Adult Hematology Abstract Categories

Stem Cell Transplant
OP 10

LONG-TERM OUTCOMES OF ALLOGENEIC STEM CELL TRANSPLANTATION FOR RELAPSED/REFRACTORY HODGKIN AND NON-HODGKIN LYMPHOMA: MULTI-CENTER EXPERINCE FROM TURKEY

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Objective: In this multicenter retrospective study, we evaluated the efficiency on survival and safety of allogeneic hematopoietic stem cell transplantation (allo-HSCT) in patients with relapse/refractory (R/R) Hodgkin lymphoma (HL) and non-Hodgkin lymphoma (NHL). **Methodology:** A total of 110 patients with R/R HL or NHL who underwent allo-HSCT were evaluated between July 2007 and October 2022 in 7 adult stem cell transplantation centers. The primary endpoints of this study were progression-free survival (PFS), graft versus host disease-free, relapse-free survival (GRFS) and overall survival (OS) after the allo-SCT **Results:** Forty-one (37.3%) of total patients were diagnosed with HL, 69 (62.7%) were NHL. The median age at the time of transplantation was 39,5 years (16-67) and 66 (60%) of them male. The mean follow-up time was 67,5±8.1 months and the rates of 5-years OS, PFS, and GRFS were 38.4%, 59.3% and 49.5% respectively. In multivariate analysis, OS was significantly impacted by both conditioning regimen type and acute GvHD degree. Myeloablative conditioning regimen and grade 3-4 acute GvHD had a statistically significant negative effect on OS (HR: 1.74, 95% CI: 1.02-2.98, p=.042, and HR: 2.03, 95% CI: 1.12-3.68, p=.019, respectively). Mismatch unrelated donor (HR: 3.91, 95% CI: 1.58-9.67, p=.003) and CMV reactivation (HR: 1.99, 95% CI: 1.11-3.58, p=.020) were statistically significant negative effect on GRFS. **Conclusion:** According to our results, PFS, OS, and GRFS are not impacted by the disease subtype. However, the transplantation results are affected by the conditioning regimens, donor type, acute GVHD status, and CMV reactivation

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Adult Hematology Abstract Categories

Other Diseases
OP 11

INCREASED CAROTID INTIMA MEDIA THICKNESS AS AN INDICATOR OF INCREASED CARDIOVASCULAR RISK IN PATIENTS WITH PRIMARY FAMILIAL ERYTHROCYTOSIS

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Objective: Erythrocytosis is a group of disorders frequently encountered in haematology practice. Erythrocytosis (polycythemia) is considered to be an elevated haemoglobin (Hb) and/or haematocrit ratio (Hct) in peripheral blood. This ratio is defined as an Hb value >16.5 g/dL in males and >16.0 g/dL in females and an Hct value >49% in males or >48% in females. Erythrocytosis is basically divided into primary and secondary according to EPO (Erythropoietin) level. Both groups are divided into hereditary and acquired forms. EPO level is normal in the primary form. Primary Familial Erythrocytosis (PFE) form often includes EPO mutations (germline mutations). Mutations in EPO receptors result in increased erythrocyte production despite physiological EPO levels. It is inherited and often has a family history of early cardiovascular and cerebrovascular disease events. Primary acquired polycythaemia is Polycythaemia Vera, which includes (somatic mutations; clonal) (JAK2 mutations). Here JAK mutations have mutations of the JAK2V617F or Exon 12 region. It is a chronic myeloproliferative disease involving the bone marrow with the risk of leukaemia and myelofibrosis. The basic rule in secondary causes is increased EPO levels. Secondary inherited type includes germline mutations (VHL, EGLN1, EPAS) and methaemoglobinaemia. Acquired secondary polycythaemia is mainly due to hypoxic causes. In this group of patients, lung, cardiac, endocrine, high altitude and renal transplantation are the main causes. In the approach to polycythaemic patients in haematology outpatient clinics, patients are followed up with intermittent phlebotomies unless the patient has P Vera, normal EPO and JAK mutation. There is no common follow-up and treatment integrity for this group of patients including our study. Although PFE does not have the risk of haematological malignancy, cardiac and cerebral events at an early age are common in family members in the anamnesis of patients. In line with this result, we wanted to evaluate the possible cardiovascular risk in patients in the PFE group and measured carotid intima-media thickness (CIMT) with high-resolution B-mode carotid

ultrasonography, which is known to be a suitable method for detecting subclinical atherosclerosis. Our study was supported by TUBITAK with 1002 programme code and 215S524 project number. Increased CIMT is an indicator of atherosclerosis and increased risk of cardiovascular disease. In our study, we found that CIMT measurements were increased in PFE patients compared to the control group. With this result, we think that subclinical atherosclerosis is increased in these patients. Our aim is to ensure that increased cardiovascular risk in this group of patients and their family members should be taken into consideration and examined more closely. **Methodology:** The study included 64 polycystic patients admitted to Namık Kemal University Medical Faculty Haematology outpatient clinic. Hb levels above 16.5 g/dL in males and 16 g/dL in females were considered polycythaemic. Patients with normal EPO levels and JAK2 analyses (-) were considered as PFE. As a control group, 29 healthy subjects with normal Hb levels were included in the study. Patients with high EPO levels and JAK2 analyses (+), known malignancy and active infection were excluded from the study. CIMT measurements were performed in the supine position with their heads tilted backwards after resting for 15 min. The right and left carotid arteries were imaged by an experienced cardiologist using a high-resolution B-mode ultrasound device (GE Vivid S5: General Electric VingMed Systems, Horten, Norway) with a 12L-RS broadband linear transducer. Right and left common carotid arteries were visualised in the longitudinal plane. The measurements were made manually by determining a 1cm segment 2 cm below the carotid bulb. 3 measurements were averaged. Carotid plaques were not included in the measurement. **Results:** IMTs of the patients were determined as follows. Both CIMT were found to be higher in the patient group. Significant carotid intima media thickness was found in the patient groups compared to the control group. This difference was detected in both carotid arteries. **Conclusion:** Cardiovascular and cerebrovascular events are common in family members of PFE patients, especially with male predominance and sudden death occurring at a young age. Although PFE patients have increased cardiovascular risks, they are often not followed up closely enough from a cardiac point of view in outpatient clinics. Mutations defining PFE are not frequently used in clinical practice. These mutations are mostly found in the 8th exon of the EPO receptor gene. However, since the frequently defined mutation cannot be demonstrated in many cases, the term idiopathic familial polycythaemia is used instead of PFE in some sources. Studies have shown that cardiac load will increase due to increased viscosity as a result of increased erythrocyte mass and endothelial dysfunction will occur due to increased shear stress in the endothelium. An increase in CIMT is an early indicator of subclinical atherosclerosis. As a result of our study, we found that the increase in CIMT, which is an indicator of increased cardiovascular risk, was significantly and statistically significantly increased in the patient group compared to the control group in B mode ultrasond measurements. PFE patients require combined follow-up in haematology and cardiology outpatient clinics. We believe that family investigations are important for the protection of future generations. We think that it is important to screen family members in PFE patients beyond defining a possible risk of cardiovascular disease only in the patient himself/herself in order to prevent complications that may occur in the future and for preventive medicine.

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OP 12

OUTCOME OF APLASTIC ANEMIA ACCORDING TO DISEASE SEVERITY

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Objective Background: Aplastic anemia is pancytopenia with a hypocellular bone marrow [<25 % (or 25 to 50 % if <30 % of residual cells are hematopoietic)] due to failure of the bone marrow in the absence of marrow fibrosis or abnormal infiltrates. For therapeutic guide, the disease is classified into moderately severe, severe and very severe aplastic anemia depending on the degree of cytopenia .Accordingly, patients with severe or very severe forms are started on therapy urgently while patients suffering from non-severe AA are treated conservatively with as needed PRBCs, platelets and growth factors support. Allogenic Hematopoietic stem cell transplantation is the standard of care for young patients with severe AA. **Aims:** Survival following allogenic Hematopoietic stem cell transplantation or immunosuppressive therapy were compared in aplastic anemia according to severity and the prognostic factors related with survival identified. **Methodology:** This is a retrospective study of 156 patients with AA. The outcome of these patients were first analyzed according to the first-line treatment received (SCT vs. IST with no subsequent transplant). The outcome was further stratified based on their risk stratification into moderate, severe, and very severe. Patient's characteristics were summarized using frequencies with percentages for categorical variables and medians with interquartile ranges for continuous data. Probabilities of OS and EFS were summarized using Kaplan-Meier estimator. Survival curves were compared using log-rank test. P-value< 0.05 was considered significant. Analysis was conducted using RStudio 2022.07.2 Build 576 ©ℓ 2009-2022 RStudio, PBC. **Results:** A 156 patients, 92 (59%) were treated with SCT and 64 (41.0%) with IST. 24(15.4%) patients were moderately severe AA, 56 (35.9%) severe AA and 76 (48.7%) very severe AA. Overall survival was 83.7 % in the allogenic hematopoietic stem cell transplantation and 78.8 % in patients given immunosuppressive therapy front-line group (P=0.4).In both group overall survival was 97 % for moderately severe AA, 82 % for severe AA and 77 % for very severe AA. In the allo-SCT cohort, under multivariate analysis, Overall survival for moderately severe, severe and very severe aplastic