

Figure 1.

Conclusions: The results of our study show that PSA itself has a low diagnostic accuracy for detecting prostate cancer in men with prior negative prostate biopsy findings. Finasteride does not improve the accuracy of PSA in this population of patients.

Poster Session 3: Incontinence and overactive bladder
Friday, 9 October 2009, 10:40-12:40
Room 3

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Initial experience with the third generation suburethral sling "TVT secur" not as good as it was expected

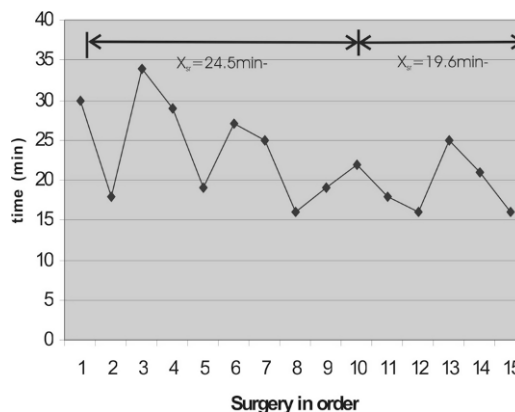
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Introduction and Objectives: Stress urinary incontinence (SUI) is a common clinical problem, that is successfully solved with tension free tapes suprapubic or transobturator. Complications although infrequent, could be life threatening, during the placement of TVT. Residual symptoms after TOT are also common. Residual symptoms deteriorate postoperative quality of life regardless excellent results regarding continence rate (80-90%). The idea of third generation sling is to make surgery less traumatic (single incision), and to pass the shortest possible way in the body and, so minimize tissue trauma and the risk of complications.

Material and Methods: During 2007-2008, sixteen patients with clinically confirmed SUI were operated. "TVT secur"-third generation sling (Johnson & Johnson, Gynecare, Somerville NJ, USA) was used, and placed with "U" technique. The main criteria for patient selection were: clinically confirmed SUI, urethral hypermobility (Qtip >30 degrees) and negative "Barrier" test. The bladder function was confirmed with basic urodynamic data before the surgery (voiding diary, first sensation, bladder capacity, and compliance on dynamic urethrocytostcopy). There was no significant pelvic organ prolapse. Szmptom evaluation was performed with ICIQ/SF questionnaire before and after the surgery. Follow up time was between three and fifteen months (mean 8.3 months).

Results: All patients were operated in LMA (laryngeal mask airway) anesthesia. Time of surgery was progressively shortened from 24.5 minutes, to 19.6 minutes. Continence was achieved in 13 out of 16 patients (81.2%). Intraoperative complications were: unintended displacement of the sling (1-7.7%) and bleeding (1-7.7%). Temporary urinary retention occurred in one case (7.7%). Symptom score measured with ICIQ/SF was significantly improved (p=0.000). There was no

postoperative urgency. Postoperative hospital stay was 1.4 days. (See figure.)



Conclusions: Initial success rate with "TVT secur", in a selected group of patients is high but not as high as we have experienced with TVT and TVT-O. Problem that remains is success rate in cases with SUI and ISD. Safety and short term tape efficiency are the most important problems we are dealing with. It seems that group of patients that are convenient for "TVT secur" must to be more strictly defined. Although complication rate is lower, in comparison with TVT(TOT), this sling type surely must pass the test of time.

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Complications in the use of mid-urethral tapes and transvaginal meshes in the surgical repair of urinary incontinence and and pelvic organ prolapse in the female

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Introduction and Objectives: We present our results in the use of pre-manufactured meshes for the treatment of pelvic organ prolapse and the use of tension-free vaginal tape in the treatment of urinary stress incontinence, with emphasis on the complications and their management.

Material and Methods: Since 2006, 61 patients have undergone surgical repair for pelvic organ prolapse (45 anterior and 16 posterior vaginal wall) with pre-manufactured meshes. For the treatment of urinary stress incontinence, 43 females underwent placement of tension-free vaginal tapes.

Results: The patients were observed from the 1st-6th post-operative months. There was one case of intra-operative puncture of the urinary bladder during the placement of the tension-free vaginal tape, which was managed conservatively. In two patients, urinary retention was observed due to over-correction of the tension free vaginal tape, and was managed with intermittent catheterizations and finally with section of the tape on the 3rd post-operative day. In the one month follow-up, there was one case of Bartholinitis, which was managed conservatively. Also, one patient presented with de novo urinary stress incontinence after cystocele repair, which was also managed conservatively. In the 3rd month a patient presented with vaginal erosion and de novo urinary stress incontinence after surgical repair of a cystocele. In the 6th post-operative month, no new complications were observed. Two cases of recurrent urinary incontinence were noted, with no recurrence of prolapse.

Conclusions: The surgical repair of pelvic organ prolapse and urinary stress incontinence with vaginal wall meshes and tension-free vaginal tapes has proven to be quick and effective. However, like all surgical procedures, they are not free from

complications. Early observation and proper management of the complications is the primary goal in the therapy of these women

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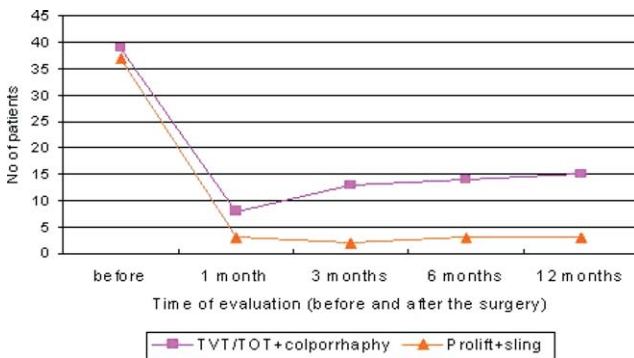
Optimal primary minimally invasive treatment for patients with stress urinary incontinence and symptomatic pelvic organ prolapse

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Introduction and Objectives: Comparison of the procedures in patients with concomitant stress urinary incontinence (SUI) and pelvic organ prolapse (POP) was performed. Tension free vaginal tape (TVT) or transobturator tape (TOT) with colporrhaphy were compared with the fixed mesh (Prolift™) applied with the tension free suburethral sling.

Material and Methods: Total of 76 females with both SUI and POP were evaluated. TVT or TOT with colporrhaphy were performed in 39 patients and Prolift with the midurethral sling in 37 patients. Anatomy, symptoms and quality of life (QOL) were evaluated before, one, three and six months as well as one year after the surgery

Results: Continence was achieved in both groups equally. The better anatomic outcome regarding correction of POP was in the Prolift group (Figure) but with the higher rate of additional procedures and complications. QOL was better in patients with grade III-IV POP corrected with Prolift ($p=0.05$) and equal in both groups with grade I-II POP during the follow-up. Impairment of sexual life was present in both groups before the surgery. After the surgery, there is no improvement in sexual life regardless of correction both anatomy and incontinence.



Conclusions: TVT or TOT performed with colporrhaphy looks as a better primary choice for grade II POP and SUI. Results for grade III-IV POP and SUI are better with the Prolift™ with the sling.

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Transobturator Tension Free Tape (TOT) procedure in the treatment of female SUI: Controlled trials 2 years after surgical procedures there was no pelvic organ prolapse

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Introduction and Objectives: Stress Urinary Incontinence (SUI) is a high prevalent symptom in adult women. SUI may seriously impair the physical, psychological, and social being of the patients. We evaluate success of surgical implantation sling, TOT, in the treatment of female SUI, there was no pelvic organ prolapse, 2 years after surgical procedures.

Material and Methods: From March 2004 to May 2006 we treated 116 women with SUI, with transobturator tension free

sling. Among them, 46 women was no pelvic organ prolapse. After 2 years controlled trials included physical examination, urinary symptom and quality of life scale questionnaires.

Results: Two-years follow-up was available on all 46; there was no pelvic organ prolapse.

Year	No pelvic organ prolapse
2004	16
2005	5
2006	25
All	46 ^a

^aSuccess rate 93% (43 patients).

In 46 patients there was no pelvic organ prolapse surgical treatment the SUI complete cure rate was 93.4% (43 patients). Two patients required tape removal due to urine retention, while in another one retention was temporary and solved spontaneously 4 weeks after procedure. In the other cases was no eny intraoperatively and postoperativ complication. Most womens reported a significant decrease symptoms of SUI and improvement in quality of life.

Conclusions: This study suggest that the implantation of the tension-free midurethral tape with transobturator approaches in the treatment of female SUI, is a safe and efficient method in treatment SUI.

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Long term viscoelastic property assessment of in-vitro aged polypropylene meshes used in female urinary incontinence treatment

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Introduction and Objectives: Tension free polypropylene multi-filament meshes are widely used for the treatment of female stress urinary incontinence. The aim of the study was to evaluate the long-term viscoelastic properties of the meshes manufactured from woven polymer filaments before and after storage in simulated body fluids. Different levels of strain were used in stress relaxation experiments in order to study the viscoelastic response of the material against in-vitro ageing conditions.

Material and Methods: Stress relaxation testing experiments were performed in specimens cut from polypropylene meshes on a TMA Q800 Dynamic Mechanical Analyzer (DMA). Constant strain levels were set at $\epsilon_0 = 1$ and 5% for both aged and non-aged specimens, respectively. The stress relaxation experiments were conducted at isothermal body temperature conditions (37°C). Dynamic Thermal response of these materials was also studied by DMA thermal scanning.

Results: Relaxing stress levels increased with increasing ϵ_0 level at $t=0$, but relaxation speed remained almost constant. DMA thermal scans showed a reduction in the mesh stiffness above 40°C. Long-term viscoelastic relaxation behavior was successfully modeled by using Zener's viscoelastic solid. By applying this model on the experimentally obtained stress relaxation curves, the viscoelastic properties of the meshes were determined with satisfactory accuracy.

Conclusions: Results from stress relaxation testing showed that polypropylene meshes appear to be a very suitable material with respect to their viscoelastic response for the treatment of urinary incontinence.