Post-Chemotherapy Retroperitoneal Lymph Node Dissection for Advanced Germ Cell Tumors at a Single Japanese Center

Introduction and Objective: Post chemotherapy lymph node dissection (PCRPLND) plays an important role in the management of advanced germ cell tumors (GCTs). Guidelines recommend performing PCRPLND for advanced GCT with tumor marker normalization. The aim of this study is to assess efficacy including preservation of antegrade ejaculation at a single Japanese high-volume center.

Materials and Methods: One hundred and eleven patients who had PCRPLND at Kyoto Prefectural University of Medicine between June 1998 and August 2011 were studied. Five cases of desperation RPLND and 6 cases of laparoscopic RPLND were also included.

Results: Median age was 30 years old (17-68y.o.). Seminoma was 11 cases and nonseminoma was 100 cases at primary site. Good, intermediate and poor prognosis group of International Germ Cell Cancer classification was 48, 35 and 20 cases, respectively. Seventy-four cases were treated after induction chemotherapy and 41 cases were done after salvage chemotherapy. Median operation time was 590 min. and median blood loss was 1650ml. Nerve-sparing procedure was performed for 90 cases. Antegrade ejaculation was preserved in 83.5% of this cohort. Especially, antegrade ejaculation was preserved in 93.3% of the patients with bilateral nerve sparing. Necrosi/fibrosis, teratoma only and viable cancer were detected in 54.4%, 32.5% and 13.1%, respectively. An additional procedure such as a nephrectomy was performed in 12 cases. Five-year overall survival was 95.1%. In the desperation group, only one case is alive without disease.

Conclusion: The results of PCRPLND at high volume center could be satisfied and preservation of antegrade ejaculation could be obtained. On the other hand, indication of desperation RPLND had to be carefully considered.