

PROSPECTIVE ANALYSIS OF AMS 800 © PLACEMENT AFTER BUCCAL MUCOSA URETHROPLASTY

Hypothesis / aims of study

The artificial urinary sphincter AMS 800 has proven to be successful for control of stress urinary incontinence (SUI). There are only a few reports of AMS 800 placement after urethroplasty and most of them describe implantations after primary anastomosis. To address contemporary continence and complication rate of the AMS 800 in case of status post buccal mucosa urethroplasty we assessed our prospective AUS data base.

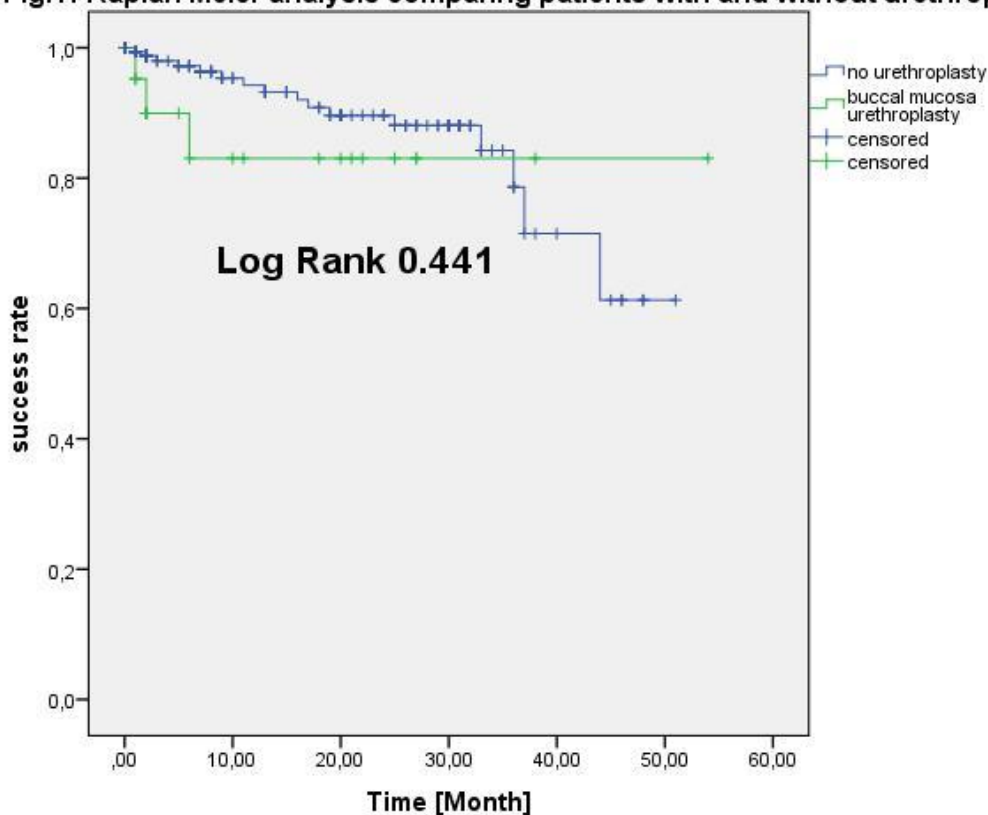
Study design, materials and methods

Since 2009, we prospectively collect data of all patients who undergo AUS implantation at our tertiary center. Activation of AUS is performed 6 weeks postoperatively at our institution. Further follow-up (FU) consisting of pad test, maximal urinary flow rate (Q_{max}), post void residual urine, radiography, and standardized questionnaire is scheduled 6, 24 months and every two years thereafter. In this analysis only patients who underwent a bulbar buccal mucosa ventral only urethroplasty were included. Primary and secondary endpoints were continence and complication rate, respectively.

Results

A total of 21 patients with a mean FU of 15.7 months (range 2-51) were available for analysis. At baseline mean age was 68 yrs (range 16-87). Previous incontinence surgery or pelvic irradiation therapy was documented in 14.3% and 66.7% of the patients. A distal bulbar double cuff was used in 71.4%, a single membranous cuff in 14.3% and transcorporal AMS 800 in 14.3%. Social continence defined as a usage of not more than 2 pads/day was reached in 90.5 % of all patients. 76.2% of the patients were dry (maximum usage of one security pad). Compared to patients without previous urethroplasty no statistically significant difference could be observed ($p=0.63$). Complications in terms of infection and arrosion were seen in 4.8% and 9.5% respectively. There was no mechanical failure observed in this cohort. According to Kaplan Meier analysis 83% of the implanted AMS 800 were still in place at 50 months FU comparable to patients without previous buccal mucosa urethroplasty (see figure 1, Log Rank= 0.441).

Fig.1: Kaplan Meier analysis comparing patients with and without urethroplasty



Interpretation of results

According to our midterm prospective follow up data AMS 800 implantation seems to be safe and effective despite previous bulbar buccal mucosa ventral only urethroplasty.

Concluding message

In high volume centers implantation of AMS 800 devices in case of high grade stress incontinence can be performed despite of prior performed buccal mucosa urethroplasty.

Disclosures

Funding: There is no funding or grant used for this study **Clinical Trial:** Yes **Public Registry:** No **RCT:** No **Subjects:** HUMAN
Ethics not Req'd: No change of standard procedures used in our normal clinical setting **Helsinki:** Yes **Informed Consent:** Yes