



# Postprostatectomy incontinence? Here's help

Behavioral therapy is an effective treatment for incontinence related to prostatectomy.

## PRACTICE CHANGER

Recommend behavioral therapy—incorporating pelvic floor muscle training and bladder control strategies—to men experiencing incontinence after prostatectomy.<sup>1</sup>

## STRENGTH OF RECOMMENDATION

**B:** Based on a single unblinded randomized controlled trial (RCT).

Goode PS, Burgio KL, Johnson TM, et al. Behavioral therapy with or without biofeedback and pelvic floor electrical stimulation for persistent postprostatectomy incontinence: a randomized controlled trial. *JAMA*. 2011;305:151-159.

## ILLUSTRATIVE CASE

Mr. H, age 75, underwent radical prostatectomy for prostate cancer a year ago. Since then, he leaks urine when he coughs and occasionally has complete loss of bladder control. His lack of control has forced him to curtail many of his normal activities and he wants to know what help you can provide.

Routine prostate-specific antigen (PSA) screening has led to an increase in the diagnosis of localized prostate cancer, and prostatectomy is a common treatment. Approximately 90,000 US men undergo radical prostatectomy each year,<sup>2</sup> and most are left with some degree of incontinence.

## Years later, bladder control problems remain

Surgical advances have attempted to minimize nerve and bladder neck damage, but some degree of incontinence is still com-

mon after radical prostatectomy. According to the 2000 Prostate Cancer Outcomes Study, 80% of men experienced some incontinence 6 months after radical prostatectomy. After 2 years, 68% of men still had some degree of incontinence,<sup>3</sup> and 8% reported frequent or total incontinence. Five years after prostatectomy, only 35% of patients reported complete bladder control vs 87% presurgery.<sup>4</sup>

A 2004 systematic review showed that behavioral therapy (mostly biofeedback) reduced symptoms in patients with all types of urinary incontinence.<sup>5</sup> Many studies, including a 2010 Cochrane review,<sup>6</sup> have shown that women with incontinence benefit from pelvic floor muscle training. No randomized trials have assessed the benefit of behavioral therapy for men with incontinence related to postprostatectomy—until now.

## STUDY SUMMARY

### Behavioral therapy has long-term payoff

The study by Goode et al was an RCT of behavioral therapy for men who had urinary incontinence after radical prostatectomy and whose symptoms persisted more than a year later. It included patients with ≥3 episodes of incontinence per week. Men were excluded if they were undergoing other treatment for prostate cancer, had a high postvoid residual volume or a history of certain bladder surgeries, or were unable to reliably report symptoms. Participants were permitted to continue taking medication for incontinence, with the exception of anticholinergics.

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One study found that 5 years after prostatectomy, only 35% of patients reported complete bladder control.



**Electrical stimulation and biofeedback provided no added benefit compared with behavioral therapy alone.**

Participants (n=208 from 3 sites) were randomized to one of 3 arms in a blinded fashion with concealed allocation: behavioral therapy alone, behavioral therapy and biofeedback with electrical stimulation, or a control group of men who could elect to try these therapies at a later date.

Behavioral therapy consisted of 4 visits with a physician or nurse practitioner over an 8-week period. At the first visit, patients received instruction in pelvic floor muscle training. Patients then practiced contraction and relaxation exercises and urinary flow control at home. At the second visit, patients learned techniques to avoid episodes of incontinence, such as performing pelvic muscle contractions with stress symptom triggers. During the final 2 visits, patients received advice about control of persistent problems identified in symptom diaries they were required to keep. In addition, continued daily pelvic floor exercises were recommended at the last session.

Men in the group that received biofeedback with electrical stimulation had the same visit schedule, but received additional pelvic floor training—with electrode-mediated feedback and electrical stimulation of pelvic floor muscles during each visit and daily at home. Patients in the control group had the same visit frequency but received no treatment. After 8 weeks, however, the controls were given the opportunity to try behavioral therapy.

Baseline characteristics and attrition rates were similar in all 3 groups. Outcomes were based on an intention-to-treat analysis. At 8 weeks, men receiving behavioral therapy, with or without electrical stimulation and biofeedback, experienced a 55% decrease in incontinence (from 28 episodes per week at baseline to 13 per week); patients in the control group had a 24% decrease (from 25 episodes to 20 per week) ( $P=.001$ ). More patients in the behavioral groups were completely continent at 8 weeks (16% vs 6% for the controls); the number needed to treat to achieve complete continence was 10. Electrical stimulation and biofeedback provided no added benefit compared with behavioral therapy alone.

Patients in the 2 treatment groups also

had clinically significant benefits in some quality-of-life measures (impact of urinary symptoms on travel, emotion, and voiding) and in symptom-specific quality-of-life scores. Patient satisfaction at 8 weeks was higher in the treatment groups: 26 of the 58 men who received behavioral therapy were “delighted, pleased, or mostly satisfied,” vs 9 of 60 in the control group ( $P=.006$  for overall group difference).

Adherence to the behavioral therapy protocol was 100% at 8 weeks and remained high (91%) one year later. Improvement in symptoms continued at one year, with patients in both treatment groups reporting a clinically significant (50%) reduction in incontinence episodes compared with baseline.

#### WHAT'S NEW

##### We have evidence-based help for postprostatectomy incontinence

We now have evidence that an 8-week program of pelvic floor training and bladder control strategies reduces the frequency of incontinence in men who have undergone radical prostatectomy.

#### CAVEATS

##### The effects of time weren't factored in

Patients were obviously aware of group assignment, so there is the possibility of treatment bias contributing to the positive self-reported outcomes. While the treatment groups showed both a greater initial improvement and persistent improvement in their symptoms at one year, symptoms of patients in the control group were not measured after a year, so the sustained improvement could reflect resolution of incontinence with time.

#### CHALLENGES TO IMPLEMENTATION

##### Locating clinicians who can train patients

The type of behavioral therapy featured in this study may not be easily accessible to all patients. The researchers suggest consulting the National Association for Continence (<http://www.nafc.org>), a private nonprofit organization whose members include physi-

cal therapists, nurses, and physicians. They also cite the Wound Ostomy and Continence Nurses Society (<http://www.wocn.org>) as a resource in locating nurses who provide these services.

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