

Multicentre Experience with the Refillable Artificial Urinary Sphincter ZSI 375 PF

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INTRODUCTION

The artificial urinary sphincter (AUS) has proved its usefulness and is now considered the gold standard for the management of severe stress urinary incontinence in males with a high success rate (1).

The aim of the study is to first report the experience in 4 tertiary hospitals in Spain with the pre-connected, pre-filled and refillable AUS ZSI 375 PF (Zephyr Surgical Implants, Geneva, Switzerland).

MATERIAL AND METHODS

Retrospective, nonrandomised, multicentre study.

From December 2015 to March 2018, 23 male patients underwent refillable artificial urinary sphincter ZSI 375 PF implantation in 4 tertiary hospitals in Spain.

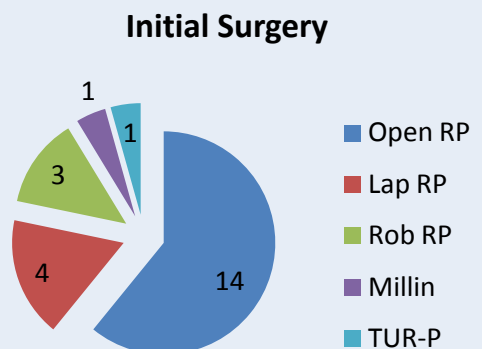
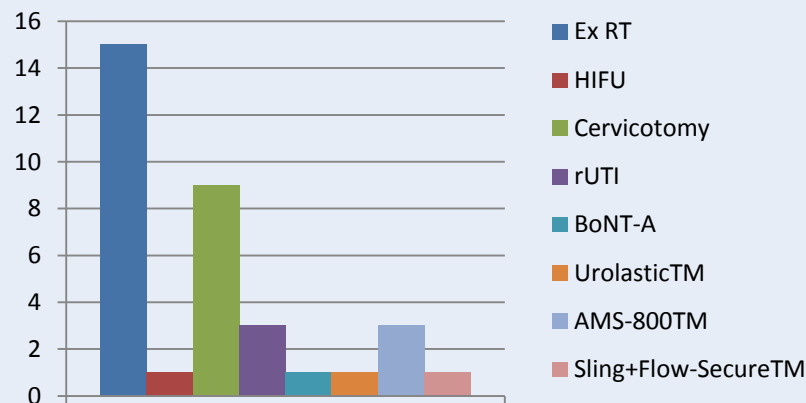
Success rates were defined as dry (≤ 1 pad/day), improved (≥ 2 pads/day) and failed. Data collection of clinical chart and clinical interview and exploration of the patients was performed and introduced in an Excel calculation worksheet. Statistical analysis was done through G-stat 2.0.



RESULTS

Median age was 69 years old (range 56-83).

Median pad test was 1200 g (range 260-1533).

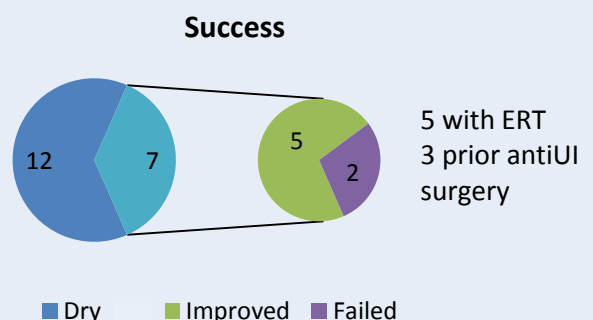


No intraoperative complications were recorded, and patients were discharged 1-3 days after surgery.

The device was activated 50 days after surgery on average (range 45-60).

Refill was performed in 12 patients (1-3 times each) with a median volume of 0.4 ml. Nine of these patients have received ERT (including the patient after HIFU, 75%).

Complications: Erosion developed in 2 patients with prior RUTI and cervicotomy and the device was explanted (Clavien-Dindo IIIb) (10.5%); one patient had prior ERT. Postoperative hydrocele appeared in another patient which was managed conservatively (Clavien-Dindo I).



CONCLUDING MESSAGE

✓ The refillable artificial urinary sphincter ZSI 375 PF is a reliable alternative with good continence results and a low complications rate. Although previous radiation therapy might influence the achievement of complete continence after implantation, it is not an absolute contraindication.

✓ Careful information should be given to patients with previous urinary tract infections since they seem to have a higher risk for device infection and explantation.

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Affiliations to disclose:
Travel grant: Pierre Fabre, Recordati, QPharma

Funding for speaker to attend:
 Self-funded
 Institution (non-industry) funded
 Sponsored by: Astellas Pharma