

# Review: Minimally Invasive Slings vs. Traditional

BY MARY ANN MOON

Minimally invasive synthetic suburethral sling operations appear to be as effective as traditional suburethral slings for stress urinary incontinence, while requiring shorter operating time and producing less post-surgical voiding dysfunction and fewer de novo urgency symptoms, according to a Cochrane review published online.

In a review of 62 randomized clinical trials involving 7,101 women, minimally invasive synthetic slings were as effective as many other surgical treatments in the short term and now can be considered first-line surgery for stress urinary incontinence. However, there is little information about long-term efficacy and adverse effects as yet, noted Dr. Joseph

**Along with the 'variable quality of many trials,' a major limitation is that long-term follow-up data for the effectiveness of many of these procedures are lacking.**

Ogah of Leeds (England) University Teaching Hospital and his associates.

Until recently, open retropubic colposuspension had been considered the accepted standard of surgical treatment for the disorder, but it is gradually being supplanted by minimally invasive procedures in developed nations, they noted (Cochrane Database Syst Rev. 2009 [doi:10.1002/14651858.CD006375.pub2]).

Dr. Ogah and his colleagues found that the quality of evidence was only moderate for most of the clinical trials they reviewed.

Short-term effectiveness was comparable between open retropubic colposuspension (82%) and minimally invasive slings (79%), but there were fewer peri-operative complications and less voiding dysfunction with the latter, as well as shorter operating times and hospital stays.

Quality-of-life scores were significantly better after the minimally invasive surgery than after open retropubic colposuspension. However, one complication—bladder perforation—was more common with the minimally invasive procedure (6%) than with the traditional procedure (1%).

The evidence comparing minimally invasive slings with laparoscopic colposuspension was conflicting, favoring one procedure in some cases and the other procedure in other cases. "Women who had minimally invasive synthetic suburethral sling operations had significantly less de novo urgency and urgency incontinence, and shorter operating time, hospital stay, and return to daily activities. Both procedures led to improvement of quality of life after surgery, but with no significant differences between the groups," Dr. Ogah and his associates wrote.

A retropubic bottom-to-top route was found to be more effective than a top-to-bottom route, with less voiding dysfunction, fewer bladder perforations, and fewer tape erosions.

The retropubic route (88% cure rate) was more favorable than the obturator route (84% cure rate). The retropubic route also was associated with less voiding dysfunction, blood loss, and bladder perforation. However, patients' assessments

of the success of their surgery were no different between these two approaches.

The investigators cautioned that a review of this nature could not detect major complications because such outcomes are "uncommon and unlikely to be picked up by small randomized clinical trials."

In this review, the number of adverse events was generally low and they were rarely serious.

"It may be that rare but major complications will still be identified" as the use of the minimally invasive operations increases, they added.

Along with the "variable quality of many trials," the researchers wrote, a major limitation of the findings is that long-term follow-up data for the effectiveness of many of these procedures are lacking.

Dr. Ogah reported no financial conflicts of interest. ■



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- The Women's Health Initiative Memory Study (WHIMS), a substudy of the WHI study, reported increased risk of developing probable dementia in postmenopausal women 65 years of age or older during 4 years of treatment with CE 0.625 mg combined with MPA 2.5 mg and during 5.2 years of treatment with CE 0.625 mg alone, relative to placebo. It is unknown whether this finding applies to younger postmenopausal women. (See CLINICAL STUDIES, WARNINGS, Dementia and PRECAUTIONS, Geriatric Use in the Prescribing Information)
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**REFERENCES:** 1. The North American Menopause Society. Estrogen and progestogen use in postmenopausal women: July 2008 position statement of The North American Menopause Society. *Menopause*. 2008;15:584-603. 2. Activella® [package insert]. Princeton, NJ: Novo Nordisk Inc; 2007. 3. Loose-Mitchell DS, Stancel GM. Estrogens and progestins. In: Hardman JG, Limbird LE, eds. *Goodman & Gilman's The Pharmacological Basis of Therapeutics*. 10th ed. New York, NY: McGraw-Hill; 2001:1598. 4. Panay N, Ylikorkala O, Archer DF, Gut R, Lang E. Ultra-low-dose estradiol and norethisterone acetate: effective menopausal symptom relief. *Climacteric*. 2007;10:120-131. 5. Data on file. CTR. Novo Nordisk Inc, Princeton, NJ.



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