

PREOPERATIVE DETRUSOR OVERACTIVITY IS A RISK FACTOR FOR EARLY URINARY INCONTINENCE AFTER ROBOT-ASSISTED LAPAROSCOPIC PROSTATECTOMY

Hypothesis / aims of study

To investigate changes in the bladder and urethral function and to detect preoperative parameters have an impact on early urinary incontinence after robot-assisted laparoscopic prostatectomy (RALP).

Study design, materials and methods

This study included 84 consecutive patients who underwent RALP for clinically localized prostate cancer. Urodynamic study (UDS), including filling cystometry, pressure flow study, electromyogram of external urethral sphincter and urethral pressure profile, were performed in the patients before and 3 months after RALP. In this series, continence was defined as free for pad against urinary incontinence. International prostate symptom score (I-PSS), QOL index, and OABSS were also examined before and at 1 and 3 months after RALP.

Results

All Patients included in this series could void spontaneously before RALP. On UDS, maximum cystometric capacity (MCC) and bladder compliance after RALP were significantly reduced than those before RALP. The degree of obstructive symptoms was markedly improved postoperatively, resulting in the significant decrease in maximum detrusor pressure 3 months after surgery; however, detrusor contractility was significantly deteriorated postoperatively. Furthermore, maximum urethral closure pressure (MUCP) and functional length (FL) after RALP were significantly decreased compared with those before RALP. In patients with postoperative incontinence, preoperative MUCP and FL were significantly lower than those in patients without incontinence.

Interpretation of results

On multivariable analysis, detrusor overactivity was preoperative independent predictor of stress incontinence at 1M after RALP.

Concluding message

Both bladder contraction and external urethral sphincter function were not sufficiently recovered 3 months after RALP, and preoperative detrusor overactivity is a risk factor for early stress incontinence after RALP.

Disclosures

Funding: none **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** this study was a retrospective study based on clinical course. **Helsinki:** Yes **Informed Consent:** Yes