Initial Experience with Robot-Assisted Laparoscopic Radical Cystectomy with Extracorporeal Urinary Diversion

Introduction and Objective: In this study, we report our initial experience with robot-assisted laparoscopic cystectomy (RALC).

Materials and Methods: From October 2011 to December 2011, four patients underwent RALC at the Hiroshima University hospital by a single surgeon using the da Vinci-S HD robotic system. In all patients, the cystectomies were performed by transperitoneal approach and as subsequent urinary diversions, ileal conduit was constructed with extracorporeal fashion through a small skin incision 5 cm in lengh. The median age was 70 (range 64 - 73). The median body mass index was 22.3 (range 19.7-24.3).

Results: All the operations were accomplished successfully without any open conversion. The median console time was 238 minutes (range 332 - 599 minutes). The median estimated blood loss was 375ml (range 150-850 ml). The median time to oral intake was 4 days (range 3-11 days). The postoperative hospital stay was 13 days (range 11- 20 days). One patient had Clavien grade I complication (ileus) . No other special morbidity was recognized. Two patients had pathologic pT1, one patient had pT3b, and one patient had pT2. The patients were followed up for 3 months, all patients survived without tumor recurrence.

Conclusions: RARC is a safe surgical technique with less pain and minor blood loss for Japanese patients as well. It is one direction of minimally invasive urologic surgery.