

## LONG-TERM OUTCOMES OF ARTIFICIAL URINARY SPHINCTER IN FEMALE PATIENTS WITH SPINA BIFIDA

### Hypothesis / aims of study

To date few series have reported the outcomes of artificial urinary sphincter (AUS) in women and none female patients with spina bifida. Our aim was to report the long-term functional outcomes of AUS implantation in a population of female patients with spinal dysraphism suffering from stress urinary incontinence related to intrinsic sphincter insufficiency

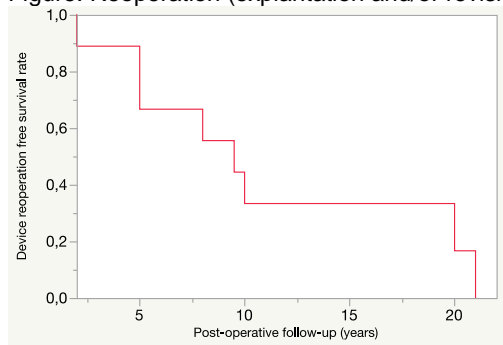
### Study design, materials and methods

Between 1982 and 2014, nine female patients with spina bifida underwent implantation of an artificial urinary sphincter for type III stress urinary incontinence due to intrinsic sphincter deficiency. Survival rates of the AUS device without needing explantation or revision were estimated using the Kaplan–Meier method. Reoperation was defined as either revision or explantation of the AUS device. Continence status was categorized as follows: complete continence (no pads), improved continence (patient's subjective assessment), unchanged or worsened.

### Results

The median age at first implantation was 30 +/-17 years (range 11-63). The median follow-up was 18 +/- 7 years. Eight patients performed clean-intermittent self-catheterization (89%). At last follow-up, 89% of patients (8/9) had undergone at least one reoperation. Three AUS explantations were needed, and five AUS revisions. Median time to reoperation was 9.5 years (fig). None of the patients explanted had a new AUS implanted. When considering only patients with an AUS in place at last follow-up, 100% had improved or complete continence.

Figure: Reoperation (explantation and/or revision) free survival



### Concluding message

AUS in female patients with spina bifida offered acceptable long-term functional outcomes but at the cost of a high reoperation rate. In the present series, continence was improved or complete in 100% of patients at last follow-up but 89 % of patients had undergone at least one reoperation (explantation or revision). Median time to first reoperation was 9.5 years.

### Disclosures

**Funding:** NO **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** Retrospective descriptive study **Helsinki:** Yes **Informed Consent:** No