THE ZSI 375 ARTIFICIAL URINARY SPHINCTER: A NEW DEVICE FOR MALE URINARY INCONTINENCE

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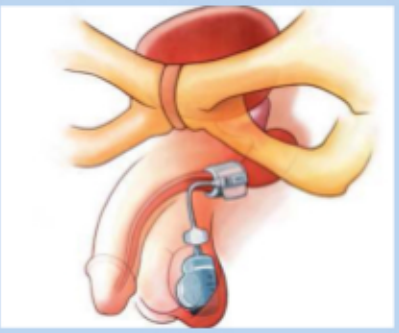
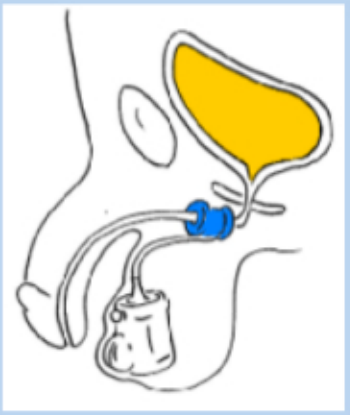
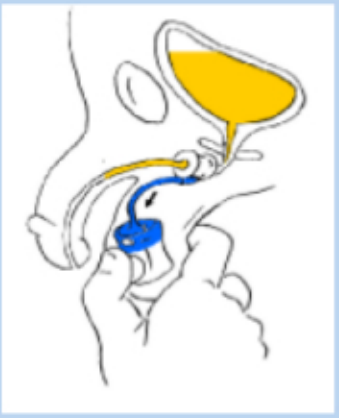
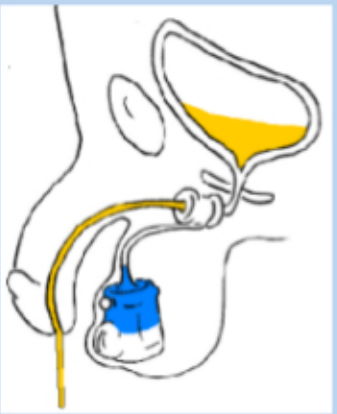
Introduction: Urinary incontinence is a devastating complication in men following definitive treatment of prostate cancer, or less commonly prostate surgery for benign conditions. In cases where conservative management fails, surgical intervention is indicated.

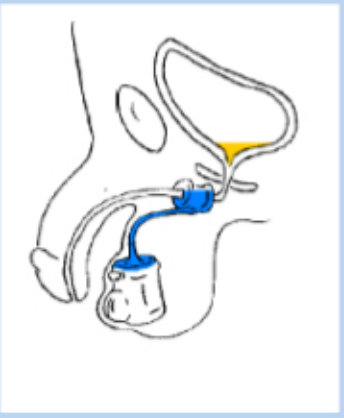
Objective: We report the use of a new one-piece assembly device with an adjustable cuff and issued pressure as an alternative solution to the AMS 800 artificial urinary sphincter (AUS) for the treatment of urinary incontinence in men.







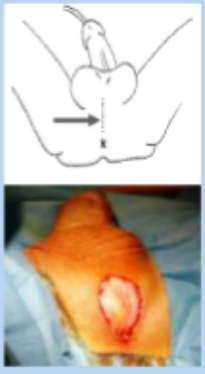


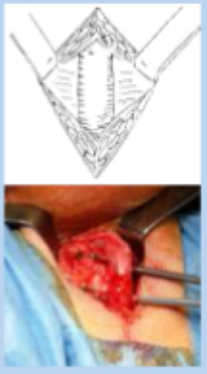


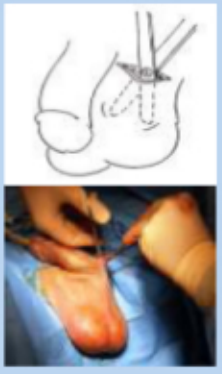
Materials and Methods: Between October 2008 and June 2010, the ZSI 375 AUS was inserted in 34 men, 51 to 78 years old (mean age 68 years), with urinary incontinence due to definitive surgical or nonsurgical treatment for prostate cancer. Radical prostatectomy (RP) had been performed in 32 men, 6 of these with adjuvant radiotherapy, while 2 had undergone brachytherapy followed by TURP to relieve outlet obstruction. Eight patients had already received a male perineal sling (MPS). In an early stage of our experience, an initial sphincter closure pressure of 60-70 cm H2O was elected, 60% of these patients necessitating an increase of the pressure range, which was performed as an office procedure. The interval for primary activation ranged from 4 – 6 weeks.

Results: With a maximum follow up of 20 months, no surgical revision was necessary for mechanical malfunction. All patients needed an increase of pressure range of the device. Infection of the device occurred in 2 (5.8%) patients requiring device removal. Overall, social acceptable continence (0-1 pad/day) was achieved in 94.2% (32 patients) of the study population.

Conclusion: Although the patient sample and follow up are limited in this preliminary study, the ZSI 375 AUS has shown to be a successful alternative to the AMS 800 device for the treatment of severe male urinary incontinence. It includes favorable characteristics such as ease of implantation and the possibility to increase the sphincter pressure as an office procedure without anesthesia







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