

THREE YEARS RESULTS OF THE ADVANCE SLING

Hypothesis / aims of study

For the treatment of persistent male stress urinary incontinence (SUI) after radical prostatectomy, the artificial urinary sphincter (AUS) is still the established standard. However, in recent years several minimally invasive sling systems were introduced. Several studies with a maximum follow up of two years showed encouraging early results and a low complication rate. Aim of the study was to evaluate the efficacy of the AdVance sling (American medical Systems, USA) in male stress urinary incontinence after radical prostatectomy in a longer follow-up.

Study design, materials and methods

In a single-centre prospective study, 58 patients with grade I to IV stress urinary incontinence due to radical prostatectomy were treated with the AdVance sling. Preoperatively, a standardized pad-test, uroflowmetry, residual urine and quality of life scores (I-QOL and ICIQ-UI SF) were performed. In addition, daily pad use was obtained. Preoperatively, in urethroscopy the sphincter region was assessed and in urodynamic studies detrusor overactivity was excluded. Patients were followed-up for at least three years (range 36-47 months, mean 40 months). 5 patients had an adjuvant radiotherapy before sling implantation.

Results

Mean age of the patients was 68.6 years. Postoperatively, patients showed a significant improvement of incontinence in the pad test, reduction of daily pad use and improvement in quality of life. No significant changes in uroflowmetry and residual urine were obtained. All irradiated patients failed. Main complication was acute postoperative urine retention. Sling explantation rate was very low. After the first four postoperative months, no further complications occurred.

Interpretation of results

After a follow-up of at least 3 years, the results of the AdVance sling are good, safe and stable. AdVance sling implantation after radical prostatectomy can be recommended to patients with stress urinary incontinence after radical prostatectomy with good residual sphincter function.

Concluding message

Also in the longer follow-up, the AdVance[®] sling appears to be an attractive treatment alternative for selected patients with postprostatectomy stress urinary incontinence.

<i>Specify source of funding or grant</i>	None
<i>Is this a clinical trial?</i>	Yes
<i>Is this study registered in a public clinical trials registry?</i>	No
<i>Is this a Randomised Controlled Trial (RCT)?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	EC of the Ludwig-Maximilian-University, Munich
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes