P039 Prognostic factors after robotic extended radical prostatectomy in patients with locally advanced prostate cancer

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Introduction & Objectives: The role and benefits of robot-assisted radical prostatectomy (RALP) and extended pelvic lymph node dissection (ePLND) as a primary treatment for locally advanced prostate cancer (PCa) are still unclear. We investigated prognostic factors in men with locally advanced PCa treated with RALP and ePLND.

Materials & Methods: We evaluated 107 patients with locally advanced PCa who underwent RALP ePLND at our institutes between March 2013 and December 2018. The locally advanced PCa cohort was defined by the presence of a primary Gleason pattern 5 on biopsy, >4 cores with a Gleason sum of 8-10, or multiple National Comprehensive Cancer Network high-risk features. None of the patients received any adjuvant therapy. We achieved a wide resection of the surrounding prostate during the RALP. Biochemical recurrence (BCR) was defined as two consecutive prostate-specific antigen (PSA) rises of ≥0.2 ng/ml. The Kaplan-Meier method and Cox regression analyses were used to identify predictors of BCR.

Results: The median follow-up was 25.0 months. The total operating and console times were 222 and 179 minutes, respectively. The median number of lymph nodes removed was 17. The median estimated blood loss was 50 ml, and perioperative complications occurred in 24 (22.4%) patients. Pathological examination of the prostatectomy specimens revealed organ-confined disease, specimen-confined disease, and lymph node metastasis in 28 (26%), 45 (42%), and 37 patients (35%), respectively. A total of 22 patients (21%) were not able to achieve a PSA under 0.2 ng/dl.The median PSA failure-free survival was 26.5 months. Multivariate analysis showed that positive surgical margin (p=0.038) and positive lymph nodes (p=0.064) were predictors of BCR.

Conclusions: Approximately half of patients with locally advanced PCa have specimen-confined disease that can be effectively treated by surgery alone. RALP with a wide resection and ePLND might be a valuable therapeutic option for locally advanced PCa. However, patients with positive surgical margin or positive lymph nodes may be candidates for multimodal treatment.