

## THE IMPACT OF LAPAROSCOPIC RADICAL PROSTATECTOMY ON LOWER URINARY TRACT SYMPTOMS

### Hypothesis / aims of study

The impact of laparoscopic radical prostatectomy (LRP) on lower urinary tract symptoms (LUTS) in patients with clinically localized prostate cancer was evaluated.

### Study design, materials and methods

Between August 2006 and July 2008, Eighty-nine men with clinically localized prostate cancer underwent LRP. Eighty patients were enrolled and followed for more than 12 months after a LRP. The preoperative and postoperative International Prostate Symptom Score (IPSS), including quality of life (QoL) score, peak urinary flow rate (Qmax) and postvoiding residual urine volume (PVR) were compared (Total, voiding and storage symptom subscores).

### Results

The overall mean total IPSS, maximal flow rate, and postvoid residual urine did not change over time after LRP. Prior to and after LRP, the mean maximal flow rate and residual urine changed from 16.4ml/sec to 19.0ml/sec ( $p=0.083$ ) and 38.2ml to 40.7ml ( $p=0.389$ ), respectively. Total IPSS also changed after LRP, from 13.2 to 13.1 ( $p=0.792$ ). The reduction of the IPSS was more prominent in patients with severe symptoms ( $IPSS \geq 20$ ), whereas in those with moderate symptoms ( $8 \leq IPSS < 20$ ), the score did not change significantly after LRP. Furthermore, in those patients with mild symptoms ( $IPSS < 8$ ), the score increased after LRP.

Table 1. Comparison of uroflowmetry and IPSS prior to and after surgery

	Baseline	After LRP	p-value
Maximal flow rate (ml/sec)	16.5 ± 5.4	19.0 ± 5.3	0.083
Residual volume (ml)	38.2 ± 40.8	40.7 ± 47.0	0.389
Total IPSS	13.2 ± 4.1	13.1 ± 2.8	0.792
Voiding	7.9 ± 2.9	6.9 ± 5.9	0.274
Storage	5.3 ± 2.0	5.6 ± 1.5	0.394
Quality of life	2.6 ± 0.5	3.0 ± 0.5	0.376

### Interpretation of results

LRP may exert a beneficial effect in those patients with severe LUTS, and may also have adverse effects on some individuals with mild symptoms.

### Concluding message

We consider that these result might be utilized when counselling patients about treatment options for localized prostate cancer.

### Disclosures

**Funding:** None **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** PNUH IRB (Pusan National University Hospital Institutional Review Board) **Helsinki:** Yes **Informed Consent:** Yes