Neurourology and Urodynamics 23:282–283 (2004)

Trans Vaginal Tape Readjustment After Unsuccessful Tension-Free Vaginal Tape Operation

Menahem Neuman*

Urogynecology, Department of Gynecology, Shaare Zedek Medical Center, Jerusalem, Ben-Gurion University of the Negev and Urogynecology Service, American Medical Center, Rishon LeZion, Israel

Aims: This study is aimed at evaluating a new surgical technique to deal with tension-free vaginal tape (TVT) failure. The TVT operation, described by Ulmsten in 1995, is based on a mid urethral Prolene tape support. TVT is accepted as an easy-to-learn and safe minimal invasive surgical technique. Yet, as with other surgical methods for correction of female urinary stress incontinence, therapeutic failures occur with TVT also. **Materials and Methods:** Described here is a new approach for addressing this issue. Out of 344 women who underwent TVT and who were followed for up to 55 months, four (1.2%) requested to be reoperated on the grounds of a diagnosis of operative failure. These four women were treated by trans vaginal readjustment of the tape. **Results:** Three out of the four reoperated patients reported subjective continence, subsequently confirmed clinically. The fourth patient, although suffering residual minor urinary leakage, declined further interventions. **Conclusions:** The readjustment technique seems effective, easy, and safe for the treatment of failed TVT operations. More experience is needed prior to suggesting this technique as a recommended approach. *Neurourol. Urodynam. 23:282–283, 2004.* © 2004 Wiley-Liss, Inc.

Key words: tape readjustment; tvt failure

INTRODUCTION

The tension-free vaginal tape (TVT) procedure for surgical correction of female urinary stress incontinence was described by Ulmsten in 1995 and has become popular very rapidly. This is due to TVT being a minimal invasive operation with a low complication rate and a high success rate [Haab et al., 2001; Nilsson et al., 2001; Bodelsson et al., 2002; Kuuva and Nilsson, 2002; Ward and Hilton, 2002]. Nevertheless, the TVT failure rate is reported to be more than 10%, which is on par with the failure rate of retropubic and sling operations. Under these circumstances, the clinician might choose to perform either re-TVT or any other incontinence corrective surgery such as retropubic colposuspension, sling operation, etc. As most of the TVT failures are contributed to inappropriate placement of the suburethral tape, a tape readjustment procedure was designed to resolve this problem.

Described here are four women diagnosed with failed TVT who underwent the tape readjustment procedure.

MATERIALS AND METHODS

From April, 1998 to September, 2002 a total of 344 TVT procedures were performed in two medical institutions (130-SZMC, 214-AMC). In 56 women, the TVT was a non-primary incontinence corrective procedure. All women suffered from urinary stress incontinence diagnosed both clinically and urodynamically. During the post-operative course, the women were followed up at the first and sixth months, and once yearly since. Women reporting post-operative urinary stress incontinence and requesting reoperation underwent a second clinical and urodynamic evaluation. Those considered being TVT failures had small anterior colpotomy, performed under general anesthesia. The suburethral field was dissected to identify and free the Prolene tape. The dissection was then continued laterally towards the lower retropubic space on both sides. The loosened TVT was then plicated and shortened using an unabsorbable number 0 nylon suture. This permitted readjustment of the tape position to the desired level of the inferior pubic edge. The vaginal mucosa was then approximated and sutured.

RESULTS

At the first 1 month post-operative examination, four (1.2%) of the 344 women who were operated on reported the TVT operation to be unsuccessful and requested reoperation. No additional women complained subsequently of this phenomenon at later check-ups. The four women were rediagnosed, both clinically and urodynamically, as suffering from urinary

*Correspondence to: Menahem Neuman, MD, Urogynecology, Department of Gynecology, Shaare Zedek Medical Center, Jerusalem, Israel.
E-mail: neuman@szmc.org.il
Received 28 January 2003; Accepted 11 June 2003
Published online in Wiley InterScience (www.interscience.wiley.com)
DOI 10.1002/nau.20007

stress incontinence. Two of these women had the TVT as a non-primary corrective surgery for urinary incontinence. Vaginal examination revealed no relaxation of the vaginal walls nor tape erosion. The above described Prolene readjustment procedure was performed on these women after they gave their informed consent. The duration of the procedure was between 8 and 12 min and the women were discharged 3 hr later. No intraoperative nor post-operative complications such as bleeding, infections, rejection, or voiding difficulties were noted. At 6 and 12 months post-operative check-up, three of these four women reported being continent, this being proved clinically by coughing, and the fourth reported only minimal residual stress leakage, electing not to have any further interventions.

DISCUSSION

Surgical failures were previously reported with TVT [Haab et al., 2001; Nilsson et al., 2001; Bodelsson et al., 2002; Kuuva and Nilsson, 2002; Ward and Hilton, 2002]. Re-TVT or retropubic colposuspension for TVT failure carries potential early and late complications, long recovery periods, and reduced success rates of non-primary operations. Reported is a suggested simple, safe, and effective approach for dealing with this not-infrequent situation.

CONCLUSIONS

Failure of TVT occurs in more than 10% of the operations and this challenges the urogynecologist with an unaddressed issue. Reported is a simple and safe surgical measure of readjustment the trans vaginal tape, already undertaken successfully in four women. More experience is needed prior to widespread use of the technique.

REFERENCES

Bodelsson G, Henriksson L, Osser S, et al. 2002. Short-term complications of the tension free vaginal tape operation for stress urinary incontinence in women. BJOG 109:566–9.

Haab F, Sananes S, Amarenco G, et al. 2001. Results of the tension-free vaginal tape procedure for the treatment of type II stress urinary incontinence at a minimum followup of 1 year. J Urol 165:159–62.

Kuuva N, Nilsson CG. 2002. A nationwide analysis of complications associated with the tension-free vaginal tape (TVT) procedure. Acta Obstet Gynecol 81:72–7.

Nilsson CG, Kuuva N, Falconer C, et al. 2001. Long-term results of the tension-free vaginal tape (TVT) procedure for surgical treatment of female stress urinary incontinence. Int Urogynecol J 12:S5–8.

Ward K, Hilton P. 2002. Prospective multicentre randomised trial of tension-free vaginal tape and colposuspension as primary treatment for stress incontinence. BMJ 325:67–73.