

#255 COMPARISON OF OUTCOMES FOR SUBURETHRAL MALE SLING AND ARTIFICIAL URINARY SPHINCTER: SINGLE CENTER PROSPECTIVE FIVE-YEAR FOLLOW-UP STUDY

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HYPOTHESIS / AIMS OF STUDY

Stress Urinary Incontinence (SUI) is a common complication **after prostate surgery or prostate radical radiotherapy**. Artificial Urinary Sphincter (**AUS**) is the gold standard in patients with **moderate to severe** SUI. **Male suburethral slings** are an acceptable surgical approach in men with **mild to moderate** degrees of SUI.

The aim of the study is to evaluate and compare **efficacy, the long-term continence and functional outcomes** of slings and AUS implants in men with SUI.

STUDY DESIGN, MATERIALS AND METHODS

Prospective observational analysis of 315 patients with SUI after radiotherapy treatment or prostate surgery treated with sling (**Sling group**) or AUS (**AUS group**) before February 2017.

Patients included: fulfilling 5 years of follow-up. Both primary and secondary implants were included.

Exclusion criteria: patients without complete follow-up were excluded.

Thirty-seven patients were excluded for not completing follow-up, finally the study group was **278 patients**.

Preoperative assessment included **24-hour pad weight (24h-PT), ICIQ-UI SF, urodynamic and flexible cystoscopy**. All implants AMS 800®, ADVANCE® and ADVANCE XP® were performed by a **single experienced surgeon**.

INDICATIONS:

- Except in isolated cases, patients with a 24h-PT>400g were considered for AUS and a 24h-PT<400g 24h for sling.
- The absence of sphincter contraction (“repositioning test”) or previous radiotherapy were a contraindication for sling.

Follow-up was carried out once every **3 months during the first year and once every 6 months thereafter**, in parallel to the oncological follow-up (PSA, 24h-pad test and ICIQ-UI SF).

RESULTS

		Sling group (n=134)	AUS group (n=144)
Age	Median (range)	66 (50-80)	67 (51-79)
Body mass index	Median (range)	28(21-39)	29(19-41)
Pad test	Median (range)	95(7-1089)	779 (100-2509)
DM	N(%)	24 (17.91%)	32 (22.22%)
HTA	N(%)	58 (43.28%)	64 (44.44%)
Hormonotherapy	N(%)	9 (6.71%)	22 (15.27%)
First treatment Prostate Cancer	Radiotherapy	1 (0.74%)	12 (8.33%)
	(RT/ BT)		
	Prostatectomy	133 (99.25%)	132 (91.66%)
Salvage radiotherapy	N(%)	1 (0.74%)	35 (24.30%)
Anastomotic stricture treated	N(%)	13 (9.7%)	49 (34.02%)

Table 1. Preoperative status: quantitative and qualitative variables (n=278).

EARLY FOLLOW-UP

	Sling group (n=134)	AUS group (n=144)	p
Cure rate	107 (79.85%)	100 (69.44%)	0.054

Table 2. Continence results (3 months follow-up)

Early postoperative complications		
	Sling group (n=134)	AUS group (n=144)
I	3 (2.23%)	5 (3.47%)
II	18 (13.43%)	14 (9.72%)
IIIa	0	2 (1.38%)

Table 3. Early postoperative complications (Clavien-Dindo)

LONG TERM FOLLOW-UP

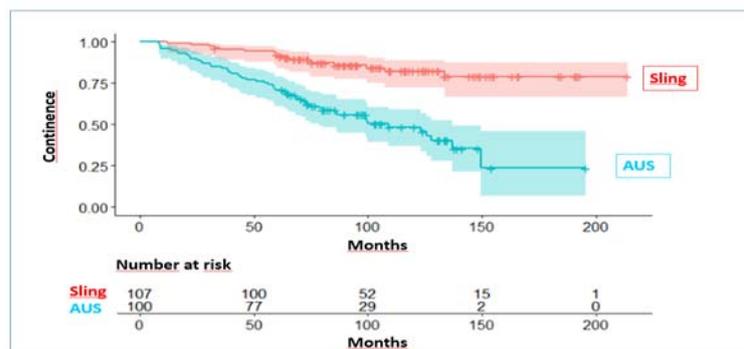


Figure 1. Loss of continence during follow-up ($p < 0.01$)

INTERPRETATION OF RESULTS

Prospectively data shows (according indication) that **the continence and early postoperative complications are similar**.

The loss of continence during patient follow-up is more evident in the AUS group. Slings seem to keep efficacy during long term follow-up .

All surgeries were performed by the same surgeon, in the same hospital, with the same preoperative evaluation and the same follow-up protocol, therefore biases in the differences in the evolution have been avoided,

CONCLUDING MESSAGE

Understanding relative rates of male slings and AUS complications, our study **can help clinicians better counsel SUI patients** of the surgical risks, thus **promoting informed decision making and appropriate patient expectations**.

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