Abstract

Objectives: UrolumeTM is a stent type, non magnetic, self expanding urethral endoprosthesis indicated to keep the urethral lumen in cases of infravesical obstruction. It has been approved by the food and drug administration. We present our experience with the use of this prosthesis in cases of obstruction secondary to BPH and bulbar urethral stenosis. Methods: From April 1999 to July 2005 we implanted 18 UrolumeTM endoprosthesis in seventeen male patients; 10 of them had symptoms of BPH and 7 bulbar urethral stenosis. We analyze the results of our series. Results: Mean patient age was 61 years [30-79], being the mean age for patients with bulbar prosthesis significantly lower. Among patients with BPH (58.8%, n = 10), 80% (n = 8) had indwelling catheter (40% with ASA III surgical risk and 60% ASA IV). 4 patients have died with only one of them having indwelling catheter at the time of death. The implantation of the endoprosthesis was performed with xylocaine gel in 4 of these 10 patients (40%). The technique failed in two patients, one of them required indwelling catheter for urinary retention (to the time of his death), and the other one extraction of the prosthesis and prostatic adenomectomy for acute urinary retention. Among patients with urethral stenosis (41.2%, n = 7), we needed to implant a second prosthesis telescoped with the first one in one case (due to distal displacement), and to perform 2 transurethral resections of intraprosthesis hyperplastic tissue in the same patient. Subjectively, the mean value of the Madsen-Iversen score before surgery was 22.5 in comparison to 7.78 after surgery (p < 0.005; Wilcoxon test). There were also objectives improvements in mean maximal flow before and after surgery (5.7 to 20.9ml/sec.; p < 0.005; Wilcoxon test). Conclusions: This is a safe and simple technique, which may be performed under local anesthesia as outpatient surgery. It has a low complication rate, significantly improves the flowmetry parameters and symptom questionnaire results. It is a very good option to be taken into consideration in old patients, with chronic urinary retention, and high surgical risk. It may be a valid alternative to surgery in patients with short bulbar urethral stenosis, without previous skin flap urethroplasty and not having spongiosis.

Keywords

Urethral stenosis, Urolume prosthesis, Lower urinary tract obstruction, BPH