A PROSPECTIVE STUDY EVALUATING EFFICACY AND SAFETY OF THE ARTIFICIAL SPHINCTER FOR THE TREATMENT OF POST PROSTATECTOMY INCONTINENCE: CORRELATION BETWEEN PREOPERATIVE URODYNAMIC FINDINGS AND SURGICAL OUTCOME

Hypothesis / aims of study
The artificial urinary sphincter (AUS) AMS 800® is considered the gold standard treatment for post radical prostatectomy urinary incontinence (PRPUI). Few papers in the literature evaluated the efficacy and safety and of this device in a specific population of PRPUI patients in a prospective way. A prospective study addressing this group may be valuable in advising educating patients suffering from this condition.

Study design, materials and methods
Between May 1997 and April 2003, 40 consecutive patients suffering from PRPUI due to sphincter deficiency were treated with the AMS-800® sphincter. Mean age was 68.3 ± 6.3 years. The parameters evaluated were: daily pads count; impact of the urinary incontinence on the quality of life and correlation between preoperative urodynamic parameters and surgical outcome.

Results
The follow up ranged from 39 to 144 months (m = 63.4 ± 21.4 months). There was a significant reduction in pads count from a mean of 4.0 ± 0.9 to of 0.62 ± 1.07 diapers/day (p < 0.001). There was also an important reduction on the impact of incontinence dropping from 4 to 6 (m = 5.0 ± 0.7) to 1.4 ± 0.93 (p < 0.05) in a visual analogue scale. Ninety percent of the patients obtained good continence. Revision rate was 17.5%. Preoperative urodynamic findings did not correlate statistically with surgical outcome.

Interpretation of results
The artificial sphincter is a safe and effective procedure for the treatment of PRPUI. Acceptable levels of complications and revisions accompany the procedure. Preoperative urodynamics does not correlate with surgical outcome.

Concluding message
The artificial sphincter remain as a good choice to treat patients suffering of PRPUI. Although pre-operative urodynamics do not identify the best candidates attention should be given to patients with poor bladder compliance.