

Comparison of Postoperative Continence Status of the Patients who Underwent Robot-Assisted Laparoscopic Radical Prostatectomy and Retropubic Radical Prostatectomy

(Poster number: 74)

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Introduction

Robot-assisted laparoscopic radical prostatectomy (RALRP) is one of the rapidly developing surgical techniques after the application of robotic surgical systems worldwide. Better visualization of the surgery field, a sharper apical dissection, preserving a longer urethral length, the possibility of nerve preservation, the lack of incisional morbidity, the less need for blood transfusion and early healing period have made the robotic approach an applicable method for radical prostatectomy.

We aimed to compare the postoperative urinary continence rates of the patients underwent RALRP and retropubic radical prostatectomy (RRP) for localized prostate cancer in our clinic.

Results

The demographic data and clinicopathologic characteristics of the patients were comparable in the two groups. The mean operation time was 3.25 hours in the RALRP group and 1.44 hours in the RRP group ($p=0.018$).

After 3 months of follow-up, continence rates for RALRP were 78.8% and 61.6% for RRP ($p = 0.026$).

After 12 months of follow-up, continence rates were 84.3% and 78.5% for RALRP and RRP, respectively ($p = 0.189$).

Methods

We reviewed the data of 951 patients who were treated with the diagnosis of stage I prostate cancer in our department between March 2012 and January 2017. RALRP and RRP operation were performed in 439 and 512 patients, respectively.

Patients' age, preoperative prostate-specific antigen (PSA) value, prostate volume, postoperative tumor Gleason score, operation time, surgical margin and extraprostatic extension status were recorded.

The urinary continence rates of the patients at 3 and 12 months postoperatively were compared between the two groups. The continence status at 3 and 12 months was assessed using the ICIQ-SF validation questionnaire. Complete urine control status was evaluated as urinary continence. Postoperative Kegel exercises were recommended for all patients, otherwise, a medical treatment was not recommended as a routine.

Conclusions

Despite the long operation time, RALRP provides better continence rates in the short term than RRP. However, in the long term, this difference is negligible.

Oncologic outcomes are comparable in both methods.

References

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