

ANALYSIS OF THE EFFICACY AND SAFETY OF THE ADVANCE TRANSOBTURATOR SLING IN THE TREATMENT OF POSTOPERATIVE MALE STRESS URINARY INCONTINENCE

Hypothesis / aims of study

Male stress urinary incontinence (SUI) after prostate surgery is a significant source of morbidity. In recent years, various minimally invasive sling systems have been investigated as treatment options for such incontinence.

The aims of the study are to evaluate the efficacy of Advance™ Male Sling in the treatment of SUI and to identify risk factors associated with failure and complications.

Study design, materials and methods

From October 2008 to February 2009 an Advance sling was placed and evaluated in 50 patients. All patients were considered 1 year after prostate surgery.

Degree of incontinence was assessed with a 24-Hour Pad Weight test (24h-PW) and the Spanish validated version of International Consultation on Incontinence Questionnaire-Short Form (ICIQ-SF). Pre-operative body mass index (BMI), urodynamic assessment, cystourethrography and cystoscopy were performed in all cases.

The surgical technique was identical to that described in detail by Rehder and Gozzi.

Follow-up was carried out one month after surgery and 6-monthly thereafter.

Cure rate was defined as no pad use, improvement as use \leq 1 pad per day.

Preoperative variables (age, BMI, 24h-PW, ICIQ-SF, adverse urodynamics, radiotherapy, previous incontinence treatment) and their correlation with surgical outcomes and complications, were analysed. The t-student test was used to compare quantitative variables between two independent groups. In case of qualitative variables, comparison was evaluated by the chi-square test.

Results

Of the 50 patients the SUI causes were: Radical prostatectomy: 42 (24 robotic, 9 laparoscopy and 9 open), 6 transurethral resection and 2 adenectomy. 5 patients had previous history of salvage radiotherapy and 2 of surgery for SUI treatment (ProACT®).

Mean age was 68.34 years (SD 5.29). Pre-operatively, the median 24h PW was 311 grams (range 50 to 660) and BMI mean was 26.58 (SD 2.34).

Twenty-three patients had detrusor overactivity and twenty-five had detrusor underactivity, five of them with acontractile detrusor.

With a median follow-up of 21 months (range 2-53), overall cure rate was 78% (39/50) and the median ICIQ-SF Score improved significantly from 18 (range 11 to 21) to 2 (range 0 to 21). Failure rate was 8% (4/50). Deterioration of continence was observed during follow-up in one patient.

The severity of incontinence was correlated with an inversely outcome but it was not significant (p: 0.064). Not significant correlation was observed with the rest of parameters evaluated with failure rates and complications.

No intraoperative complications were seen. Postoperative complications were observed in 34% (17/50), acute urinary retention in 14 and perineal numbness in 4.

Interpretation of results

The Advance sling is not an obstructive device. None of 5 patients with acontractile detrusor has postvoiding residual. In the case of patients with previous radiotherapy cure rate was 40% but it was not significant. Both patients with proACT device are cured. We removed it during the Advance surgery and increased fibrosis or decreased urethral mobility was not observed.

In all cases, the urinary retention resolved within 2 weeks without further treatment.

Concluding message

The Advance transobturator sling is an effective and safe treatment option for male SUI after prostate surgery.

References

1. Rehder P and Gozzi C: Transobturator Sling Suspension for Male Urinary. Eur Urol 52:860–867. 2007.
2. Collado Serra A, Resel Folkersma L, et al: AdVance/AdVance XP Transobturator Male slings: Preoperative degree of incontinence as predictor of surgical outcome. Urology in press

Disclosures

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