

LONG TERM RESULTS OF FEMALE ARTIFICIAL URINARY SPHINCTER: CUFF ONLY OR FULL SPHINCTER?

Hypothesis / aims of study

We reviewed long term outcomes of artificial urinary sphincter (AUS) in female population to assess the need for a full sphincter or cuff only.

Study design, materials and methods

We have collected retrospective data on 38 female patients who had their AUS inserted between 1985 to 1999 at our institution. The data pertaining to the indications of surgery, continence rate, revision rate and follow up were collected from the case notes and electronically from the hospital database system.

Results

Thirty eight female patients were included in the study. Out of 38 patients, 24 had Neurogenic bladder (22 patients with Spina Bifida & 2 with Spinal injury), 10 patients had stress incontinence, and one each with various aetiologies like extrophy, urethral injury, vesico-vaginal fistula and post bladder surgery for interstitial cystitis.

Follow up of these patients ranged from 2- 21 years (Mean = 11.2 years)

Out of 38 patients only 20 had the fully activated artificial urinary sphincter, whereas in rest 18 patients it was either not activated or only a cuff was inserted.

Continence rate of all patients was as shown in Table 1

	Immediate Follow Up	Last Follow Up
Dry	25 (65.7%)	19(50%)
Occasional wet	9 (23.6%)	8(21.05%)
Wet	4 (10.52%)	9 (23.68%)

Table No 1 shows continence rate immediately after the procedure and during the last follow up. Dry= totally dry, Occasional wet = 1-2 pads/ day, Wet = More than 2 pads per day.

6 patients who were dry after the immediate insertion of device were wet at their last follow up after having revision surgeries. 5 patients had activated AUS and 1 patient had only cuff inserted. 2 patients were managed with long term catheter at the follow up.

Revision surgery was performed after insertion of AUS as shown Table 2.

Revision Surgery	Once	Twice	Three or more
	21(55%)	12 (31.5%)	7(18.42%)
Cuff or deactivated AUS	7 (38.88%)	4 (22.22%)	2 (11.11%)
Activated AUS	14(70%)	8 (40%)	5 (25%)

Table No 2 shows the number of revision surgeries performed after insertion of AUS.

Interpretation of results

Cuff only or deactivated AUS patients had a dry continence rate of around 66% on long term follow up.

The results also show that cuff only group had lower revision rate 39% compared to patients with immediate AUS activation 70%.

Concluding message

We present a large single institution case series of females having AUS implants with fairly long term follow up.

The presence of a non activated cuff seems to be sufficient to achieve continence.

References

1. Female Urinary Incontinence and Artificial Urinary Sphincter: Study of Efficacy and Risk Factors for Failure and Complications. Bertrand Vayleux, Jérôme Rigaud, François Luyckx, Georges Karam, Pascal Glemain,
2. Comparison of the Long-Term Outcomes Between Incontinent Men and Women Treated With Artificial Urinary Sphincter. Virgilio G. Petero, Jr. and Ananias C. Diokno,†.

Disclosures

Funding: NIL **Clinical Trial:** No **Subjects:** NONE