

COMPARISON OF THE EFFICACY BETWEEN ARTIFICIAL URINARY SPHINCTER AND ARGUS MALE SLING AFTER PROSTATE SURGERY IN MODERATE INCONTINENCE PATIENTS

Hypothesis / aims of study

The treatment options for moderate to severe postprostatectomy incontinence (PPI) include an artificial urinary sphincter (AUS), periurethral bulking agents, and sling techniques¹. While the AUS has long been considered the gold standard procedure for PPI among them, in recent years studies of male perineal sling have shown that this is a safe, effective and less invasive procedure^{2,3}. This study examined to compare the efficacy of AUS with Argus male sling operation in the moderate incontinence patients after prostate surgery.

Study design, materials and methods

Thirty two men with moderate (2 pads/day) to severe (>2 pads/day) PPI who received AUS (n=18) or Argus (n=14) were enrolled. The preoperative evaluations included history, physical examination, pad test, cystoscopy, and urodynamic studies. Success was defined as the use of less than 1 pad/day at postoperative 12 months.

Results

The patients' mean age was 74.1 ± 6.3 (59-84) years and the follow-up period was 15.0 ± 10.9 (12-39) months. Thirty one patients underwent radical prostatectomy (25 in open radical prostatectomy, 6 in robot assisted radical prostatectomy) due to prostate cancer and one patient underwent TURP due to BPH. There were no statistical differences in terms of mean age, preoperative pad usage (4.3±1.2 day in AUS group, 3.3±1.7 day in Argus group), previous surgery characteristics and preoperative urodynamic variables between two groups. But the admission duration was shorter in the AUS group and operation time was longer compared to the Argus group (4.1 ± 1.4 vs. 5.6 ± 1.3 day and 122.0 ± 34.7 vs. 71.5 ± 15.7 , respectively) ($p=0.003$ and $p<0.001$). In the Argus group, postoperatively 2 patients underwent sling adjustment for obstructive symptoms, and 6 patients for persistent stress incontinence. The success rate was 88.95 % in the AUS group and 92.9% in the Argus group ($p=0.116$). The postoperative complication rate was 16.7% in the AUS group and 7.1% in the Argus group ($p=0.318$). Anticholinergics and tricyclic antidepressant were prescribed more frequently in the AUS group (77.8%) than Argus group (7.1%) ($p=0.001$).

Interpretation of results

Argus male sling has a similar success rate as the artificial sphincter in male PPI after prostate surgery with moderate severity.

Concluding message

Argus could be an alternative surgical option in patients with a moderate degree of male PPI.

References

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Disclosures

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