

Authors: M. Meschia, M. Spennacchio, F. Amicarelli, P. Pifarotti, P. Cavoretto, S. Stoppelli.
Institution: Urogynecology Unit, Dept. Obstetrics and Gynecology, University of Milan
Title: A RANDOMIZED PROSPECTIVE COMPARISON OF TVT AND ENDOPELVIC FASCIA PPLICATION IN THE TREATMENT OF OCCULT STRESS URINARY INCONTINENCE IN PATIENTS WITH GENITAL PROLAPSE: PRELIMINARY DATA.

Aims.

Severe genital prolapse may mask potential genuine stress incontinence in women. Some have suggested that a suspending urethropexy could be selected in patients who have potential stress incontinence demonstrated by barrier reduction of the prolapse preoperatively (1). Our aim was to compare outcomes after prolapse surgery that included TVT procedure with those operations that did not.

Methods.

Between January 2000 and October 2000, 35 patients with utero-vaginal prolapse $\geq 2^\circ$ in at least two vaginal sites, according to the Half-way system classification, were considered eligible for the study. All patients underwent a cough and a Valsalva provocation test in supine position. The test had to be performed at bladder volume of ≈ 250 ml, before and after utero-vaginal prolapse had been reduced with a ring forceps. Pre-operative urodynamic investigations were performed in all subjects. Exclusion criteria were : age > 75 years, obesity (BMI ≥ 29), chronic pulmonary diseases, diabetes, previous pelvic and anti-incontinence surgery, clinical evidence of stress incontinence without prolapse reduction. Patients estimated the severity of their symptoms (prolapse, voiding difficulties, urgency, urinary stress and urge incontinence) on a 10 grade visual analogue symptoms scale (VAS). The observed pelvic floor defects had to be repaired by senior authors using a standardized vaginal reconstructive technique with the exclusion of sacrospinous ligament fixation. Patients who demonstrated urinary leakage only when the prolapse had been re-positioned were included in the randomisation list. They underwent either a TVT procedure (n=18) as described by Ulmsten (2) or a plication of the urethrovesical junction endopelvic fascia (n=17) as described by Hurt (3). These two anti-incontinence procedures were assigned randomly within blocks of four. Follow-up visits were scheduled at 6, and 12 months.

Results.

Study subjects had a mean age of 66 ± 9 (range 50-75) years, BMI of 26, and vaginal parity of 2.2 ± 0.7 (range 1-4). There were no significant differences between the two surgical groups with respect to any of these parameters. Thirteen subjects had symptoms of stress incontinence before surgery (6 in the TVT group and 7 in the fascia plication group) but no one had the diagnosis of genuine stress incontinence before prolapse had been reduced. Two subjects had detrusor instability diagnosed and successfully treated before surgery. No difference was seen in the severity of genital prolapse between the two groups. The mean follow-up time was 8.8 months (median 8 months). All subjects except one in the fascia plication group had a successful repair of pelvic defects. No subjects that received TVT and 8 patients who had fascia plication referred post-operatively symptoms of stress incontinence. Out of the 8 subjects complaining of stress incontinence, 4 did not refer symptoms before surgery. Objectively all patients in the TVT group were cured by the procedure whilst 6 subjects (35%) who underwent endopelvic fascia plication showed urinary leakages while performing the cough provocation test. No intra-operative complications were observed in both groups. Spontaneous voiding was achieved after a mean of 2.6 days (range 2-11) with no differences between groups.

Conclusions.

The fact that genital prolapse may mask potential genuine stress incontinence should be appreciated by every reconstructive pelvic surgeon. Postoperatively no subjects had symptoms or signs of stress urinary incontinence when reconstructive surgery was combined with TVT. On the contrary the use of endopelvic fascia plication in the treatment of occult stress incontinence is associated, even in the short time, with a relatively large number of patients who suffered from urinary leakages during stress.

References.

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