

COMPLICATIONS WITH ADJUSTABLE DEVICE FOR MALE STRESS URINARY INCONTINENCE: SPANISH MULTICENTRE EXPERIENCE

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INTRODUCTION

- The artificial urinary sphincter (AUS) is the standard treatment for moderate-to severe male stress urinary incontinence (SUI) (2)
- Recently, new devices have been used for the treatment of mild-to moderate male SUI. Adjustable devices add more surgical possibilities for our patients, including treatment of severe SUI (1). As AUS, these devices have their own complications
- The aim of this study is to report our complications with an adjustable device (ATOMS™) in the treatment of male SUI with a long follow-up

RESULTS

- Mean age was 67 years (± 4.8)
- Radical prostatectomy was the most common cause of SUI (91%)
- Eighteen patients had received external radiotherapy (ERT) previously (19%)
- Cervicotomy was performed at 23%
- Fifty-three patients had severe incontinence and mild-to-moderate SUI was at 43%
- Median follow-up was 35 months (± 19)

CLAVIEN I y II COMPLICATIONS

Spontaneous voided device	11
Transient perineal pain	7
Acute urinary retention	5
Wound disruption	5
Urge de novo	3
Haematoma	2
Scrotal infection	1

CLAVIEN III COMPLICATIONS

Valve removed	8
Valve buried	3
Total device removed	6
→ Urethral perforation	→ 3

SIMULTANEOUS PROCEDURES

1 cervicotomy	6
2 previous device removed	(6,6%)
3 penile prosthesis implant	

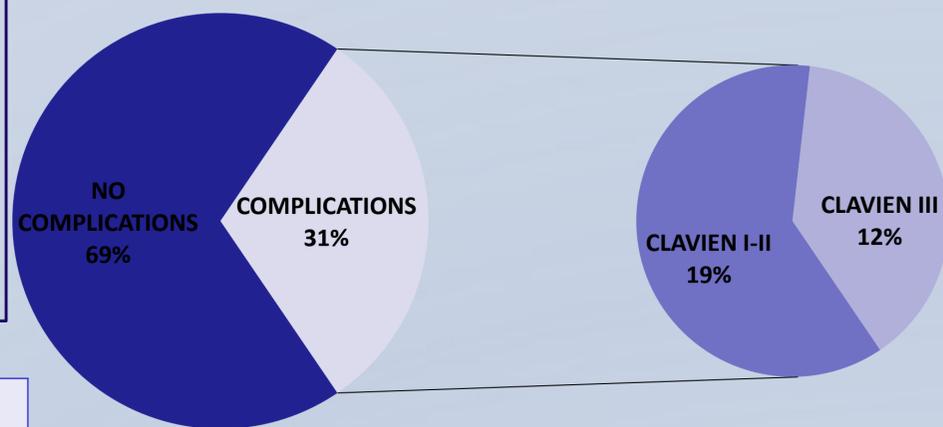
POSTERIOR PROCEDURES

6 ERT	16 (17,6%)
8 endoscopic procedures	
2 penile prosthesis implant	

METHODS

- Retrospective, nonrandomised, multicentre study
- Ninety-two ATOMS™ devices have been implanted in three tertiary hospitals in Spain, from September 2012 to March 2019
- Data recorded: clinical data, etiology and SUI severity, cough stress test, cystoscopy, 24-hours pad-test and urodynamics
- Complications with Clavien-Dindo classification, and evolution were registered at 6, 12, 24, 36 and 60 months
- Statistical analysis was done through Stata 2.0

COMPLICATIONS



Clavien I-II complications were less frequent in pre-assembled devices ($p < 0.04$)

**Reoperation rate was 18.2%
Clavien III complications were no related with any risk factor**

CONCLUSIONS

- Male SUI can be successfully treated with ATOMS™ device
- This device is safe, easy to implant and has a lower rate of complications and device explantations than AUS

INTERPRETATION OF RESULTS

- The majority of minor complications have been solved with pre-assembled valve. The position above the muscle can avoid urethral complications, especially in those patients who have received external radiotherapy
- Our complications rate is very similar to previous published in literature (3), but this is the first report of urethral perforation with this device

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