

REVIEW OF THE SURGICAL TREATMENT OF URINARY INCONTINENCE WITH AMS 800 SPHINCTER AFTER 100 PATIENTS.

Hypothesis / aims of study

The artificial urinary sphincter (AUS) is a surgical procedure that seems a good alternative in the treatment of urinary incontinence due to urethral sphincter insufficiency since 1983 and is widely regarded as the gold standard treatment. Since 1983 the basic design of the AUS has been unchanged; however, there have been numerous modifications of device components leading to both increased continence and longer device life. The objective of this study is to prospectively analyze the safety and efficacy of the AMS- 800 sphincter in the management of urinary incontinence due to sphincter insufficiency.

Study design, materials and methods

Between April 2006 and April 2012 100 patients underwent artificial urinary sphincter AMS 800 implantation, performed by a single surgeon at Urology department. 97 patients were male and 3 females. The cause of incontinence was sphincter incompetence in all cases, secondary to prostate surgery in 92 cases, 4 with neurological disease and 4 due to pelvic radiation of prostate cancer. In men were placed in the bulbar urethra and in women in the bladder neck. The cuff diameters varied from 4 to 5.5 cm and reservoir pressures from 60 to 70 H₂O cm.

Results

Functional results with a minimum follow up of 2 years, were successful in 84 (84%) patients and failure in 16 (16%) cases who were reoperated for removing the artificial sphincter and later reimplantation with good results in 6 patients.

The complications that appeared, ordered by frequency, were: fistula or exteriorization, intraoperative erosion, malfunction, infection and rejection.

Interpretation of results

In our series the AMS-800 prosthesis for the treatment of urinary incontinence due to sphincter insufficiency showed good efficacy and safety results, low morbidity and no mortality. The most frequent indication was following prostate surgery, with the best results. Patients with incontinence of neurogenic origin or pelvic radiation due to prostate cancer have the highest complication rate, and the worst results in relation to vascularization and tissue trophism abnormalities. In female patients the functional result was failure in all cases.

Concluding message

The use of an AMS-800 prosthesis for the treatment of urinary incontinence due to sphincter insufficiency is effective but not exempt of complications. The most frequent indication was following prostate surgery, being this group the one that obtains the best results. In female patients or neurogenic or pelvic radiation origin we prefer other techniques that have similar results, are technically easier and more economic. Only surgeons who have been properly trained in the use of this procedure should be performing this surgery. Candidates for the procedure must be carefully selected. Patients must be informed about the success rates and complications of the surgical procedure

Disclosures

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