RESULTS OF THE ADVANCE XP SLING FOR THE TREATMENT OF MALE STRESS INCONTINENCE

Hypothesis / aims of study
In recent years, several studies showed the effectiveness and safety of the Advance sling for the treatment of male stress urinary incontinence (SUI). In mid 2010 the Advance XP sling was introduced. The Advance XP addresses several important issues:
- anchors: higher capability during strenuous activities in the early postoperative period (first 3 months) to reduce early failure due to sling loosening or slippage
- new needle shape for easier tunneling.

Aim of the study was to evaluate the efficacy and safety of the Advance XP sling in male SUI after radical prostatectomy.

Study design, materials and methods
In a prospective study, 41 patients with mild to severe SUI after radical prostatectomy were treated with the Advance XP sling. Preoperatively, a standardized 24-hour-pad-test, daily pad use, uroflowmetry, residual urine and quality of life scores (IQOL and ICIQ-UI SF) were performed. Only patients with a positive repositioning test and a coaptive zone of ≥1cm in the preoperative urethroscopy were included. Patients with detrusor overactivity in preoperative urodynamic studies were excluded. Postoperatively, patients with 0 pad/day were considered as cured, patients with an improvement of ≥50% as improved and all others as failure.

Results
Patients were followed-up for a median of 10.8 months (6-17 months). 30 patients (73.1%) were cured, 7 (17.1%) were improved and 4 patients (9.8%) failed. At maximum follow-up, pad use, urine loss in the pad-test and quality of life scores improved significantly. In addition, no significant changes in uroflowmetry and residual urine were obtained. No intraoperative complications or early loosening of the sling with recurrent SUI occurred. 9 patients (21.9%) showed postoperatively residual urine (>150ml) or an acute urinary retention. In 7 cases it resolved without further treatment within 4 days to 3 months (median 19 days). 2 patients suffered from persistent residual urine for 3 months; in both cases a transection of only one arm of the sling was performed. After transection all patients were able to empty their bladder without residual urine (<20ml) and were still continent. No infections, erosions or explantation occurred. No patient suffered from persistent perineal pain.

Interpretation of results
The second generation Advance sling, the Advance XP shows a very good effectiveness and a low complication rate. In addition, due to the new needle shape an easier tunneling especially in larger or more obese patients is possible.

Concluding message
The Advance XP sling is safe and effective for the treatment of persistent male stress incontinence.

References

Disclosures
Funding: no funding no grant Clinical Trial: Yes Public Registry: No RCT: No Subjects: HUMAN Ethics Committee: EC of the Ludwig-Maximilian-University Helsinki: Yes Informed Consent: Yes