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RESULTS OF MIDURETHRAL SLINGS IN PATIENTS UNDERGOING GYNECOLOGIC RECONSTRUCTION

Abstract Text:

Hypothesis / aims of study

In recent years, the surgical treatment of stress urinary incontinence (SUI) has utilized the placement of a midurethral sling. However in many cases of SUI, women have a combination of urologic and gynecologic conditions requiring surgical repair. At our institution, a midurethral sling has been placed in conjunction with other gynecologic procedures. We compared the complication rate and successful treatment of incontinence between midurethral slings using a tension-free vaginal tape system (TVT, SPARC, etc.) placed independently, to those with coincident gynecologic procedures. Assessment of the complication rate was also followed.

Study design, materials and methods

Between January 2001 to June 2004, 80 patients underwent midurethral sling placement for the treatment of SUI. Forty-three of the patients underwent sling placement with coinciding gynecologic procedures which included: cystocele/rectocele/enterocele repair, total vaginal hysterectomy, bilateral salpingo oophorectomy, and perineoplasty. Thirty-seven patients underwent a midurethral sling alone. Most were done as an outpatient. Complications from the surgery encompassed post operative morbidities and intraoperative complications. The complications noted in this study included: excessive blood loss (>300cc), urinary retention needing catheterization, ureteral obstruction, novel UTI, novel urgency, and back pain. The treatment of SUI was considered a success if the patient was continent at a follow up visit eight weeks post operation with a residual volume of <100cc. At the time of the surgery, the patients in the independent group and coinciding procedure group were assessed for age, weight, smoking history, parity, history of recurrent UTI, and history of prior pelvic surgery.

Results

Of the 43 patients in the combined group, 96% were dry (4% improved, 0% failed) after eight weeks and were considered to be successfully treated for SUI. The combined group had a complication rate of 29%. The independent group had an 84% success rate (8% improved, 8% fail and a 20% chance of complication ($p>0.05$). The most common complication was urinary retention, but all resolved (13/13). The one episode of ureteral obstruction necessitated replacement at the initial surgery. The sling added only 10-20 minutes to the operative time.

Of the patients who failed, all had repeated urodynamic testing that revealed persistent stress urinary incontinence, with leak pressures less than 120 cm H_2O and/or urethral pressures less than 40 cm H_2O closure. Management in two cases was periurethral injection, and the remaining patients are in the process of re-evaluation and therapy. No patients had urinary obstruction or urinary retention after the two week time period post operatively. One infection of the tape was noted, but did not require explant. No erosions were observed. All patients were followed for at least 20 months. There was no change from eight weeks to 20 months.

Interpretation of results

Those patients receiving coinciding gynecologic procedures were found to have at least an equal likelihood of being dry at eight weeks when compared to those only having transvaginal sling placement. It was also found that there is no significant difference in operative morbidities or intraoperative complications evaluated in this study.

Concluding message

Midurethral slings have efficacy both alone and in conjunction with other gynecologic reconstructive procedure. There is no increase in the complication rate for this low-morbidity procedure.

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