

OPTIMIZING ADVANCE™ SLING OUTCOMES VIA INTRAOPERATIVE URETHROSCOPIC CONFIRMATION OF SLING POSITIONING

Hypothesis / aims of study

Although the AdVance™ sling is a novel and promising procedure for restoration of urinary control among men with stress urinary incontinence following prostatectomy, variations in sling positioning along the proximal bulbar urethra have been suggested as playing a major role in influencing outcomes. We started employing intraoperative urethroscopic guidance for sling placement routinely in mid 2008 to find the point of sling placement on the bulbar urethra that visually gave the best mucosal coaptation near the membranous urethra. This study compares results of patients who received an AdVance™ sling without intraoperative urethroscopic guidance to patients in whom urethroscopic guidance was used.

Study design, materials and methods

Between June 2007 to January 2009, 83 men between 50 and 80 years of age underwent the AdVance™ sling procedure by a single surgeon for stress urinary incontinence following prostatectomy. These patients were retrospectively reviewed. The patients were assessed and compared according to two groups: Group A--sling positioning based on intraoperative urethroscopic guidance; Group B--sling positioning based solely on external anatomic landmarks along the corpus spongiosum. For Group A patients, sling positioning was performed at a proximal bulbar location (5-10 mm distal to sphincter) where circumferential sphincteric coaptation was visualized during ventral manual compression. Outcomes were compared on the basis of reduction of pads used and subjective percentage of improvement perceived by the patient.

Results

Of the 83 AdVance™ sling patients, 54 had intraoperative urethroscopic guidance of sling placement (Group A) and the remaining 29 (Group B) had sling placement based only on external landmarks along the corpus spongiosum. The average pads per day in Group A and B preoperatively were well matched, 2.6 and 2.3 respectively. The average pads per day in Group A and B postoperatively were 0.3 and 1.3 respectively ($p = 0.007$). The average subjective improvement in Group A and B postoperatively were 90% and 56% respectively ($p = 0.001$).

Interpretation of results

The patients in this study who had urethroscopic guidance employed for AdVance™ sling placement had better continence results than the patients who did not in terms of number of pads per day and subjective improvement. These results are clinically and statistically significant.

Concluding message

Precise proximal bulbar sling positioning using intraoperative urethroscopic guidance appears to promote improved continence after AdVance™ sling surgery performed for stress urinary incontinence following prostatectomy.

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<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>	Institutional Review Board at University of Texas Southwestern
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes