

and has poor transplant outcome with a high TRM, a lower EFS and a lower OS.

3. Group 2 ($0.30-0.85 \times 10^8/\text{kg}$) had the best overall engraftment (both ANC and PLT) of close to 80%. TRM was lowest in this group at 13% but the rate of relapse was higher than the other groups.

4. Group 3 ($0.86-2.83 \times 10^8/\text{kg}$) received higher than the median MNC cell dose. Compared to Group 2 though this group shows a lower engraftment it shows comparable EFS. This group shows that a higher cell dose results in higher TRM (8 of 9 patients) and fewer relapse (4%).

Transplant Outcome

MNC dose group ($\times 10^8/\text{kg}$)	Overall (0.08- 2.83)	(1) ≤ 0.29	(2) 0.30- 0.85	(3) ≥ 0.86
n=	92	19	46	27
ANC engraftment	63; 68.5%	10; 52.6%	38; 79.2%	15; 55.6%
PLT engraftment	58; 63%	10; 52.6%	36; 78.3%	12; 44.4%
Days to ANC	24	36	26	18
Days to PLT	44	56	46	34
TRM	22; 23.9%	8; 42%	6; 13%	8; 29.6%
Relapse	13; 14.1%	3; 15.8%	9; 19.6%	1; 3.7%
EFS	57; 62%	8; 34.8%	31; 67.4%	18; 66.7%
OS (days)	706	326	1396	603

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HEMATOPOIETIC STEM CELL TRANSPLANTATION FOR HEMATOLOGICAL DISEASES AT YEDITEPE UNIVERSITY HOSPITAL

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Stem cell transplantation(SCT) is an effective treatment modality in hematological malignancies. SCT Unit at Yeditepe University Hospital(CIC-919) was activated in October 2005 and accredited for unrelated SCT by EBMT in April 2006. Until September 2006, 13 autologous and 17 allogeneic (4 unrelated) SCT have been performed. Diagnosis of patients who underwent auto-SCT consisted of HL(n=6), NHL(n=4) and myeloma (MM, n=3). Patients undergoing allo-SCT had HL(n=2), NHL(n=2), MM(n=3), CML(n=3), CML-BT(n=3), AML(n=2), ALL(n=1), and Thalassemia(n=1). Median age was 38,5 (20-65) years and mean time from diagnosis to transplant was 2,3 years. Patients received a mean number of 8 (2-18) salvage regimens prior to transplantation. All patients engrafted and median engraftment period was 11 (8-14) days. Transplantation related mortality(TRM) was not observed during the first 100 days and follow-up. Median follow-up period was 5,4 (1-10,5) months. During follow-up, 5 patients (16%) relapsed and 2 patients died (6%). Of 28 (94%) surviving patients, 24 (80%) are in CR. All patients (100%) were alive following auto-SCT at day +100, only one patient with myeloma died due to relapse at 9 months. In the allo-SCT group, 16 (94%) of patients were alive at day +100, only one patient died due to relapse of CML-BT. Post-transplant complications were CMV viremia(n=9), CMV colitis(n=3), sinusoidal occlusion syndrome(n=1), BK viremia and hemorrhagic cystitis(n=2), renal failure(n=1). Reversible blindness due to hypophyseal tumor apoplexy in a patient at day +11 was successfully corrected by neurosurgery. Grade II- III acute GVHD was observed in 8 patients(47%). All patients with acute GVHD were successfully treated without mortality. A patient with refractory ALL associated with CNS and eye involvement achieved complete remission following allo-SCT combined with modulated radiotherapy (IMRT). All 4 patients (100%) who underwent unrelated-SCT following autologous transplantation complicated with relapsed-refractory disease are alive and 3 were in CR at day +100 (2 HL, 1 NHL). Of 7 patients undergoing allo-SCT as a second transplant, 6 (85%) are alive; in this group, only one patient with MM (15%) died due to relapse. The high survival rate (94%) achieved following autologous and/or allogeneic SCT including unrelated transplants, low TRM (0%) and the high remission rate (80%) may be related to

team approach, 24-hour patient follow-up, and effective management of acute GVHD.

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VALIDATION OF THE HEMATOPOIETIC CELL TRANSPLANTATION-COMORBIDITY INDEX (HCT-CI) FOR NON-RELAPSE MORTALITY (NRM) AND SURVIVAL AFTER MATCHED UNRELATED DONOR SCT

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Background: The HCT-CI is a recently developed comorbidity score which has been adapted to hematopoietic stem cell transplantation, with higher scores associated to worse outcomes (Blood 2005;106:2912). We determined the HCT-CI score in a cohort of patients who underwent conventional MUD transplantation in a single arm, single institution trial assessing efficacy of a 3-drug combination of cyclosporine, methotrexate and prednisone for GVHD prophylaxis from 1996-2005.

Methods: The analysis included all patients undergoing MUD transplant who received GVHD prophylaxis with cyclosporine 2 mg/kg iv BID from day -2, methotrexate 15 mg/m² iv on day +1 and 10 mg/m² iv on days +3 and +6, and methylprednisolone 0.25 mg/kg iv BID beginning on day +7 and tapering at day +28. Patients were stratified by disease risk per CIBMTR classification. The comorbidities were obtained by retrospective chart review and scored according to the HCT-CI score.

Results: 133 patients received the 3 drug-regimen, including 26 % with low-, 36 % with intermediate- and 38 % with high-risk disease. Diagnoses included acute leukemia in 50%, MDS in 9.8%, CML in 16.5%, lymphoma in 18.1%, multiple myeloma in 3.0%. 52 % were older than 40. Source of stem cells was PBSC in 47.4%, marrow in 51.9%, and both in 0.8%. Among the 133 patients, 22%, 31% and 47% had HCT-CI scores of 0 vs 1-2 vs ≥ 3 , respectively. Overall NRM was 26.3% and 36.8%, at 3 months and 1 year, respectively. Three and 12 month NRM was 13.3%, 14.6 and 40.3% and 30%, 22% and 50% among patients with scores of 0 vs 1-2 vs ≥ 3 , respectively. HR rates for 3 month NRM were 1.10 and 3.7 for HCT-CI scores 1-2 and ≥ 3 . Kaplan-Meier assessment showed 42.1% 5 year OS for the whole cohort. OS of 60%, 48. % and 28.1% were observed in patients with scores of 0 vs 1-2 vs ≥ 3 , respectively (p < 0.05). No statistically significant differences in OS were observed between low-, intermediate- and high-risk CIBMTR disease groups.

Conclusion: HCT-CI was a powerful predictor of 3 and 12 month NRM, as well as of 5 year OS in this cohort of MUD patients. It will be useful for patient stratification in clinical trials and for treatment allocation.

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SYNGENEIC STEM CELL TRANSPLANTATION FOR APLASTIC ANEMIA IN AN HIV+ PATIENT

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Allogeneic hematopoietic stem cell transplantation from HLA identical siblings is an effective treatment for aplastic anemia in young patients. Heavily transfused patients have shown an increased risk of graft rejection requiring a more intensive immunosuppressive conditioning. Usually a combination of cyclophosphamide (Cy) with total body irradiation (TBI) or more recently with antithymocyte globuline (ATG) is used.

We report a 32 year old patient with haemorrhagic manifestations, haemodynamic instability and pancytopenia, admitted to the Hospital in February 2005. Bone marrow biopsy performed, confirmed the diagnosis of aplastic anemia, Human Immunodeficiency Virus (HIV) seropositivity was assessed by 2 different methods. No other