

**S38****Gynecology synthetic grafts in animal studies**

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**Introduction and Objectives:** Synthetic grafts have clearly demonstrated superior durability and long term success, over biomaterials, for pelvic floor repair. Although grafts can be made from the same materials, the final weave of the product may play a role in the ultimate outcomes or complications.

**Material and Methods:** Full-thickness abdominal wall defect, with respect to the peritoneum, was primarily repaired in 36 male Wister rats, using the overlay technique. Monofilament, multifilament and collagen coated polypropylene grafts were used for repair. Graft shrinkage, thickness and tensile strength of the explants were analyzed after three and six weeks.

**Results:** Monofilament grafts showed 12–18% shrinkage respectively over the 9–11% for the multifilament and 10–14% for the collagen coated for the investigated period. Thickness of monofilament explants increased gradually, with a maximum of 23% after six weeks. Multifilament and collagen explants did swell more rapidly to 80% and 60% in the third week, decreasing thereafter to 19% above the pre implantation values after six weeks. The tensile strength showed a gradual increase over the course of experiment in all groups. Monofilament was the strongest followed by collagen coated and multifilament. In half of the cases the site of disruption was the suture itself but after six weeks all disruptions occurred in the native tissue.

**Conclusions:** Overall graft shrinkage was 9–18% with monofilament graft as the most prominent. Thickness of the grafts increased 9–23% respectively for the investigated period. The strongest tensile strength was recorded in the monofilament group.

**S39****Minimally invasive therapy of male stress urinary incontinence after radical prostatectomy with the Advance® Sling System**

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**Introduction and Objectives:** The rationale of the Advance® Sling System in male stress urinary incontinence does not rely on the principle of compressing the urethra and the bladder neck but on an anatomical repositioning of the urethral bulb into the pelvic floor. Previous studies have shown that radical prostatectomy (RPX) often leads to a descend of the bulbar part of the urethra into the lower pelvis resulting in a lower closure pressure of the external urethral sphincteric muscle. The aim of the therapeutical concept of the advance-sling is to suspend the dorsal part of the urethra with a transobturator sling which is lifting the urethra in order to regain full function of the sphincteric muscle. The urethra therefore is elevated in a dorso-cranial direction towards the pubic symphysis without being compressed by the sling.

**Material and Methods:** 25 Patients with mild to moderate Stress urinary incontinence (ICSII<sup>®</sup>) following RPX with an intact sphincteric muscle were treated with this system. The following data were checked preoperatively, 24h postoperatively and 12 weeks postoperatively: –24h Pad Test – Urinalysis – Kings Health Questionnaire – EORTC QLQ C30 PR25 – Urodynamic studies.

**Results:** The average pad-usage in 24h was reduced from 4.2 preoperatively to 1.2 postoperatively, shown in the ICS Pad Test. This is highly significant with a p-value of <0.001 in the ANOVA Test. The urinary symptoms in the EORTC PR 25 module were reduced from 27 to 7.2 in the 12 weeks follow-up. (p-value <0.002). Urodynamic studies did not show any significant

increase in the parameters of obstruction during micturition in the 12 weeks follow-up. We had no major or minor complication in the peri- and postoperative phase.

**Conclusions:** The Advance® male-sling-System significantly reduced urinary symptoms as well as pad usage. It is a simple and safe procedure and therefore offers a good treatment option in male stress urinary incontinence after radical prostatectomy.

**S40****Intensive pelvic floor muscle training after radical prostatectomy improves continence outcomes**

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**Introduction and Objectives:** Urinary incontinence following radical prostatectomy (RP) continues to be a distressing problem with severe impact on the quality of patient's life. Incontinence has been reported in 2% to 87% of men after radical prostatectomy depending on the definitions, diagnosis modalities and interval from surgery. Aim of the study is to describe the effect of intensive pelvic floor muscle training after RP to continence outcomes.

**Material and Methods:** Fifty eight men aged 53 to 74 years (median 66 years) were included in the study between November 2006 and September 2008. All patients underwent open, nerve sparing RP by different surgeons. The patients were divided into two groups. Group A with 30 men, followed an intensive treatment consisted of a structured 12-week program including patient education and positive reinforcement techniques administered by trained nurses. In group B, the 28 patients were informed how to contract correctly their muscles and were encouraged to perform three sets of pelvic floor muscle contractions daily. groups were analysed on an intention-to-treat basis by ANOVA and chi<sup>2</sup>-test.

**Results:** Continence outcome was evaluated by the use of pads and the urinary leakage (gr) at 24 h pad test at 1, 3 and 6 months after surgery. At 1 month follow up, the continence status was similar in group A and group B. At 3 and 6 month follow up there was a significantly higher number of continent patients in group A compared to group B. In the intensive treatment group A continence was achieved after 3 months in 90% of patients. In group B, continence returned after 3 months in 54% of 28 patients. At 6 months the continence rates were 95% and 74% respectively.

**Conclusions:** Intensive pelvic-floor muscle training should be considered as a first-line option in curing incontinence after radical prostatectomy.

**S41****A multicenter study on perineal versus penoscrotal approach for implantation of an artificial urinary sphincter: cuff size and control of male stress urinary incontinence**

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**Introduction and Objectives:** In a single-center retrospective study, we previously reported superior dry rates and fewer artificial urinary sphincter (AUS) revisions, when the sphincter cuff was placed via traditional perineal approach as compared with a penoscrotal approach, to treat severe male stress