Improvement of Severe Baseline Lower Urinary Tract Symptoms Following Prostatectomy

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Introduction and Objectives
Previous studies have shown improvement of lower urinary tract symptoms (LUTS) following prostatectomy, specifically in men with large obstructive prostates. However, improvement of severe preoperative LUTS after robotic assisted laparoscopic radical prostatectomy (RALP) has not been emphasized. The purpose of this study was to examine the relationship between preoperative LUTS and postoperative urinary functioning following RALP.

Methods
529 patients underwent RALP between May 2007 and September 2010 and completed International Prostate Symptom Score (IPSS) surveys at baseline and after a minimum of 6 months follow-up. Patients preoperative LUTS were categorized as mild, moderate, and severe according to the original IPSS validation. An IRB-approved database was queried for patient demographics, clinical and pathologic outcomes. Continence was defined as zero or one security pad daily.

Results
99% of patients were preoperatively continent: 58% of patients presented with mild, 34% with moderate and 8% with severe LUTS. Postoperatively, there was an overall shift toward milder LUTS with 65%, 32%, and 3% of patients having mild, moderate and severe symptoms, respectively. Increased prostate size trended with increased LUTS severity (p<0.001). The mean IPSS scores decreased from 8.0 at baseline to 6.9 after surgery. 25% of patients experienced a clinical improvement while only 16% clinically worsened. The group of patients who had severe pre-operative LUTS witnessed a 60% reduction in IPSS (23.9 to 9.46, p< 0.001). Men with moderate preoperative LUTS also saw a significant decrease in postoperative LUTS (12.0 to 7.9, p<0.001). At 6 months post-op, 88% of all patients were continent including 89% of patients with mild or moderate LUTS and 80% of patients with severe LUTS (p< 0.001).

Conclusions
The majority of patients with moderate or severe LUTS improved significantly following RALP, with the largest improvements seen in the severe group. Patients with severe LUTS should be counseled on the beneficial role of prostatectomy in their voiding dysfunction without concern of increased incontinence.