

## PROSTHESIS IN MALE STRESS URINARY INCONTINENCE: AN UPDATE

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### ABSTRACT

**Introduction.** Stress Urinary Incontinence (SUI) is mostly present in men having undergone prostate surgery (radical prostatectomy for prostate cancer or TURP for Benign Prostate Hyperplasia). It is a bothersome condition, with a significantly negative impression on patients' quality of life, including low self-esteem as well as professional, social and relational restrictions. Nowadays, the gold standard treatment for SUI in men is the implantation of an Artificial Urinary Sphincter (AUS). Apart from this, the development of newer materials leads to the use of suburethral slings in the management of SUI as an alternative to the AUS. **Aim.** We aimed to perform a systematic review concerning the outcomes of SUI surgery, more precisely between the AUS and the suburethral slings, using the most recently published trials. **Results.** A recent non-inferiority study performed in the UK by Constable et al revealed that the slings were non-inferior to the AUS in terms of postoperative continence rates although the sling patients were more likely to have a lower success rate. At 12 months' interval, the incontinence symptoms were

less likely to appear in the AUS patients (mean difference in ICIQUI-SF score for the time point at 12 months: 1.30, 95% confidence interval 0.11 to 2.49;  $p=0.032$ ). The number of serious adverse events was small (male sling group,  $n=8$ ; AUS group,  $n=15$  with one man in the AUS group having experienced three serious adverse events). The authors reported an improvement in Quality-of-life scores as well as an increased satisfaction in both groups. However, the analysis of cost over benefit favored the AUS despite the less expensive sling. Another study concerning the ATOMS male sling performed by the study of Giammo et al on a cohort of 99 male SUI patients revealed that the device had a 74.7% continence rate at follow-up, with 87.9% of devices being in place at 60 months and a necessity for revision in 20.2% of patients. Still, the authors suggested that the results could have been further improved by using the device as the first choice for male SUI surgery. **Conclusion.** AUS remains the gold standard for SUI surgery in men. However, similar results could be obtained in selected patients using the most recent generation of male suburethral slings, especially when using a model that allows adjustments after implantation.