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EARLY CHANGES IN LOWER URINARY TRACT SYMPTOMS AFTER ROBOT-ASSISTED LAPAROSCOPIC RADICAL PROSTATECTOMY

Hypothesis / aims of study
Studies on changes in lower urinary tract symptoms (LUTS) after a radical prostatectomy is primarily focused on urinary incontinence and reports regarding changes in other symptoms are scarce. We prospectively evaluated the impact of robot-assisted laparoscopic radical prostatectomy (RLRP) on lower urinary tract symptoms (LUTS) and LUTS related quality of life (QOL) at the early postoperative stage.

Study design, materials and methods
Between July 2005 and November 2006, 64 patients underwent RLRP by a single surgeon. The International Prostate Symptom Score (IPSS) and the IPSS QOL score were administered before and 1, 3, and 6 months after RLRP. 43 patients completed validated self-administered questionnaires. For preoperative total IPSS, the group was divided into those with preoperative mild (IPSS less than 8) and moderate/severe symptoms (IPSS 8 or greater). Changes in IPSS and QOL were evaluated and compared between the groups.

Results
The overall mean total IPSS and IPSS QOL score improved from 13.5 to 10.7 (p=0.012) and 3.0 to 2.4 ( p=0.018), respectively, 6 months after RLRP. However, this improvement came after an aggravation of both the total IPSS and IPSS QOL scores at 1 month post surgery which then gradually improved up to 6 months. Both scores recovered to the preoperative state at 2 months after surgery. The sum of all voiding symptoms (incomplete emptying, intermittency, weak stream, and hesitancy) significantly improved from 7.9 to 5.0 (p=0.000) at 6 months and this improvement was observed from 1 month after surgery. Each of the four voiding symptoms analyzed separately also showed significant improvement at 6 months. However, total storage symptoms aggravated after the operation and gradually improved to the preoperative state at 6 months. The mean total IPSS and IPSS QOL scores in men with moderate to severe LUTS significantly improved at 6 months after operation (p=0.014). However, no changes were observed in men with preoperative mild LUTS at the same time point.

Interpretation of results
RLRP improves LUTS, more specifically, voiding symptoms. This improvement was seen as early as 1 month after surgery and mainly in patients with preoperative moderate to severe symptoms. Overall, initial aggravation of storage symptoms can be expected at 1 month after surgery which gradually improves to preoperative level at 6 months.

Concluding message
There is a difference in voiding and storage symptom changes during the early stages after a RLRP. Moreover, preoperative LUTS may be a significant factor in predicting its change in the postoperative period. Using these data, patients can be warned of changes in LUTS after RLRP.

Specify source of funding or grant
NONE

Is this a clinical trial?
No

What were the subjects in the study?
HUMAN

Was this study approved by an ethics committee?
No

This study did not require ethics committee approval because the study used routine questionnaires used for evaluating LUTS after a prostatectomy.

Was the Declaration of Helsinki followed?
Yes

Was informed consent obtained from the patients?
No