Self-administered behavioral training was equal to training plus biofeedback or verbal feedback in urge incontinence


QUESTION
In community-dwelling older women with urge incontinence, is behavioral training (BT) by nurse practitioners plus biofeedback or verbal feedback more effective than self-administered BT for reducing the frequency of urge incontinence?

DESIGN
Randomized (unclear allocation concealment*), unblinded,* controlled trial with 10-week follow-up.

SETTING
University outpatient continence clinic in the United States.

PATIENTS
222 ambulatory, mentally competent, community-dwelling women 55 to 92 years of age (mean age 65 y) who had persistent (for ≥3 mo) urge incontinence or mixed incontinence with urge as the predominant pattern that occurred ≥2 times per week (on average) with urodynamic evidence of bladder dysfunction. Exclusion criteria included continual leakage and postvoid residual urine volume >150 mL. Follow-up was 88%.

INTERVENTION
Patients were allocated to BT plus biofeedback (biofeedback group, n = 73), BT plus verbal feedback based on vaginal palpation (verbal feedback group, n = 74), or self-administered BT using a self-help booklet (self-help group, n = 75) for 8 weeks. Patients in the biofeedback and verbal feedback groups visited the clinic 4 times at 2-week intervals in the 8-week period to receive training from nurse practitioners. The BT program consisted of learning skills and strategies for preventing incontinence. The content of the self-help booklet was identical to the BT program. Patients in the self-help group were asked to complete and return bladder diaries every 2 weeks and to return for an appointment after 8 weeks.

MAIN OUTCOME MEASURES
Change (reduction) from baseline in the frequency of incontinence episodes.

COMMENTARY
Urinary incontinence is a common problem, especially among older women. Overactive bladder includes urinary urgency and frequency as well as urge incontinence (1).

The study by Burgio and colleagues compared 3 behavioral therapies for urge incontinence or mixed incontinence (with urge as the predominant pattern) in older women. Wyman and colleagues (2) have already shown that a combination of biofeedback and bladder training provides relief sooner than other behavioral therapies but is no more effective than other behavioral therapies after 3 months. Interestingly, in the study by Burgio and colleagues, BT by nurses with biofeedback or verbal feedback was no more effective than the less costly, self-administered training program in reducing the frequency of urinary episodes. This confirms the value of self-help as first-line therapy.

The authors make no recommendation about when pharmacotherapy should be used. An initial 3- to 5-day trial of timed voiding while keeping a bladder diary should be used as first-line treatment for overactive bladder and can be followed by pharmacotherapy if needed.

For >3 decades, antimuscarinic drugs have been used successfully in patients with more severe urge incontinence symptoms. Frequent side effects, however, are a substantial problem. New medications promise to be more tolerable: extended-release oxybutynin chloride and toterodine (3). Local vaginal estrogen therapy can be offered to women with atrophic vaginitis or recurrent urinary tract infections. Before treatment is offered, urinalysis and evaluation of postvoid residual volumes should be obtained to exclude infection or obstruction.

Specific biofeedback should be reserved for women with more complex pelvic floor muscular dysfunction or mixed incontinence. Women who have no self-awareness of levator ani pelvic musculature or who do not respond to self-help program and antimuscarinic therapies should be referred for more specialized evaluation and therapy. Other drug therapies, electrical stimulation, and selective surgical procedures should be reserved for more difficult conditions.

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MAIN RESULTS
Analysis was by intention to treat. The 3 groups did not differ for change (reduction) from baseline in the frequency of incontinence episodes (Table).

CONCLUSION
In community-dwelling older women with urge incontinence, behavioral training by nurses plus biofeedback or verbal feedback was not more effective than self-administered behavioral training for reducing the frequency of incontinence episodes.

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<table>
<thead>
<tr>
<th>Outcome</th>
<th>Biofeedback</th>
<th>Verbal feedback</th>
<th>Self-help</th>
<th>P value†</th>
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</thead>
<tbody>
<tr>
<td>Mean (SD) percentage reduction from baseline in frequency of incontinence episodes</td>
<td>63.1 (42.7)</td>
<td>69.4 (32.7)</td>
<td>58.6 (38.8)</td>
<td>0.23</td>
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*See Glossary.

References