence persisting more than 1 year." Also, biofeedback, which assists patients to properly contract pelvic floor muscles, and pelvic floor electrical stimulation, which produces a maximal pelvic floor contraction and improves urethral closure pressure, are often used together in practice and are thought to enhance the effectiveness of behavioral therapy, but empirical evidence of a benefit is lacking.

Patricia S. Goode, M.S.N., M.D., of the University of Alabama at Birmingham, and colleagues conducted a study to evaluate the effectiveness of behavioral therapy for reducing persistent postprostatectomy incontinence and to determine whether the technologies of biofeedback and electrical stimulation enhance its effectiveness. The randomized controlled trial, which involved 208 community-dwelling men ages 51 through 84 years with incontinence persisting 1 to 17 years after radical prostatectomy, was conducted from 2003 - 2008 and included a 1-year follow-up after active treatment. Twenty-four percent of the men were African American; 75 percent, white.

After stratification by type and frequency of incontinence, participants were randomized to 1 of 3 groups: 8 weeks of behavioral therapy (pelvic floor muscle training and bladder control strategies); behavioral therapy plus in-office, dual-channel electromyograph biofeedback and daily home pelvic floor electrical stimulation (behavior plus); or delayed treatment, which served as the control group. Participants completed 7-day bladder diaries.

The researchers found that at 8 weeks, those in the behavioral therapy group had an average reduction of incontinence episodes of 55 percent (from 28 to 13 episodes per week), which was a significantly greater percent reduction than that reported by the control group (average reduction of 24 percent; from 25 to 21 episodes per week). Those in the behavior-plus group experienced an average reduction of 51 percent (from 26 to 12 episodes per week), indicating that the addition of biofeedback and electrical stimulation did not improve 8-week results compared with behavioral therapy alone.

"Improvements were durable to 12 months in the active treatment groups: 50 percent reduction (13.5 episodes per week) in the behavioral group and 59 percent reduction (9.1 episodes per week) in the behavior plus group," the authors write.

At the end of the 8-week treatment period, 15.7
percent of men in the behavior therapy group, 17.1 percent in the behavior-plus group, and 5.9 percent in the control group achieved complete continence, reporting no incontinence episodes in their 7-day bladder diaries.

Behavioral therapy also improved the effects of incontinence on daily activities and condition-specific quality of life.

"Based on the significant decrease in incontinence frequency and the small number needed to treat (n=10) to achieve complete continence with behavioral therapy, these findings have important implications for urologists, primary care providers, and their patients," the researchers write. "Behavioral therapy should be offered to men with persistent postprostatectomy incontinence because it can yield significant, durable improvement in incontinence and quality of life, even years after radical prostatectomy."


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