

Treatment of male stress urinary incontinence with the adjustable male sling ARGUS® in patients with fragile urethra



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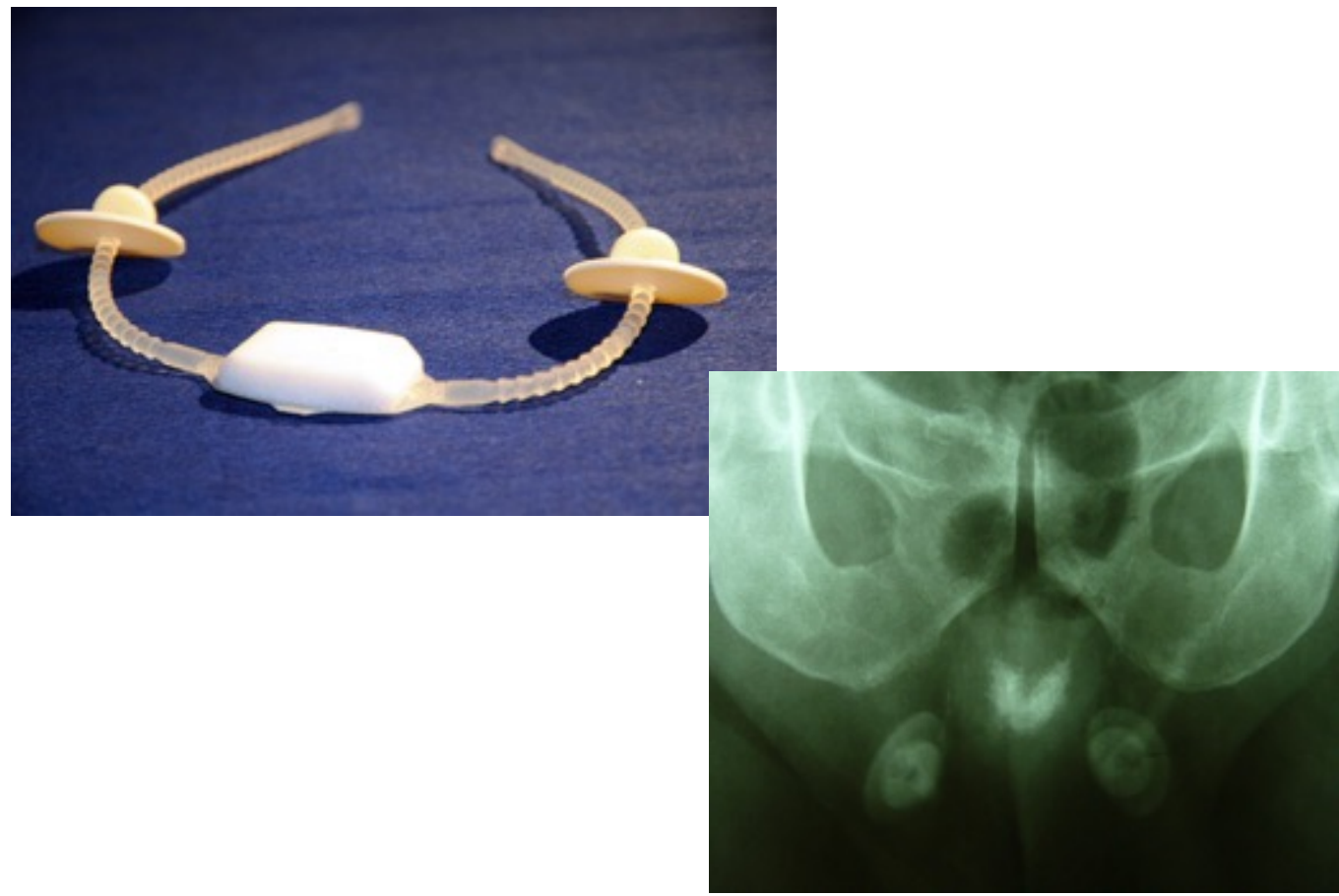
Poster Nr. 307

Introduction

The use of adjustable bulbourethral male slings may be a promising alternative to AUS for the treatment of male stress urinary incontinence (SUI) after prostatic surgery. It is adjustable and does not require manipulation before voiding.

Treatment of SUI in patients with history of pelvic radiation or previous incontinence surgeries is a challenging topic.

The aim of the study was to evaluate the results of the adjustable male sling ARGUS® in challenging patients with a “fragile urethra” at risk for urethral erosion.



Methods

An institutional retrospective review of all ARGUS® sling placements between March 2005 and September 2020 was performed. A “fragile urethra” was defined as a history of pelvic radiation, previous incontinence surgeries, previous urethroplasty or procedures for bladder neck pathologies (Table1). The primary outcome was continence, secondary outcomes included postoperative complications, need for further treatment and patients reported satisfaction. Success was defined as a reduction of more than 50% in pad per day usage (p/d).

Retrograde Leak Point Pressure (RLPP) was measured intraoperatively at baseline (before sling placement), after sling placement and the sling was progressively adjusted by tensioning the silicone columns through the washers. The RLPP was generally adjusted 10-15 cmH₂O higher than the reference RLPP measured initially before sling placement.

Table 1: Definitions of fragile urethra

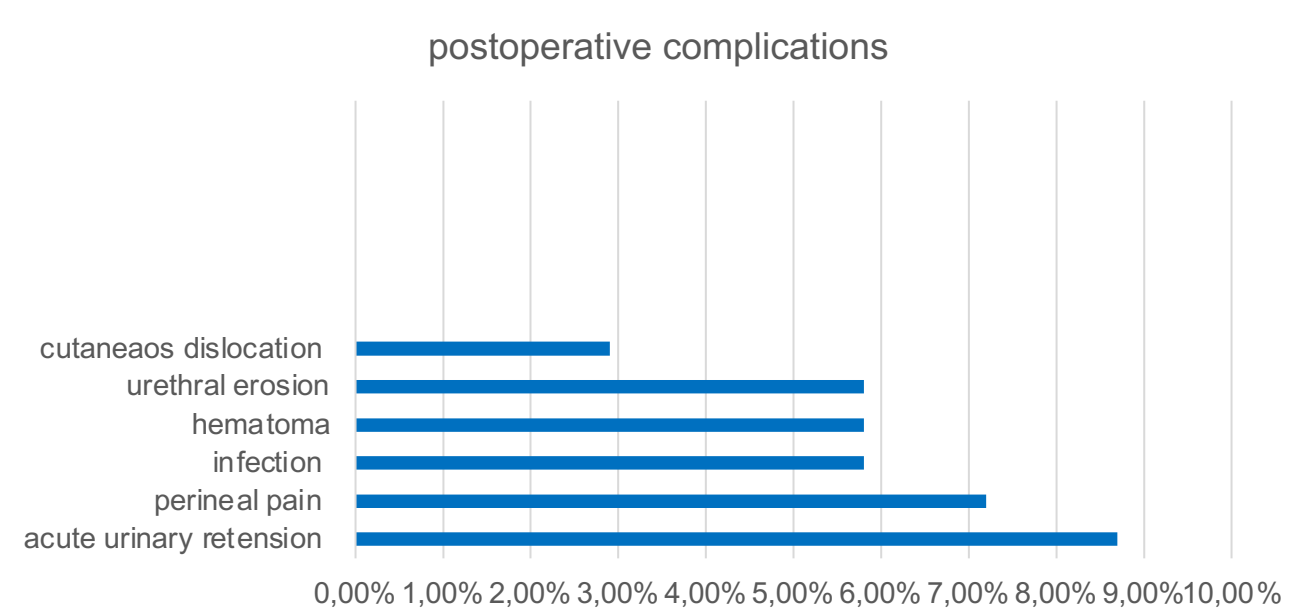
N=69	n (%)
„fragile urethra“	
History of pelvic irradiation RTx and SUI surgery	24 (34,5) 8/24
History of surgical treatment of SUI	30 (43,5)
ACT balloons	18
Male sling	2
AUS	1
bulking agents	2
multiple SUI surgeries	7
Procedures for bladder neck pathologies	15 (21,7)

Results

Within the observation period Argus sling was indicated in 122 Argus with moderate to severe urinary incontinence (defined as pad per day usage ≥ 2). 69 of 122 patients (56,6%) were identified as having a fragile urethra. 16 patients (23,2%) had a history of pelvic radiation, 23 (33,3%) had a previous incontinence surgery, mostly ProACT Balloons (n=18), in 15 cases (21,7%) prior procedures for bladder neck pathologies were performed and other 15 (21,7%) had multiple risk factors for erosion. The success-rate was reported as 76,5%, 44 patients (63,8%) were socially dry (≤ 1 p/d). The p/d improved in average from 3.7 (± 1.7) to 1.5 ($\pm 1,4$) and 90% reported a significant improvement regarding continence and quality of life.

Complications included postoperative hematoma (n=4), transient perineal or scrotal pain (n=5). Urethral erosion and infection were reported in 10 cases (erosion n=6, infection=4). Sling explantation was reported in 28 cases, however, after a median of 41 months (range 1.4-164.8), mostly associated with recurrence urinary incontinence (n=18) or urethral erosion (n=6).

Diagramm 1: Complications after male adjustable Argus suburethral sling implantation



Conclusions

The Argus® sling is an effective treatment option to achieve substantial long-term improvement of incontinence, even in patients with a high risk for erosion. In this cohort a 77% success rate was 77% and patient’s reported satisfaction was 90%.

References

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- Aagaard MF, Khayyami Y, Hansen FB, Tofft HP, Nordling J. Implantation of the argus sling in a hard-to-treat patient group with urinary stress incontinence. *Scand J Urol.* 2018;52(5-6):448-452.