

TRANSSCROTAL IMPLANTATION OF AN ARTIFICIAL URINARY SPHINCTER IN 13 PATIENTS WITH URINARY STRESS INCONTINENCE AFTER RADICAL PROSTATECTOMY

Hypothesis / aims of study

Implantation of an artificial urinary sphincter has proven to be effective for managing male urinary stress incontinence. In 2003 a new surgical technique for implantation an artificial urinary sphincter was published by others [1].

Our aim was to apply this method in own patients with urinary stress incontinence due to radical prostatectomy and – in some cases – additional radiotherapy.

Study design, materials and methods

An AMS Sphincter 800 Urinary Control System was implanted in 13 patients with post-prostatectomy urinary stress incontinence lasting for more than one year. Each patient had a period of at least 6 weeks with pelvic floor muscles exercises. 7 Patients had an adjuvant radiotherapy of the periprostatic region because of tumor-positive preparation margins and PSA-relapse or tumor progress. Surgical technique was performed as described before [1]: Using one transverse scrotal incision, the cuff was implanted around the bulbar urethra, the pressure regulating balloon extraperitoneally in the pelvis and the pump into the scrotum.

Results

Surgical procedure could be performed without intraoperative complications in all patients. Mean operative time was 74 minutes (50-90 min); mean blood loss was 48 ml (20-80 ml). The mean followup was 11,8 months. In one patient sphincter device was removed because of pseudomonas infection. 9 (75%) of the remaining 12 patients with artificial sphincter reported complete urinary continence and needed no pads any longer. 3 patients used 1 pad per day postoperatively and reported a very good improvement of continence but minimal and seldom loss of urine in cases of stronger physical activity.

Interpretation of results

The surgical technique of implanting an artificial urinary sphincter by a transversal skrotal incision was performed without intraoperative complications. It's an excellent technique with good access to the bulbar urethra. The rate of postoperative continence after a mean followup of 11,8 months ist good.

Concluding message

A long-term follow-up is necessary to find out the complication rate of this new surgical technique in comparison to the traditional combined transperineal and abdominal technique.

References

- [1] New surgical technique for sphincter urinary control system using upper transverse scrotal incision. J Urol, 2003. 169(1): p. 261-264