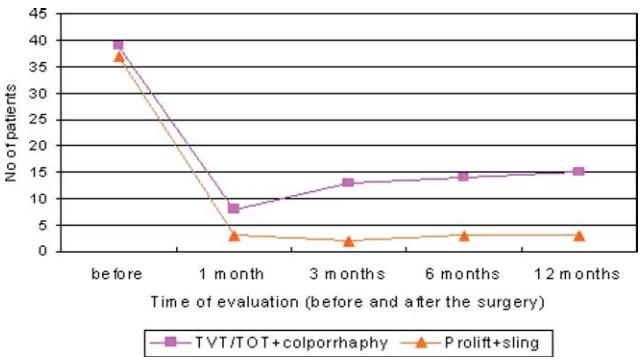
complications. Early observation and proper management of the complications is the primary goal in the therapy of these women

S35

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

M.I. Ignjatovic*, C.N. Medojevic, T.D. Basic, B.M. Potic, L.J.A. Dinic, P.D. Mitic. *Clinical Center Nis, Dept. of Urology, Nis, Serbia*

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 transobturatory tape (TOT) with coporrhaphy 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 patiens. 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.

S36

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

J. Ivovic*, D. Tomanovic, D. Kljakic, N. Zejnilovic, Z. Srzentic, S. Vucetic, N. Djurisic, B. Popovic. *General Hospital, Dept. of Urology, Bar, Montenegro*

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 succes 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 transobturatory 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]

[a]Success 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.

S37

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

N. Ferakis[1], C. Bouropoulos[1], N. Bouropoulos[2], T. Granitsas[1]*, A. Farmakis[1], I. Poulias[1]. *[1]Korgialenio-Benakio Hellenic Red Cross Hospital, Dept. of Urology, Athens, Greece; [2]University of Patras, Dept. of Materials Science, Patras, Greece*

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 $\varepsilon_0 = 1$ and 5% for both aged and non-aged specimens, respectively. The stress relaxation experiments were conducted at isothermal body temperature conditions (37ºC). 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 40ºC. 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.