TVT and TOT Compared in American Studies

BY BETSY BATES
Los Angeles Bureau

TUCSON, Ariz.—Three studies presented at the annual meeting of the Society of Gynecologic Surgeons have begun to unravel the advantages and disadvantages of tension-free vaginal tape (TVT) and transobturator (TOT) procedures in patients with stress or mixed urinary incontinence.

The more recent entry into this arena of hammock-like procedures using TOT avoided the retro pubic space and therefore offered a theoretically low-vantage over TVT procedures. Bladder perforation has been reported in as many as 6%-9% of TVT cases; bowel and vascular injuries are very rare but do occur, explained Dr. Matthew Barber of the Cleveland Clinic.

Several studies have directly compared the two approaches in terms of safety and efficacy; or to identify the best candidates for each procedure. The SGS meeting featured comparisons of the following:

Perioperative complications and adverse events. Dr. Barber and associates reviewed a cohort of 205 patients who underwent a TOT and 213 who underwent a TVT procedure at the Cleveland Clinic between January 2003 and August 2005. Current surgical procedures were performed in 72% of all subjects, but neither the number nor type of procedures differed between the two groups.

The most significant difference in perioperative complications was bladder injury, which occurred in 5% of patients undergoing TOT and no patient undergoing TOT. Vaginal dysfunction was present in 8.9% of women following TVT surgery and 2.9% of women following TOT procedures. Anticholinergic medications were required beyond 6 weeks postsurgery in 14% of women in the TVT group and 6.3% of those in the TOT group.

Dr. Barber disclosed that as received research support from American Medical Systems and Eli Lilly, and two of his coinvestigators have served as consultants or received support from Gynecare, American Medical Systems, or Organogenesis, makers of products used in stress incontinence surgery.

Efficacy in patients with borderline maximal urethral closure pressure. Dr. Jay Miller and associates at North- western University in Evanston, Ill., and Michigan State University in Flint noted that TOT failures occur in patients with low maximal urethral closure pressures.

They therefore undertook a study of 14-week outcomes in 145 patients (85 who underwent TOT and 60 who underwent TVT), analyzing results based on a cutoff point of maximal urethral closure pressure of 42 cm H2O or less. With that threshold, the TOT procedure was six times more likely to fail in patients with a borderline maximal urethral closure pressure at baseline. Specifically, failure occurred in 7 of 37 patients meeting that definition who had TOT vs. 1 of 36 patients who had a TVT procedure.

Among all patients evaluated at 14 weeks, almost three times as many objective failures were seen with TOT: 8 of 77 vs. 2 of 58 with TVT.

Long-term follow-up and a prospective, randomized controlled trial would be helpful. DR. MILLER

CASE REPORTS

Erythromycin in the treatment of refractory urinary tract infection. Dr. James P. Leung disclosed consultant or investigator relationships with American Medical Systems and Eli Lilly, and two of his coinvestigators were speakers for American Medical Systems and Eli Lilly.

During the postoperative period, patients treated with or without erythromycin (500 mg every 6 hours) demonstrated no difference in clinical cure rates, with 15 of 16 patients treated with erythromycin and 16 of 16 patients treated without erythromycin achieving cure.

European/Canadian Results Favor TOT for Ease and Safety

BY JANE SALODOF
MacNeil Southwest Bureau

PARIS—A randomized, multicenter trial and two retrospective studies presented at the annual congress of the European Association of Urology found outcomes were similar whether patients had the transvaginal or transobturator sling procedure for urinary stress incontinence.

The investigators agreed that their results favored the newer transobturator tape (TOT) procedure, as it is simpler than constructing midurethral synthetic slings with transvaginal tape (TVT). “Both are the same in my experience. The TOT is easier, and it is inherently safer,” Dr. Graeme H. Urwin of the United Kingdom said in a conclusion echoed by investigators from France and Canada.

“My sense is transobturator is a little easier to carry out, so it gave me a little confidence to recommend this,” said Dr. Sender Herschorn, Department of Urology at the University of Toronto.

Less clear was whether some patients might present with conditions that would be better treated by TVT or TOT. Dr. Herschorn said he “did not know of any specific indications for one over the other.”

In the French group, patients might present with complaints suggestive of overactive bladder or low maximal urethral closure pressure. The most significant difference in perioperative complications was bladder injury, which occurred in 5% of patients undergoing TOT and no patient undergoing TOT.

Vaginal dysfunction was present in 8.9% of women following TVT surgery and 2.9% of women following TOT procedures.

Anticholinergic medications were required beyond 6 weeks postsurgery in 14% of women in the TVT group and 6.3% of those in the TOT group.

In the Canadian group, Dr. Herschorn reported de novo pollakiuria in 10.7% of the transobturator patients. De novo pollakiuria occurred in 5.1% of the retropubic cohort and 88.6% of patients who underwent TOT procedure. Dr. Urwin reviewed available evidence. The transobturator patients had the transvaginal or transobturator sling procedure. Dr. Herschorn reported de novo pollakiuria in 10.7% of the transobturator patients. De novo pollakiuria occurred in 5.1% of the retropubic cohort and 88.6% of patients who underwent TOT procedure. Dr. Urwin reviewed available evidence.

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