

## STRESS URINARY INCONTINENCE AFTER RADICAL PROSTATECTOMY: LONG TERM EFFECTS OF ENDOSCOPIC INJECTION WITH DEXTRANOMER/HYLAURONIC ACID COPOLYMER

### Hypothesis / aims of study

After radical prostatectomy due to prostate cancer a remarkably number of patients suffer of stress urinary incontinence (SUI). Dextranomer/hyaluronic acid copolymer (Deflux) is a substance which is easy to applicate, with a good biocompatibility and no tendency to migrate <sup>(1,2)</sup>. In a retrospective study 21 patients in our department were injected for mild to moderate stress incontinence after radical prostatectomy. Urethral injection of bulking agents as a minimal invasive treatment option for SUI was controlled for its efficacy and time of duration

### Study design, materials and methods

Between October 2003 and September 2007 21 male patients with mild to moderate SUI postoperative after radical prostatectomy were treated with endoscopic injection of Deflux. Injection site was in the anastomotic area. Prospectively all patients were interviewed by telephone. The endpoint of the study was the presence of incontinence and the number of pads per day respectively. Incontinence was defined as "the complaint of involuntary leakage on effort or exertion, or on sneezing or coughing" according the definition of the International Continence Society (ICS) 2002.

### Results

Operating time was 14 min (5 - 31min). Before injection a suprapubic catheter was inserted. Mean injected volume was 3.2 ml (2,5 – 4.5 ml). Mean hospital stay was 1,1 days (1 - 3 days). One patient had a hematuria from the suprapubic catheter which was treated conservatively. No other complications were reported. After a median follow-up of 30.7 months (8 – 55 months) all patients were interviewed by telephone. Before therapy all 21 patients had mean 3,3 (1-10) Pads/day, In the long term follow up two patients of the 21 patients (9,5%) didn't need any pads and were defined as continent. 19 patients (90,5%) showed no improvement post injection. In these patients the mean number of pads before and postoperatively didn't change significantly ( $p > 0, 3$ ). Meanwhile in 7 of these patients artificial devices were implanted (5 pts artificial sphincter, suburethral slings in 2 pts).

### Interpretation of results

The injection of Dextranomer/hyaluronic acid copolymer (Deflux) for SUI in patients after radical prostatectomy is a minimal invasive treatment option with a low complication rate. In the long term follow up the success rate of this technique was found to be 9,5%. The costs for the amount of used substance were dependent to the injected volume high.

### Concluding message

Only in selected cases endoscopic injection of Deflux can be advised patients with SUI after radical prostatectomy as a treatment option.

### References

1. Stenberg Å, Larsson E, Lindholm A, et al. Injectable dextranomerbased implant: histopathology, volume changes and DNA analysis. Scand J Urol Nephrol 1999; 33: 355-61
2. Lottmann HB, Margaryan M, Lortat-Jacob S et al: Long-term effects of dextranomer endoscopic injections for the treatment of urinary incontinence: an update of a prospective study of 61 patients. J Urol 2006;176(4 Pt 2):1762-1766

<b>Specify source of funding or grant</b>	none
<b>Is this a clinical trial?</b>	Yes
<b>Is this study registered in a public clinical trials registry?</b>	No
<b>What were the subjects in the study?</b>	HUMAN
<b>Was this study approved by an ethics committee?</b>	No
<b>This study did not require ethics committee approval because</b>	Deflux is a substance, which is proved. Deflux is also a substance, which has been used in the therapy of VUR and urinary incontinence in children
<b>Was the Declaration of Helsinki followed?</b>	Yes
<b>Was informed consent obtained from the patients?</b>	Yes