

TENSION FREE VAGINAL TAPE IN THE TREATMENT OF STRESS URINARY INCONTINENCE

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Aims of the study: To evaluate the safety and efficacy of tension free vaginal tape (TVT) for the surgical correction of female stress urinary incontinence.

Methods: The design of the study was an open multicenter study including six Italian hospitals. Between December 1997 and November 1999, 429 stress incontinent women were enrolled in the study, a minimum of 40 patients for each participating center was requested. The pre-and post-operative protocol included: 1) a thorough history of the duration and severity of stress incontinence, 2) a stress provocation test in the supine and standing positions with a comfortably filled bladder (300ml,) 3) a gynecologic examination to identify pelvic floor defects according to the method previously described by Baden et al.[1], 4) urodynamic evaluation including uroflowmetry, water-cystometry and urethral profilometry, 5) a 10 grade visual analogue symptoms scale (VAS) to quantify incontinence inconvenient. The post-operative evaluation also included the collection of data regarding operation time, additional surgical procedures performed, intra-and postoperative complications and length of hospital stay. Post-operatively patients were assessed after 6, 12 and 24 months (urodynamic tests were performed after 12 months from surgery)

Results: the mean age of the patients considered was 57 years (31-83) and 78 of them had undergone to a previous operation for the treatment of stress urinary incontinence or genital prolapse. Out of the 429 women, 371 were followed for a minimum of 6 months, 11 were lost to follow-up, and 47, at the present time, have not been followed for at least 6 months. 190 patients were operated on under local anesthesia, 213 under epidural anesthesia and 26 using the general anesthesia. 88 (20%) women required an additional surgical procedure to repair coexisting pelvic floor defects. The mean operation time was 41 minutes (range 15-165) and the mean blood loss was 31ml. There were few intra or post-operative complications: in 24 patients (6%) a vesical perforation occurred; a severe bleeding that required an open laparotomy was observed in two patients, whilst no rejection of the tape or defective healing occurred. After surgery 346 women (93%) were subjectively cured and 9 patients referred to be significantly improved. The cough provocation test showed no leakages of urine in 94 % (349)

of the patients. Finally the evaluation with the analogue symptoms scale showed a significant decrease of the discomfort referred by the patients.

Conclusions: From the present study it seems justified to conclude, according to other experiences [2] that tension free vaginal tape can be considered a safe and effective procedure for the surgical treatment of stress urinary incontinence; moreover it can be easily performed in addition to other surgical procedures in patients with associated pelvic floor defects. A longer follow-up is needed to verify the long-lasting effectiveness of this technique but data, recently published by Ulmsten and co-workers [3], encourage the use of this procedure as the first choice treatment for urinary stress incontinence. _____

References:

- 1) Genesis of the vaginal profile. a correlate classification of vaginal relaxation. Clin. Obstet Gynecol 1972;15:1048-1054
- 2) A Multicenter Study of Tension-Free Vaginal Tape (TVT) for Surgical Treatment of Stress urinary Incontinence. Int. Urogynecol J.1998;9:210-213
- 3) A Three-year follow up of tension free vaginal tape for surgical treatment of female stress urinary incontinence. British J of obstet.Gynecol. 1999;106:345-350.