

FEASIBILITY OF ARTIFICIAL URINARY SPHINCTER AFTER MALE SLING FAILURE

Hypothesis / aims of study

To evaluate feasibility and efficacy of artificial urinary sphincter (AUS) in patients following failed bone anchored male sling for treatment of persistent post prostatectomy urinary incontinence.

Study design, materials and methods

A total of 64 patients with post prostatectomy incontinence underwent 66 (2 re-do procedures) bone anchored perineal male sling procedures. An absorbable biomaterial sling was placed in 16 patients and non-absorbable silicon mesh was placed in 50 patients. At a mean follow up of 30 months, 18 patients failed the procedure. Sling was removed in 2 patients because of mesh infection. 10 of 18 failed patients and 1 of 2 patients who had sling removed underwent implantation of AUS. Out of these 11 patients, six had absorbable biomaterial and 5 had non-absorbable material. Two patients underwent re-do sling procedure because of refusal for AUS. Urodynamic evaluation was performed preoperatively in all patients and postoperatively in failed patients. Outcome was evaluated with the number of pads used both pre & post-operatively.

Results

AUS was implanted through perineal approach in 8 patients and trans scrotal in other 3 patients. There was no difficulty encountered during urethral dissection in absorbable sling group as no sling material was identified. In patients with synthetic mesh, the sling was divided in the middle to expose the underlying urethra without difficulty. Following AUS implantation, the cure rate was 72.7% (8 patients) and improved rate was 9.1% (1 patient). One patient failed after AUS implantation, one developed infection necessitating removal of AUS after 1 month. Mean pad usage decreased from 4.63 ± 0.67 to 0.81 ± 1.32 . The mean duration between sling procedure and AUS implantation was 13.4 months (range 4-32) and mean follow up after AUS implantation was 14.2 months (range 5-20).

Interpretation of results

AUS is effective in recurrent post prostatectomy stress urinary incontinence with success rate around 82%. Type of sling material and severity of incontinence contributed to the male sling failure.

Concluding message

AUS implantation after failed male sling can easily be performed with high success. Previous sling surgery does not preclude future AUS implantation.