Evidence-based answers from the Family Physicians Inquiries Network

# CLINICAL INQUIRIES

# **Q** What is the best nonsurgical therapy for pelvic organ prolapse?

### **EVIDENCE-BASED ANSWER**

A PELVIC FLOOR MUSCLE TRAINING (PFMT) and pessaries are equally effective in treating symptoms of pelvic organ prolapse (POP). PFMT transiently improves patient satisfaction and reduces urinary incontinence more than pessaries do (strength of recommendation [SOR]: **B**, a randomized controlled trial [RCT]).

PFMT moderately improves prolapse symptoms and severity, especially following 6 months of supervised intervention (SOR: **B**, a systematic review of randomized trials with some methodologic flaws).

Two pessaries (ring with support and Gellhorn) reduce symptoms in as many as 60% of patients (SOR: **B**, a systematic review of randomized trials).

Untreated postmenopausal women with mild grades of uterine prolapse are unlikely to develop more severe prolapse; 25% to 50% improve spontaneously (SOR: **C**, a prospective cohort study with methodologic flaws).

## **Evidence summary**

A 2010 multicenter RCT with 445 women (mean age 49.8 years) compared PFMT, pessary use, and combined treatment.<sup>1</sup> Investigators used the Patient Global Impression of Improvement and the stress incontinence subscale of the Pelvic Floor Distress Inventory to measure patient satisfaction and urinary incontinence symptoms.

At 3 months, equivalent numbers of women using PFMT and a pessary (49% and 40%, respectively; P=.09) reported they were "much better" or "very much better." More women in the PFMT cohort than women using a pessary reported resolution of incontinence symptoms at 3 months (49% vs 33%; P=.006), and satisfaction with treatment (75% vs 63%; P=.02), but these differences disappeared at 12 months. Combination therapy wasn't superior to PFMT alone.

# Pelvic floor muscle training improves symptoms, especially with perseverance

A 2011 Cochrane review that compared women receiving PFMT with a control group

(observed but not treated) found that PFMT moderately improved prolapse symptoms and severity, especially following 6 months of supervised intervention.<sup>2</sup> Investigators evaluated 4 trials, (N=857), including 3 with fewer than 25 women per arm.

Three studies found that PFMT improved symptom severity and manometric measures. Although the authors couldn't pool the data because of different symptom scoring instruments, typical improvements ranged from 20% to 30%. Two trials found that PFMT increased the chance of improvement in POP stage by 17% (pooled data, relative risk=.83; 95% confidence interval [CI], .71-.96). PFMT also improved urinary outcomes (approximately 30% reduction in urinary frequency and stress incontinence symptoms) in 2 of 3 trials and improved bowel symptoms in one trial (approximately 25% to 30% reduction).

## Pessaries also relieve symptoms

A 2013 Cochrane Review seeking to determine the effectiveness of pessaries in POP, identified one RCT (crossover, 3 month, CONTINUED ON PAGE 479 Zachariah Overby, MD; Robert K. Persons, DO Eglin Air Force Base Family Medicine Residency, Fla

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multicenter, United States) that compared symptom relief and change in life impact over baseline for 134 women (parous, mean age 61 years, range 30-89 years) with POP stage II or greater who were treated with ring with support or Gellhorn pessaries.<sup>3</sup> Sixty percent of patients who completed the study (the dropout rate was 37%) reported symptom relief with both types of pessary. Outcomes were measured by multiple questionnaires and Likert scales.

Patients reported improved symptoms on both the Pelvic Organ Prolapse Distress Inventory (POPDI) and Pelvic Organ Prolapse Impact Questionnaire (POPIQ) scales (P<.05 for difference from baseline on each scale, actual scores not reported). The ring with support and Gellhorn pessaries didn't produce different scores on either scale (POPDI, P=.99; POPIQ, P=.29).

Untreated mild prolapse postmenopause usually doesn't progress and may regress

A cohort of 412 postmenopausal women (ages ≥50 years) with POP who were observed, but not treated, found that mild POP was unlikely to progress and sometimes improved spontaneously.<sup>4</sup> Over a mean follow-up of 5.7 years, few women with grade 1 POP (prolapsed pelvic organs remaining within the vagina) progressed to grade 2 or 3 (probability of progression for women with cystoceles=.095, 95% CI, .07-.13; women with rectoceles=.135, 95% CI, .09-.19; and women with uterine prolapse=.019, 95% CI, .0005-.099).

Some women with grade 1 POP regressed to grade 0 (probability of regression for women with cystoceles=.235, 95% CI, .19-.28; women with rectoceles=.22, 95% CI, .16-.28; and women with uterine prolapse=.48, 95% CI, 0.34-.62). Women with grades 2 and 3 POP were less likely to regress to grade 0 (probability of regression for women with cystoceles=.093, 95% CI, .05-.14; women with rectoceles=.033, 95% CI, .011-.075; and women with uterine prolapse=0, 95% CI, 0-.37).

One flaw of this study was that the women received hormone replacement therapy, which the investigators didn't evaluate independently. However, a 2010 Cochrane review (2 small trials, one meta-analysis) found insufficient data to determine whether hormone replacement therapy alters POP.<sup>5</sup>

# Recommendations

The American College of Obstetricians and Gynecologists Practice Bulletin on POP recommends the following:<sup>6</sup>

- Pessaries can be fitted in most women with prolapse, regardless of prolapse stage (equivalent to grade) or site of predominant prolapse.
- Pessary use should be considered before surgical intervention in women with symptomatic prolapse.
- Women with prolapse who are asymptomatic or mildly symptomatic can be observed at regular intervals, unless new bothersome symptoms develop. JFP

# Pelvic floor muscle training and pessaries are equally effective in treating symptoms of pelvic organ prolapse; combining them offers no added benefit.

#### References

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