FEMALE UROLOGY

Groin pain after a tension-free vaginal tape or similar suburethral sling: management strategies

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Objective: To review different treatment strategies for women with groin pain after tension-free vaginal tape (TVT) or similar suburethral sling procedures.

Patients and Methods: The series comprised 450 women who had a TVT procedure, with a follow-up of 3-50 months. Five women (1%) reported significant groin pain and were offered further treatment. In addition, one woman was referred from another centre and received treatment.

Results: Women with pain were initially treated conservatively, and in most the pain resolved and required no further treatment. Persistent or severe discomfort was treated with a combined steroid (methyl prednisolone, 2 mL, 80 mg) and local anaesthetic (bupivacaine, 10 mL, 0.5%) injection in four women. There were no side-effects from the treatment. One woman was relieved of her pain and required no further treatment. In one woman the local injections failed to improve her symptoms but the pain was not severe enough to warrant further treatment. Two women developed recurrent pain after an initially successful injection, and in these women the TVT was excised. One woman referred from another centre was primarily treated with TVT excision. In the three women treated with distal tape excision, the mean pain scores decreased from 8.7 before excision to 0.7 afterward. One woman is awaiting tape excision.

Conclusion: If conservative management fails to relieve the symptoms of groin pain it can be treated by injecting a mixture of steroid and local anaesthetic. However, local injection failed to provide long-term relief in three of four women. More severe symptoms might require TVT mesh dissection and excision, which provided significant pain relief.

Editorial Comment

The authors report on the incidence and management of clinically significant groin pain following a tension-free vaginal tape procedure. Findings noted a 1% rate of postoperative pain after the TVT procedure. Their study group of 5 women included 4 who were initially treated with an injection of methylprednisolone and bupivacane. Of those 4 women who were treated, one woman achieved an acceptable response and one woman had her pain reduced to a point that no further treatment was needed. The remaining 3 (2 of which underwent initial infiltration of the anesthetic solution) underwent distal tape excision. All 3 of those women had an excellent clinical response with regards to diminution in the pain score.

This report provides an excellent commentary on the presence of groin pain after the tension free vaginal tape procedure and its incidence in their surgical population. In addition, it provides a very workable algorithm of management for these patients. Key points to consider from this paper would be when the pain originally presented: Immediately after surgery or during the postoperative convalescence as adhesions would develop? In addition, it would have been of great value to know the change in pain scores after the injection therapy and to compare them to the change in pain scores after the TVT excision. The paper brings up further cogent points including whether pain after a tension-free vaginal tape has a greater incidence than reported and is the current reported incidence merely reflective of the vigorousness of the interviewing consultant. In summary, this is an excellent paper with regards to both discussing the presence of pain after tension-free vaginal tape as

well as describing a straight forward treatment algorithm. That these surgeons had an excellent response in pain to the excision of the distal end of the tape should be noted and remembered.

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Diagnosis, management and prognosis of vaginal erosion after transobturator suburethral tape procedure using a nonwoven thermally bonded polypropylene mesh

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Purpose: We studied the diagnosis, management and prognosis of vaginal mesh erosion using a thermally bonded nonwoven polypropylene mesh in a transobturator suburethral tape procedure for the surgical treatment of stress urinary incontinence in women.

Materials and Methods: A total of 65 patients diagnosed with stress urinary incontinence underwent a transobturator suburethral tape procedure with a fusion welded, nonwoven, nonknitted polypropylene mesh, with or without a central silicone coated section, at our institution. All women were followed and if vaginal erosion was diagnosed, cystoscopy and vaginoscopy were performed, the mesh was partially or completely removed and, if necessary, posterior cough test and urodynamic study were performed.

Results: Of the 65 patients 9 (13.8%) were diagnosed with vaginal erosion at the vaginal incision during a relatively long postoperative period (mean 290 days). All presented with vaginal discharge and 1 had a severe complication (obturator abscess). Complete mesh removal was necessary in 8 patients and only 2 (22%) had recurrent stress urinary incontinence.

Conclusions: A 13.8% rate of vaginal mesh erosion using a nonwoven thermally bonded polypropylene mesh was reported. This complication was probably due to the characteristics of the mesh and not to the transobturator approach. Complete removal of the tape is recommended and the continence status prognosis is good (78%).

Editorial Comment

The authors review their experience with vaginal erosion in a group of patients that underwent the transobturator suburethral tape procedure. They report a 13.8% rate of vaginal erosion. They note that all patients presented with a vaginal discharge (some being quite impressively copious) and one patient had a severe complication of an obturator abscess. The vast majority of the patients underwent complete mesh removal with subsequent continence level remaining at 78%. The authors felt the complication was not secondary to the actual transobturator technique but merely representative of characteristics of the mesh utilized.

The authors should be complimented on their report on vaginal erosions after transobturator tape procedures. This procedure, as developed by Delorme, is achieving new levels of popularity and thus any review or edification regarding this new technique is of extreme value. Key points include the presentation of persistent vaginal discharge in all of the patients with vaginal erosion, symptoms of potential dyspareunia and fever presenting in a metachronous fashion. It would have interest to note if the authors treated any of the vaginal erosions in the same conservative manner as delineated by Kobashi & Govier (1). The effect of the

material utilized as the sling as opposed to the actual technique has been commented on in previous reports. With regards to the actual tension-free vaginal tape procedure and the findings of erosions, it was noted that using a tape of polytetrafluoroethylene or polyethylene terephthalate, Ulmsten & Petros reported a 10% rate of erosion (2). When TVT has been performed utilizing different materials, the erosion rate was markedly diminished (3). It is with great probability that the same phenomenon regarding diminishing erosion rates and the transobturator technique will be noted in view of the evolution to new tapes such as Aris™ that is knitted and has a larger pore size of 550 x 170 microns. Lastly, though the sling removal was completed it did not seem to affect the continence status (78%). This rate mirrors other reports of continence levels after sling excision or urethrolysis including those performed after using a retropubic technique and is quite thought provoking in view that the TOT does not really affect a retropubic fibrosis (4).

References

1. Kobashi KC, Govier FE: Management of vaginal erosion of polypropylene mesh slings. J Urol. 2003; 169: 2242-3.
2. Ulmsten U, Petros P: Intravaginal slingplasy (IVS): an ambulatory surgical procedure for treatment of female urinary incontinence. Scan J Urol Nephrol. 1995; 29: 75-82.
3. Klutke JJ, Klutke CG: The tension-free vaginal tape procedure: innovative surgery for incontinence. Curr Opin Obstet Gynecol. 2001; 13: 529-32.
4. Petrou SP, Young PR: Rate of recurrent stress urinary incontinence after retropubic urethrolysis. J Urol. 2002; 167: 613-15.

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PEDIATRIC UROLOGY

Congenital adrenal hyperplasia and lower urinary tract symptoms

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Objectives: To assess urinary symptoms in adult women with congenital adrenal hyperplasia (CAH), as feminizing surgery in infancy is current standard practice for CAH and one of the indications for surgery is to reduce urinary symptoms.

Patients, Subjects and Methods: In a case-control study, 19 women with CAH, of whom 16 had had childhood feminizing genital surgery, and age-matched women with no CAH, were evaluated. Subjects and controls completed the Bristol Female Lower Urinary Tract Symptoms (BFLUTS) questionnaire.

Results: Urge incontinence was reported in 13 (68%) patients and three (16%) controls (P = 0.003); stress incontinence was present in 47% and 26%, respectively (P = 0.31). Results from the controls were comparable with those documented in larger studies on normal populations. Nine of the patients felt that their urinary symptoms had an adverse effect on their lives, compared with only one of the controls (P = 0.008).

Conclusion: Patients with a diagnosis of CAH are more likely to have significant urinary symptoms than normal controls. At present it is not clear whether this is a result of surgery or an effect of CAH. In at least two-thirds of patients surgery did not achieve the objective of reducing urinary symptoms.