

THE ADJUSTABLE SINGLE-INCISION SLING SYSTEM (AJUST™) IN AN ELDERLY AND OVERWEIGHT POPULATION – RESULTS OF THE FIRST 100 CASES IN A SINGLE INSTITUTION

Hypothesis / aims of study

Risk factors for stress urinary incontinence (SUI) are age, overweight, prior surgical treatment of the pelvic floor, and several concomitant diseases, e.g. COPD. In the growing population of elderly patients with these risk factors, in particular overweight, there is a need for a safe treatment procedure with little invasiveness, high efficacy, and good reproducibility.

Study design, materials and methods

Between 04/2009 and 02/2012 we treated 100 patients with the adjustable single-incision sling system (AJUST™, C. R. BARD, Inc.) with a follow-up of 1 to 23 months (mean 9.3 months). Age ranged from 43 to 86 years (mean 70.3 years). The average body-mass-index (BMI) of the patients with I°, II°, III° SUI, and mixed incontinence was 28.7, 29.6, 30.9, and 30.5, respectively. 88% of the patients had prior pelvic floor surgery (mean 2.2 (0-13) operations). Hospital stay ranged from 1 to 12 days (mean 3.1 days), operation time from 9 to 75 minutes (mean 24.9 minutes). Patients were evaluated by Stamey degree of incontinence, clinical stress test, pad use, and overall satisfaction. To control adequate tensioning of the tape a stress test with 300cc saline filling of the bladder and a Valsalva manoeuvre was performed at the time of the sling placement in every patient.

Results

The procedures were all performed by the same surgeon. They were easily feasible in all patients despite considerable periurethral scarring in many patients. There were no complications like bleeding, bladder injury, or tape infection. We observed 4 cases of urinary retention due to a hypocontractile detrusor (3 temporary, 1 permanent). The postoperative change in Stamey degree of incontinence is figured in table 1.

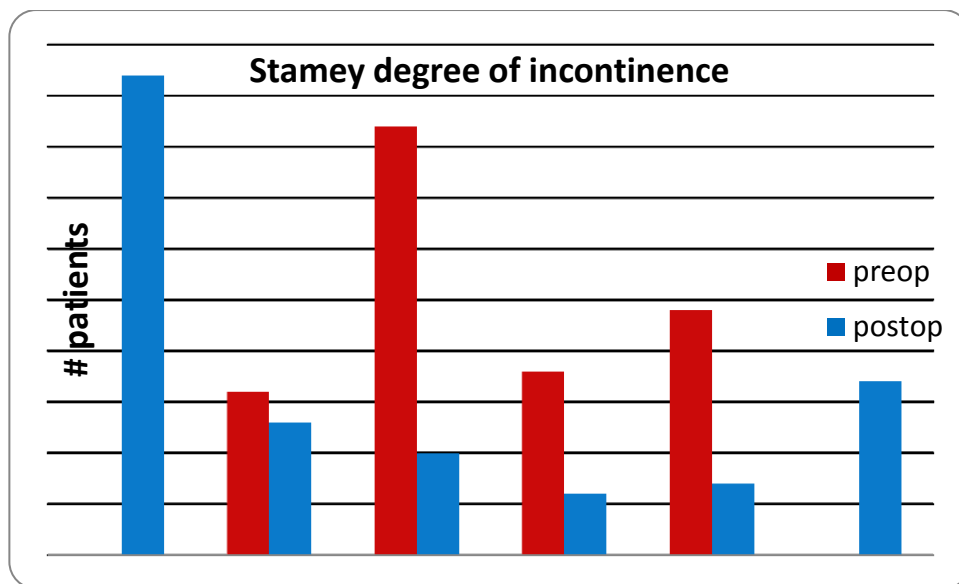


Table 1.

The postoperative pad test was negative in 82/100 patients (82%). If BMI was <30 the pad test was negative in 89.3%, if BMI was >30 it was negative in 72.7%. The average usage of pads per day decreased from 4.9 (1-13) to 1.9 (0-10), overall by 60.7%. 64/100 patients (64%) had a pad reduction of at least 50%. Overall satisfaction with the result was very good in 33/100 patients (33%), good in 28/100 (28%), fair in 12/100 (12%), and poor in 27/100 (27%). The average BMI of the patients with a very good, good, fair, and poor result was 28.7, 29.4, 29.8, and 32.5, respectively. The average age of the 27 patients who were regarded as failure was distinctly above (74 years) the entire cohort.

Interpretation of results

In our single-institution, single-surgeon experience the success rate shows a clear trend in favor of a lower body-mass-index. The cut-off point has been identified at a BMI of 30. But even in obese and morbidly obese patients a considerable success rate is achievable with this quick and minimal invasive procedure. The procedure can be regarded as safe for no complications were observed in this elderly group of patients with multiple risk factors.

Concluding message

The application of an adequate degree of tension to the urethra is the key factor in restoring continence in this selected cohort of elderly and overweight patients. The design of the adjustable single-incision sling ensures an individual tensioning in every patient and an easy feasibility even in morbidly obese patients.

Disclosures

Funding: NONE **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** Retrospective observational study **Helsinki:** Yes
Informed Consent: Yes