

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 ultrasound 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 © 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

anemia was 66.0%, 81.4% and 86.3 % respectively ($P=0.5$). While, in IST group OS for moderately severe, severe and very severe aplastic anemia was 93.8%, 86.6% and 56.1 % respectively ($P=0.005$). Age of 20 years or under positively affected overall survival in allogenic hematopoietic stem cell transplantation group, whereas age more than 20 years negatively affected overall survival in this group. The factors influencing the overall survival were use of allo-SCT, an age under 20-years-and moderately severe AA. **Conclusion:** Aplastic anemia in adolescents has a very good outcome. If a matched sibling donor is available, Hematopoietic stem cell transplantation is the first choice treatment. If such a donor is not available, immunosuppressive treatment may still be an acceptable second choice also because, in case of failure, hematopoietic stem cell transplantation is a very good rescue option. Use of SCT, age of < 20 years in sever AA and IST in non-severe AA were favorably associated to OS. Therefore, younger age SAA patients, with HLA-matched donors, may benefit more from allo-SCT.

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OP 13

GLOBAL RESEARCH PATTERNS ON BLOOD DONOR DEFERRAL: AN ANALYSIS OF THEMES, TRENDS, AND INFLUENCE

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Background: Blood banking relies heavily on deferral policies for safety. Recognizing current academic themes can highlight research opportunities, encourage collaboration, ensure funding, understand audience interests, steer public sentiment, and inspire productive competition, thereby prompting impactful studies. **Materials and Methods:** We analyzed 1034 blood deferral papers from Web of Science and Scopus, focusing on publication count, uniqueness, timeline, and themes like Men who have Sex with Men (MSM), HIV, COVID-19, anemia, and machine learning. We also assessed the global distribution of these studies to understand prevalence and associations with geography, demographics, and economic factors. **Results and Conclusions:** The study uncovered 1037 articles; MSM (107), HIV (234), Anemia (201), COVID-19 (40), and machine learning (59). Most papers were from the US, UK, Canada, reflecting their robust research capabilities. The US led in HIV and anemia studies, with India significantly contributing to anemia research. India led in COVID-19 studies,

with substantial participation from the US. Machine learning research primarily came from the US and India, with significant Chinese contributions. The trending literature on blood deferral underscores the need to comprehend evolving blood banking dynamics. Machine learning, with its transformative capacity, is a prime research area. These insights could guide future studies and policymaking, maintaining blood safety.

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OP 14

UNUSUAL PRESENTATION OF RHABDOMYOSARCOMA WITH BONE MARROW INVOLVEMENT AND CERVICAL MASS: A 17-YEAR-OLD FEMALE CASE REPORT

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Background: Rhabdomyosarcoma (RMS) is a rare type of cancer that originates in the skeletal muscle cells. It's most commonly found in children but can occur at any age. The cancer is characterized by the presence of cells that resemble immature muscle cells, and it can grow and spread rapidly. Rhabdomyosarcoma (RMS) is a rare cancer that originates in skeletal muscle cells and can be found in various parts of the body, including the head and neck, genitourinary tract, extremities, and other less common areas such as the trunk and retroperitoneum. Bone marrow infiltration in Rhabdomyosarcoma (RMS) is a relatively rare occurrence. We are presenting a case Rhabdomyosarcoma with Bone Marrow Involvement and cervical Mass. **Case Report:** A 17-year-old female patient with no known previous illnesses presented to an external center with complaints of coughing, difficulty swallowing, weight loss, and fatigue that had begun a month prior. During a physical examination, a 2 cm mass was observed in the left cervical region, along with an enlarged appearance of the thyroid gland. Complete blood count revealed hemoglobin at 10.6 g/dL, leukocytes at 1000 mm³, neutrophils at 200 mm³, and platelets at 70000 mm³, leading to a referral to a hematology clinic. Upon repeated observation of pancytopenia, early myeloid precursors were seen in a peripheral smear. Due to a high suspicion of lymphoma, a bone marrow biopsy was performed, revealing widespread mononuclear cell infiltration. Immunohistochemical analysis showed desmin(+), myogenin (+), and Ki67 80% positivity, leading to a diagnosis of rhabdomyosarcoma. A PET-CT scan to determine the extent of the