

THE GENITOURINARY PROLAPSE REPAIR COMBINED WITH TVT: CLINICAL OUTCOMES AND LONG-TERM FOLLOW UP

Aims of Study

We review our clinical experience of surgical repair of severe urogenital prolapse using tension-free vaginal tape (TVT). Our aim is to evaluate whether the TVT procedure, performed during prolapse repair, results in good success after long-term followup.

Methods

From November 1999, we performed combined genitourinary repair with TVT in 8 women (mean age 63.0+/-6.3) with severe cystocele (grade III and IV) with or without other pelvic organ prolapse. Occult stress urinary incontinence (SUI), defined as a positive stress test with repositioning of the prolapse during the preoperative examination, was demonstrated in only 1 of 5 patients with SUI. On the other hand, urethrocystocele, defined as a forward movement of the external urethral meatus during Valsalva maneuver in the lithotomy position, was demonstrated in 4 patients. To demonstrate how the TVT supports the anterior vaginal wall, we performed an intraoperative fluoroscopic study. After cutting off the needle of the tape, contrast medium was injected into the plastic sheath.

Results

The mean duration of followup was 15.62+/-9.59 months (range 1 to 28). Clinical results of surgical repair were cured (7) and improved (1), respectively. Only one case of improvement developed severe uterine prolapse postoperatively. Minimal symptomatic SUI persisted in another one case. An increased urethral resistance was suggested in postoperative urodynamic study, but there is no clinical evidence of bladder outlet obstruction nor other serious complications. By the intraoperative fluoroscopic study, TVT was demonstrated to run loosely from mid urethra to bilateral bladder wall and unexpectedly supported a considerable length of the paravaginal area.

Conclusions

In the surgical repair of severe cystocele, the optimal prophylactic anti-incontinence procedure is still controversial. Traditional anterior colporrhaphy could merely repair a midline defect of anterior vaginal wall. Beck et al.[1] reported excellent results of 25-year experience with 519 anterior colporrhaphy procedures. However, their modified Kelly-Kennedy-type technique including a vaginal retropubic urethropexy might repair not only midline defects, but also coexisting paravaginal defects. Gordon et al.[2] reported the preliminary results of TVT as prophylactic procedure in clinically continent women with severe prolapse and occult SUI. But occult SUI can be demonstrated under adequate repositioning and may have some difficulty to be diagnosed in the lithotomy position alone. The TVT procedure is minimal invasive and an efficient procedure for SUI. From January 1991 to June 1999, we performed combined genitourinary repair with Burch colposuspension in the early 5 women and with Modified Pereyra bladder neck suspension in 9 women with severe genitourinary prolapse. Clinical results after long-term followup, however, were not so satisfactory. Goldberg et al.[3] also reported a significant protective effect of suburethral slings against postoperative cystocele recurrence, compared with the effect of retropubic urethropexy and needle suspensions. Although our preliminary results are encouraging, more experiences in larger series with longer followup are needed to confirm these results.

References

1. Beck,R.P. et al: A 25-Year Experience With 519 Anterior Colporrhaphy Procedure. *Obstet Gynecol* 1991;78:1011-1018.
2. Gordon,D. et al: Combined Genitourinary Prolapse Repair and Prophylactic Tension-free Vaginal Tape in Women With Severe Prolapse and Occult Stress Incontinence: Preliminary Results. *Urology* 2001;58:547-550.
3. Goldberg,R.P. et al: Protective Effect of Suburethral Slings on Postoperative Cystocele Recurrence After Reconstructive Pelvic Operation. *Am J Obstet Gynecol* 2001;185:1307-1313.