Introduction: An increasing number exists of patients suffering post-radical prostatectomy (RP) stress urinary incontinence (SUI).

The surgical treatment with an artificial urinary sphincter is still the gold standard.

The retrourethral transobturator sling (AdVance) represents a nonobstructive, functional treatment option.

Objectives: To evaluate the efficacy and complications of the AdVance for the treatment of post-RP SUI.

Material and Methods: From May 2007 to August 2010 the AdVance was placed and evaluated in 43 men according to the method described by Rehder and Gozzi (18 patients with SUI post-laparoscopic RP and 25 with SUI post-retropubic RP, 2 of them received radiotherapy).

Preoperative evaluation included history, physical exam, 24-hour pad weights, uroflowmetry and urethrocytostoscopy in all patients. Urodynamics was performed only in cases of bladder overactivity.

The degree of SUI was assessed by pad tests, ICIQ-UI SF questionnaire and Sandvik severity test.

Results: The mean age of patients was 68 years. Median follow up was 21 months (range 3-40m). A cure rate (no pads or one dry security pad) of 65%, an improved rate (one to two pads or pad reduction ≥50%) of 21%, and a failure rate of 14% were observed.

Quality-of-life scores improved considerably. Daily pad use and pad weight decreased significantly postoperatively. No intraoperative complications were observed and no severe postoperative complications were seen.

Conclusions: The AdVance is an effective, safe and minimally invasive therapeutic approach for male SUI resulting from radical prostatectomy. The ideal candidate for this procedure is a patient with mild to moderate SUI without history of radiotherapy treatment.