progressive disease. A randomized trial comparing different maintenance regimens post ASCT is needed to determine best regimen.

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PROGNOSTIC SIGNIFICANCE OF PRE-TRANSPLANTATION FDG-PET/CT IN PATIENTS WHO UNDERGO ALLOGENIC STEM CELL TRANSPLANTATION FOR LYMPHOMA

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A positive scan in pre-transplantation fluorine-18 fluorodeoxyglucose positron emission tomography (FDG-PET) has been shown to be associated with a poor prognosis in patients with malignant lymphoma (ML) undergoing high-dose chemotherapy followed by autologous stem cell transplantation (SCT). However, it remains unclear with allogeneic SCT. Therefore, we conducted a retrospective analysis of 52 consecutive patients with ML who had undergone FDG-PET scan before allogeneic SCT at our institution from January 2005 to July 2010. The median age was 52 years (range: 20-64), and the median follow-up after allogeneic SCT was 475 days (range: 46-1553). Twenty-three patients were FDG-PET-negative and twenty-nine were positive with a median SUV of 7.23 (range: 2.7-17.82). Nine indolent lymphomas and 14 aggressive lymphomas were PET-negative, while 14 indolent and 15 aggressive lymphomas were PET-positive (p = 0.52). Among the PET-negative patients, 5 and 18 received myeloablative and reduced-intensity conditioning respectively. On the other hand, 9 of the 20 PET-positive patients received myeloablative conditioning (p = 0.54). Other characteristics (age, serum LDH, extranodal sites, donor source) were not significantly different between the PET-positive and PET-negative groups. Although the cumulative incidence of progression at 1 year was lower in the PET-negative patients, there was no statistical significance (15% vs 31%, p = 0.35). Although overall survival (OS) and progression-free survival (PFS) rate at 3 years after allogeneic SCT were higher in the PET-negative patients, there were no statistical significances (OS 83% vs 58%, p = 0.21; PFS 67% vs 53%, p = 0.22). Median survival time was not reached in either PET-negative or -positive patients.A multivariate analysis by Cox regression analysis showed that high serum LDH was associated with an increased risk of poor OS (HR 4.11, 95% CI 1.23-13.78, p = 0.02). On the other hands, a positive PET findings did not significantly affect the OS (HR 1.80, 95% CI: 0.46-6.96, p = 0.40). In conclusion, ours study suggested that, in contrast to the setting of autologous SCT, a positive pre-transplant PET finding may not be a predictor of poor OS in patients with lymphoma who underwent allogeneic SCT.

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HEMATOPOIETIC STEM CELL TRANSPLANTATION IN LYMPHOMA PATIENTS: THE IRANIAN EXPERIENCE

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Background: Autologous hematopoietic stem cell transplantation (HSCT) is a potentially curative treatment in patients with lymphoma including Hodgkin's disease (HD) and non-Hodgkin's lymphoma (NHL).

Patients and Methods: 416 lymphoma patients (269 male and 147 female) with a median age of 25 years (range: 12-60 years) in 204 HD patients and a median age of 33 years (range: 8-62 years) in 206 NHL Patients had received HSCT in our center from January, 1992 through October, 2010. The most common subtypes of NHL Patients were 86 (42%) diffuse large B-cell lymphoma and 35 (17%) lymphoblastic lymphoma. The most common status of disease before transplantation was First and second complete remission in NHL patients and second complete remission in HD patients. The sources of hematopoietic stem cells for lymphoma patients were 397 peripheral blood (194 NHL, 203 HD), 16 bone marrow (10 NHL, 6 HD) and 3 patients with combined Peripheral blood and bone marrow (2 NHL, 1 HD).

Results: The median time (days) to Absolute Neutrophil Count > = $0.5 * 10^9$/L was +14 in HD and +13 in NHL patients. The median time (days) to platelet count > = $20 * 10^9$/L was +22 in HD and +18 in NHL patients. The median follow up time was 14 months. The three years, disease-free survival (DFS) for HD and NHL patients was 78.8% and 63.3%, recpectively. The three years overall survival (OS) for HD and NHL patients was 91.8% and 71.4 %. Acute and chronic GVHD occurred in 16 (53.3%) and 7 (23.3%) of NHL patients with Allogeneic HSCT. The three years, DFS for autologous and allogeneic transplantation in NHL patients was 64.9% and 56.3% (p = 0.543).The three years, OS for autologous and allogeneic transplantation in NHL patients was 72.2% and 68.5 %, (p = 0.843).

Conclusion: Our results confirm that autologous HSCT is a suitable treatment in patients with NHL and relapsed HD. More importantly, there is no significant difference between autologous and allogeneic HSCT in NHL patients.

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AUTOLOGOUS STEM CELL TRANSPLANTATION AS FRONT LINE THERAPY DOES NOT IMPROVE THE OUTCOME OF HIGH RISK AGGRESSIVE NON-HODGKIN'S LYMPHOMA: A SINGLE CENTER STUDY

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Background: The role of high dose therapy (HDT) followed by autologous stem cell transplantation (ASCT) as front-line therapy in the high risk aggressive non-Hodgkin's lymphoma (NHL) patients is still a matter of debate, but several studies demonstrated the efficacy of HDT. Since Rituximab added to CHOP chemotherapy, OS and PFS were significantly improved. Therefore, we analysed to compare conventional chemotherapy with HDT followed by ASCT in aggressive NHL.

Patients and Methods: We retrospectively reviewed the medical records of 357 patients with primary diagnosed aggressive NHL from January 2002 to December 2009. Among them, we select patients who achieved to complete or partial remission after first induction chemotherapy or had ≥ 3 International Prognostic Index (IPI) scores or stage III, IV. Among 357 patients, 42 patients younger than 65 years were enrolled and categorized to two groups: conventional chemotherapy group (n = 33, 79%) and HDT followed by ASTC group (n = 9, 21%).

Results: The median age at the time of diagnosis was 46 years (range, 15-64). Diffuse large B-Cell lymphoma (DLBLC, 48%), T-cell lymphoma (38%), lymphoblastic lymphoma (7%) was included. The proportion of Rituximab including regimen for induction chemotherapy were 49%. The five-year overall survival rate was not significantly different between two groups (72% in chemotherapy group vs. 70% in HDT group, $P = 0.73$). And the estimated progression free survival at five years was not significantly different between two groups (51% in chemotherapy group vs. 53% in HDT group, $P = 0.63$).

Conclusion: The efficacy of HDT followed by ASTC during first-line treatment in patients with aggressive NHL does not improve the outcome and should be evaluated in randomized trials.

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TRANSPLANT OUTCOMES IN MULTIPLE MYELOMA PATIENTS YOUNGER VERSUS OLDER THAN 60 YEARS OF AGE IN THE ERA OF NEWER TARGETED AGENTS

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Introduction: Various newer agents are available recently and revolutionized treatment of myeloma and are used with intention to overcome the adverse influence of cytogenetic abnormalities. We were