

PATIENT SELECTION CRITERIA AND OUTCOMES FOR SURGICAL MANAGEMENT OF POST-PROSTATECTOMY INCONTINENCE

Hypothesis / aims of study

Influx of novel technologies has evolved the treatment algorithms for evaluation and management of post-prostatectomy incontinence. This effort was to define urodynamic and clinical parameters to determine optimal surgical management of post-prostatectomy intrinsic sphincter dysfunction with either artificial urinary sphincter or male urethral sling.

Study design, materials and methods

Retrospective review was undertaken following IRB approval of medical records from radical prostatectomy patients who had undergone AUS or male urethral sling implantation from January 2004 to June 2008. Charts were evaluated for demographics, voiding symptoms, urodynamics, postoperative outcomes including standardized instruments and incontinence pad counts, and surgical complications.

Results

Fifty-two prostatectomy patients underwent AUS placement (American Medical Systems, Inc., Minnetonka, MN) from 1/2004 to 2/2008 and twenty eight patients underwent placement of the bone-anchored InVance™ male urethral sling (American Medical Systems, Inc., Minnetonka, MN) from 3/2005 to 6/2008. Mean age at time of surgery was 66.9 years (range 53 – 85 years) for AUS patients and 67.6 years (range 51 – 85 years) for sling patients. Average follow up for AUS patients was 9.9 months (range 1 – 40 months) and 7.6 months (1 – 26 months) for sling patients. Average time from prostatectomy to first AUS and sling placement was 55.2 months (range 8 – 295 months) and 39.4 months (range 13 – 161 months) respectively. Average abdominal leak point pressure (ALPP) was 54.6 cm H₂O in AUS patients and 76.6 cm H₂O in sling patients. Both groups showed a significant reduction in mean number of pads per day (PPD) from 7.1 to 0.86 ($p < .0001$) in AUS patients and from 2.1 to 0.3 ($p < .0001$).

Interpretation of results

For men with ALPP <60 and ≥ 3 PPD our data supports AUS placement, while men with ALPP >70 and ≤ 2 PPD are appropriate sling candidates. Analysis of both populations also highlight the prolonged time from prostatectomy to incontinence treatment, average 48.7 months (57.33 months AUS, 39.41 months sling).

Concluding message

In this population of men with post-prostatectomy incontinence we have identified urodynamic and incontinence pad parameters to provide a simple algorithm to identify appropriate surgical treatment. These data contribute insight into important considerations for clinicians developing strategies for the treatment of post-prostatectomy incontinence by providing specific parameters to compare surgical managements, offer comprehensive patient counseling, and guide treatment decisions.

<i>Specify source of funding or grant</i>	None
<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	Internal Review Board
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	No