

## ARTIFICIAL URINARY SPHINCTER IMPLANTATION AFTER TREATMENT WITH BULKING AGENTS FOR STRESS URINARY INCONTINENCE AFTER RADICAL PROSTATECTOMY

### Hypothesis / aims of study

Currently there are several methods available for the treatment of stress urinary incontinence after radical prostatectomy. One option is the implantation of an artificial sphincter. More minimal invasive methods include the transurethral application of bulking agents. Throughout time various materials have been used as bulking agents. Newer materials are collagen, polytetrafluorethylene or Macroplastique®. Recently Deflux®, a dextranomer/hyaluronic acid copolymer, is also used as a bulking agent in the treatment of stress urinary incontinence. Bulking agents have been suspected to negatively influence the implantation of an artificial sphincter afterwards. Aim of this study was the evaluation whether the treatment with bulking agents of patients with stress urinary incontinence after radical prostatectomy influences the outcome of an artificial sphincter implantation.

### Study design, materials and methods

Between 2003 and 2005 9 patients (Ø-age: 67) with stress urinary incontinence after radical prostatectomy have been treated. 7 patients received Deflux before implantation (n=6: Deflux 3 ml once, n=1: Deflux 3 ml two times) and 2 patients with Macroplastique (n=2: 5-7,5 ml). The pre-operative pad use was 6,3 /24 h in average. Continence was defined as complete continence. 2 patients received a double-cuff, 7 patients received a simple cuff implantation. Continence was evaluated after 3 months (n=9) and after 12 months (n=6).

### Results

Implantation was without problems in all patients, especially regarding the preparation of the bulbous urethra. Surgical time did not differ to patients without treatment with bulking agents. There were no peri- or postoperative complications. All patients were completely continent and did not need any pads.

### Interpretation of results

The treatment with Deflux as a bulking agent for stress urinary incontinence after radical prostatectomy does not seem to influence the surgical procedure or the outcome of a artificial sphincter implantation. Nevertheless our group of patients in this study is rather small and further studies are needed.

### Concluding message

Transurethral injections of bulking agents in patients with stress urinary incontinence after radical prostatectomy do not have a negative influence regarding the surgical procedure of sphincter implantation or the postoperative results.

### References

**FUNDING:** None

**CLINICAL TRIAL REGISTRATION:** This clinical trial has not yet been registered in a public clinical trials registry.

**HUMAN SUBJECTS:** This study did not need ethical approval because approved therapy but followed the Declaration of Helsinki Informed consent was obtained from the patients.