Autologous stem cell transplantation using modified TAM conditioning regimen for clinically aggressive non-Hodgkin’s lymphoma.

Division of Medical Oncology, Department of Internal Medicine, College of Medicine, Catholic University of Korea.

*Sook Hee Hong, Sang Young Rho, Ji Yean Peak, Myung Ah Lee, Byoung Yong Shim, Jae Ho Byun, In Sook Woo, Young Seon Hong

**Purpose:** High-dose chemotherapy and autologous stem cell transplantation (ASCT) has been used for clinically aggressive non-Hodgkin’s lymphoma. The present study evaluated the efficacy and toxicity of a conditioning regimen involving fractionated total body irradiation, Ara-C and melphalan (TAM) for clinically aggressive NHL. Material and Methods: Between March 2002 and December 2004, 31 patients with aggressive NHL received fractionated TBI of 12 Gy over 3 days, 9 g/m² Ara-C and 100 mg/m² melphalan followed by ASCT. Patients who respond to first line chemotherapy and achieved complete remission (CR), or in first sensitive relapse were defined as having less advanced disease, while others were defined as having more advanced disease. Results: Objective responses were obtained in 24 of 31 patients (77.4 %), CR in 19 patients (61.3 %) and PR in 5 (16.1 %) patients. The median follow-up time was 28 months (range 1-62 months). At 3 years, the overall survival and event-free survival (EFS) rates were 62.3 % and 47.3 %, respectively. Patients with less advanced disease and more advanced disease showed 3-year EFS rates of 73.3 % and 22.5 %, respectively (P=0.006). Early treatment-related mortality occurred in 3 (9.7 %) patients. Of the 31 total patients, 15 (48.4 %) developed grade 3 mucositis, 21 (67.4 %) developed neutropenic fever. Conclusions: The modified TAM conditioning regimen and ASCT appeared to be a feasible treatment for clinically aggressive NHL, particularly in patients with less advanced disease.

---

Autologous stem cell transplantation and high-dose therapy in peripheral T-cell lymphoma.

Division of Medical Oncology, Department of Internal Medicine, College of Medicine, Catholic University of Korea.

*Sook Hee Hong, Sang Young Rho, Ji Yean Peak, Myung Ah Lee, Byoung Yong Shim, Jae Ho Byun, Young Seon Hong

**Purpose:** High-dose chemotherapy (HDT) and autologous stem cell transplantation (ASCT) has been used for clinically aggressive non-Hodgkin’s lymphoma (NHL). However the benefit of HDT and ASCT in peripheral T-cell lymphoma (PTCL) has not yet been established. The present study evaluated the efficacy and toxicity of HDT and ASCT in PTCL. Material and methods: We retrospectively analyzed the results of 24 PTCL patients treated with HDT and ASCT between March 2002 and December 2004 at the Catholic Hematopoietic Stem cell transplantation Center of Korea. Results: 14 patients had PTCL-U (peripheral T cell lymphoma, unspecified), 8 had extranodal natural killer/T cell lymphoma, 2 had anaplastic large cell lymphoma. Objective responses were obtained in 21 of 24 patients (87.5 %), comprising complete remission (CR) in 15 patients (62.5 %) and partial remission (PR) in 6 (25 %) patients. The median follow-up time was 26.5 months (range 1-62 months). Only seven (29.2%) patients remain alive without disease. The median overall survival (OS) and event free survival (EFS) was 12.0 and 6 months (95% confidence interval, 1.2 to 10.7 months) respectively. At 2 years, OS and EFS rates were 45.5 % and 33.3 %, respectively. In terms of disease status at transplantation, 5 patients were CR1, 3 in CR2, 9 in PR and 7 in refractory. Early (within the first 100 days) treatment-related mortality occurred in 3 (12.5 %) patients and two of them were refractory disease status. In multivariate analysis, disease status at transplantation was only significant prognostic factor in EFS (p=0.005). Conclusions: The result of HDT and ASCT in PTCL was not satisfactory. The newer treatment approaches are needed to improve the outcome in these patients.