Clinical Outcome of Laparoscopic Radical Prostatectomy: A Single Surgeon Experience at Kumamoto University Hospital

Introduction and Objective: We report on our experience with 120 extraperitoneal laparoscopic radical prostatectomies (LRP) by a single surgeon.

Materials and Methods: From Sept. 2009 to Sept. 2011, LRP was performed on 120 men, aged 46 to 79 years. The indication of LRP was localized cancer in principle, patient characteristics, surgical statistics, and pathologic results were retrospectively collected.

Results: There were 116 patients with clinically localized prostate cancer who were treated. The only 4 patients were locally advanced cases. The median BMI was 23.6 (range 17.8-35.1). The median operative time was 260 minutes (range 165-570 minutes). The median blood loss (with urine) was 510 ml (range 50-2900 ml). The blood transfusion rate was 0.8% (1/120). No open conversion case was observed. One major complication, DVT (with IVC filter insertion) and 2 laparoscopic repair of a rectal injury were observed. The pathologic stage was pT2a in 10 patients (8%), pT2b in 23 (19%), pT2c in 54 (45%), pT3a in 20 (17%), pT3b in 10 (8%), and pT4 in 2 (2%) uncertain in 1 (1%). Positive surgical margins were found in 3.4% of patients (3/87) with pT2 tumors and 28.1% of patients (9/32) with pT3 or pT4 tumors. The median catheterization time was 5 days (range 4-12 days). The continence rates (no pads or pad for safety) at 1, 3, 6 and 12 months were 19.8%, 44.0%, 75.4%, and 92.0%, respectively. After a nerve-sparing procedure, the total potency rates at 3 and 6 months were 37.5% and 48.8%, respectively.

Conclusions: In this study we reported initial experiences of LRP by a single surgeon. These data were satisfactory in oncological outcome, urinary continence and sexual function. However, we should consider the indication of LRP especially for cases suspected to be locally advanced.