

326

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Title: THE AMS 800 ARTIFICIAL GENITOURINARY SPHINCTER: TANDEM CUFF PLACEMENT FOR RECURRENT URINARY INCONTINENCE

Introduction:

Recurrent urinary incontinence secondary to cuff compression and subsequent tissue atrophy, mechanical failure, and cuff erosion is well known. While alternative measures, reduction of cuff size, cuff repositioning, and increasing the reservoir pressure have been described, we present our results on a second or tandem cuff placement.

Aims of Study:

To report the efficacy of placing a second or tandem urethral cuff for recurrent urinary incontinence following implantation of an AMS 800 artificial genitourinary sphincter (AGUS) device.

Methods:

Thirty-six men with recurrent post prostatectomy incontinence: radical retropubic prostatectomy (RRP) (n = 25); RRP plus adjuvant radiotherapy (n = 4), suprapubic prostatectomy (n = 1), transurethral resection of the prostate (n = 4), and XRT (n = 2). All patients were reporting 3.1 pads per day at the time of the tandem cuff placement. A detailed history and physical examination, inflate/deflate radiographs, cystometrogram, and cystoscopy in conjunction with urinalysis, culture, and serum creatinine were performed.

Results:

All 36 patients demonstrated sphincteric incontinence and bulbous urethral atrophy at the original cuff site. A tandem cuff was placed on all patients at the bulbous urethra approximately 1 cm distal to the original cuff side, thus reducing the risk of urethral injury. Using an Elekta stainless steel three-way connector (Elekta Implants S.A., Atlanta, Georgia), the tandem cuff was connected. The average interval between placement of the original device and tandem cuff was 61 months. The average number of pads used per day prior to tandem cuff placement was 3.1. A questionnaire was sent to all patients with a mean follow-up of 28 months (range 6-90) from the time of the tandem cuff placement to the last follow-up. Twenty-seven

patients reported being dry, requiring no pads, while six patients required one pad per day following tandem cuff placement. Degree of satisfaction was noted to be satisfactory in the majority with 30 patients satisfied and 3 patients unsatisfied due to using one pad per day.

Conclusions:

Tandem cuff placement was associated with significant improvement in urinary incontinence and quality of life. When tissue atrophy secondary to cuff compression is encountered, a tandem cuff should be considered as an ideal option in patients with a high degree of satisfaction and a low complication rate.