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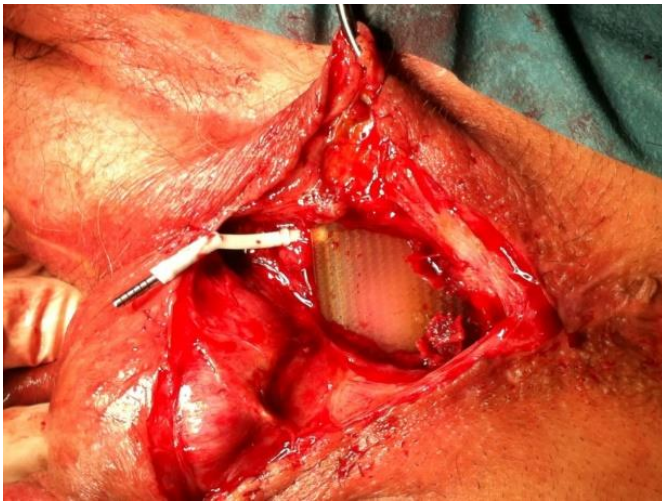
ADJUSTING MALE STRESS URINARY INCONTINENCE

Hypothesis / aims of study

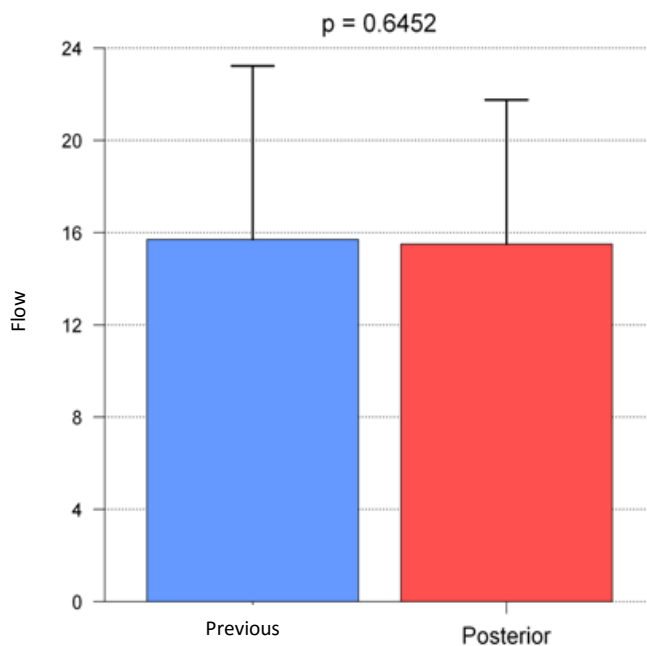
The artificial urinary sphincter (AUS) is the standard treatment for moderate-to severe male stress urinary incontinence (SUI). Recently, new devices have been used for the treatment of mild-to moderate male SUI, and adjustable devices add more surgical possibilities for our patients. We show our experience with ATOMS[®] device in the treatment of male SUI with long follow-up.

Study design, materials and methods

Thirty-seven ATOMS[®] devices have been implanted from September 2012 to March 2016. Mean age was 67 years (60-76). Radical prostatectomy was the most common cause of SUI (95%). Eight patients had received external radiotherapy previously. Twenty-one patients had mild-to-moderate SUI and 43% were severe SUI. Thirty-five devices are still working and they are analyzed. Prospective analysis has been realized. Clinical data, etiology and SUI severity were initially recovered. During follow-up, outcomes, complications and evolution were registered in first month, and 6, 12, 24 and 36 months. Preoperative evaluation was performed by cough stress test, cystoscopy, 24-hours pad-test and urodynamics (flowmetry or complete study).



No changes were founded between flowmetry pre and post-treatment ($p > 0.05$).



Results

Nowadays, 29 patients (83%) are continent (87.5% in 6 months, 93% in 12 months y 82% in 24 months). Four patients have been improved (pad-test 50% less than before surgery) and two patients have been failed. 78% of severe SUI patients are continent. Two devices were removed during implant surgery (one AUS and one mesh). Intraoperative mean volume was 9.6cc into the device. Final mean volume was 15,5cc. Seven abdominal ports and 31 scrotal ports have been implanted. No intraoperative complications have happened. Mean follow-up has been 20 months (2-42 months). Twenty-seven patients have needed adjustment (77%). No relationship between adjustments, device volume and SUI severity were found. During follow-up, a few minor complications have been registered: one scrotal hematoma, one transient scrotal dysesthesia and one perineal pain during three months. Mayor complications have happened too. Two port infections were identified. One patient cured with antibiotherapy, but other needed device removed. One scrotal extrusion was observed and port was removed, but residual device was infected and it had to be removed after. Chronic fracture of ischiopubian branches, urethral stricture and urgency urinary incontinence were developed for one patient, who is failed.

Interpretation of results

ATOMS® device is a good treatment for mild-to-moderate male SUI and its success is constant during follow-up. In fact, this device has proved being a good option opposite AUS, in those patients with severe incontinence.

There is no need to manipulate the device and it allows treating more patients than with AUS.

Minor complications are similar to other synthetic devices. The position on the muscle can avoid urethral complications, especially in those patients who have received external radiotherapy. Our complications are less than published in literature (2).

Concluding message

Mild-to-moderate and selected severe cases of male SUI could be treated with ATOMS®. This device provides high level of success and safety and is simple to implant. It is a good option opposite AUS.

More patients and follow-up are necessary to confirm these promising data.

References

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2. Risk Factors for Treatment Failure With the Adjustable Transobturator Male System Incontinence Device: Who Will Succeed, Who Will Fail? Results of a Multicenter Study. Friedl A, Mühlstädt S, Rom M, Kivaranovic D, Mohammed N, Fornara P, Brössner C. Urology. 2016 Jan 7. pii: S0090-4295(16)00004-2. doi: 10.1016/j.urology.2015.12.044. Epub ahead of print

Disclosures

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