

lifespan due to factors extrinsic to RBCs or structural changes in RBCs. As a result of the increase in RBC hemolysis, anemia and associated clinical symptoms become manifest. Hemolytic anemias can be categorized under two broad titles: hereditary and acquired. Here, we present a case diagnosed with pemphigus vulgaris who was determined to have Glucose-6-phosphate dehydrogenase (G6PD) deficiency based on the tests performed subsequent to hemolytic anemia that occurred during dapsone therapy. **Case report:** 66 year-old female patient presented to the dermatology polyclinic with raised erythema and bullous lesions in a butterfly distribution on the face involving the eyelids. The patient was diagnosed with pemphigus vulgaris based on punch biopsy and, as treatment, was started on 2 × 50 mg dapsone (PO), 1 × 16 mg methylprednisolone (PO) and corticosteroid pomades. Blood parameters at diagnosis were as follows: leukocyte, $8.1 \times 10^9/L$ (4.4-11); hemoglobin (Hgb), 12.3 gr/dl (12-16); thrombocyte, $270 \times 10^9/L$ (142-424); MCV, 86 fl (80-100); LDH, 210 U/L (135-214); ALT, 22 U/L (0-33); AST, 16 U/L (0-32); direct bilirubin, 0.5 mg/dl (0-0.3); indirect bilirubin, 0.8 mg/dl (0.1-0.9); creatinine, 0.59 mg/dl (0.5-0.9); folate, 10 ng/ml (5.4-24); vitamin B₁₂, 310 ng/ml (210-910). The patient presented to the dermatology polyclinic 6 days after the onset of treatment due to fatigue, pallor, icterus of the sclerae. The patient was referred to the hematology polyclinic based on the following test results: Hgb, 3.8 gr/dl; leukocyte, $11 \times 10^9/L$; thrombocyte, $222 \times 10^9/L$; MCV, 108 fl; creatinine, 0.8 gr/dl; LDH, 810 U/L; indirect bilirubin, 6.4 mg/dl; direct bilirubin, 0.8 mg/dl. The patient's history and anamnesis did not include a similar condition that followed medication use or an operation. On physical examination; sclerae were icteric, skin was pale, and there was no organomegaly or peripheral lymphadenopathy. In addition, urine was dark in color. On peripheral blood smear; macrocytosis, anisocytosis-poikilocytosis, polychromasia and Heinz bodies were observed. Corrected reticulocyte was determined as 5.2% (0.5-2%); ANA, anti-dsDNA, direct Coombs (IgG) and indirect Coombs' tests were negative. The haptoglobin level was determined as 8 mg/dl (30-200) and was below the reference range. As the present hemolytic anemia picture was reasoned to be associated with dapsone, the medication was stopped and 16 mg methylprednisolone was started. No pathological findings were determined on abdominal ultrasonography and lung radiography. Based on the perception that anemia was associated with dapsone, G6PD enzyme levels were examined. The patients' G6PD level was found as 3.52 IU/gHb (7.48-10.20 IU/gHb), and was below the reference. During follow-up, fatigue, subicterus and pallor improved. Hgb levels increased, LDH and indirect bilirubin levels showed a gradual decrease. Blood parameters after 10 days were as follows: Hgb 11.8, gr/dl; leukocyte, $7.6 \times 10^9/L$; thrombocyte, $234 \times 10^9/L$; MCV, 98 fl; creatinine, 0.6 gr/dl; LDH, 260 U/L; direct bilirubin, 0.42 mg/dl; indirect bilirubin, 0.44 mg/dl. **Conclusion:** Dapsone is used widely in the treatment of various disorders, most notably, dermatological disorders. In G6PD deficiency, using dapsone is risky and is associated with a high probability of hemolytic anemia occurrence. In this case presentation, we aimed to stress that hemolytic anemia encountered in a patient on dapsone would be linked to G6PD enzyme deficiency.

<https://doi.org/10.1016/j.htct.2023.09.073>

Pediatric Hematology Abstract Categories

General Hemostasis / Thrombosis / Vascular Biology PP 24

UNRAVELING BLOOD DONOR DEFERRAL TRENDS: A REAL-WORLD SINGLE-CENTER STUDY

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Background: Enhancing blood safety and donor eligibility are vital in blood banking. We analyze our blood center's approach and Turkey's general strategy in this domain, focusing on identifying and mitigating the reasons for donor deferral. **Materials and Method:** We retrospectively evaluated data from 169,410 donors visiting Çukurova University Medical Faculty Blood Center from 2015 to 2021, including demographic, clinical, and laboratory information. We also compared this data with historical records from 2009 and 2011 obtained from Turkish conference papers. **Results and Conclusions:** Our analysis covered donors aged 18-65 years (mean 38 years) consisting of 91.1% males and 8.9% females. Blood type distribution was A Rh(+) 36.7%, O Rh(+) 29.5%, B Rh(+) 14.8%, and AB Rh(+) 7.6%. Only 3.6% of donors volunteered, while the rest had different donation reasons. A 72.3% successful donation rate was observed, but there was a 27.7% deferral rate, surpassing 2011's 25.3% and 2009's 18.2%. Deferrals were mostly due to anemia, recent medication use, elevated blood pressure, and vaccination history. Donor deferral aims to safeguard both donors and recipients against potential risks, underlining the importance of continual evaluation and management strategies to minimize deferral rates.

Key words:

Blood Donor Deferral
Blood Banking in Turkey
Donor Rejection Causes
Blood Donation Rates

<https://doi.org/10.1016/j.htct.2023.09.074>

PP 25

EVALUATION OF THROMBOSIS RISK FACTORS AND PROGNOSIS IN CHILDHOOD THROMBOSIS

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Objective: The aim of our study is to determine demographic data in patients with thrombosis in childhood to determine hereditary and/or acquired risk factors that cause thrombosis, to diagnose and treat thrombosis, to detect the complications related to thrombosis or treatment, to examine mortality and morbidity after thrombosis, and to evaluate the final status of the patients. **Methodology:** 160 cases diagnosed with thrombosis between the ages of 1 month and 18 years, who were followed up by the Pediatric Hematology and Oncology outpatient clinic of Istanbul School of Medicine, between 01-JAN-2012 and 01-JAN-2022 were analyzed, retrospectively. While obtaining the medical data of the patients, patient files and hospital information management systems were used. The obtained data were analyzed with IBM SPSS V23 computer program and $p < 0.05$ was considered statistically significant. **Results:** Cerebral thrombosis was present in 33% of the cases, thrombosis in the lower extremity in 30.6% and upper extremity in 25.6%. At least one acquired or hereditary thrombosis risk factor was detected in 96.9% of the patients. Acquired risk factors were found in 81.2% of the patients, hereditary risk factors in 60.6% and both acquired and hereditary risk factors in 45% of the patients. Twenty (12.5%) patients were followed up without anticoagulant treatment. 66.2% of the patients received prophylaxis. **Conclusion:** In our study; the incidence of childhood thrombosis, acquired and inherited risk factors, treatment and complications of thrombosis were found to be compatible with the studies conducted in our country and in the world. Based on the frequency of inherited and acquired risk factors in every child with thrombosis, it is thought that these risk factors cannot be ignored. Conducting studies in a larger population, including the healthy control group, will contribute to the literature.

<https://doi.org/10.1016/j.htct.2023.09.075>

Pediatric Hematology Abstract Categories

Red Blood Cell Disorders

PP 26

SLEEP QUALITY IN PATIENTS WITH B-THALASSAEMIA MAJOR

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Objective: INTRODUCTION AND PURPOSE: β -thalassaemia major (β -TM) is characterized by chronic anemia due to a genetic deficiency in hemoglobin production. The clinical findings of the disease include hepatosplenomegaly, enlargement and thinning of the bones with flattening of the nasal

root, protrusion of the forehead and other facial bones resulting abnormal facial appearance. In this study, we aimed to examine sleep apnea and abnormal sleep quality in patients with β -TM that might occur as a result of structural facial defect. **Methodology:** METHODS AND MATERIALS: Two separate sleep-related questionnaires, pediatric sleep (PSQ) and pediatric sleep habits (PSHQ), were used to patients with β -TM who were followed in the pediatric hematology section of our hospital. Same questionnaires were applied to children in pediatric outpatient clinic who had no history of any chronic illness as a control group. The families included to the study were asked to fill questionnaires under the supervision of a clinical nurse. **Results:** FINDINGS: A total of 50 children with β -TM and 47 children as a control group were included in the study. No significant difference was found among the characteristics (age, gender, family education level) of both groups. Additionally, there was also no statistical difference between the total sleep duration of patients with β -TM and the control group. Similarly, no statistical difference was observed among the groups in the pediatric sleep apnea questionnaire. However, there were statistically significant higher scores in patients with β -TM compared to control group in the pediatric sleep habits questionnaire. In addition, the findings in the habit questionnaire scores did not change when the groups were compared by segregated age (i.e. 3-10 years old and 10-17 years old). **Conclusion:** DISCUSSION: The current study concluded that sleep apnea risk was not increased in patients with β -TM, but sleep quality was poor. No definite information exists about the cause of sleep-related disorders in patients with β -TM. Probably, the atypical facial structure resulting from nasopharyngeal extramedullary increased hematopoietic activity predisposes to sleep-related problems in patients with β -TM. It was also shown that the uvula-glossopharyngeal dimension was shorter in patients with thalassemia than in patients with no thalassemia. There is limited information in the literature with regard to sleep-related problems in children with β -TM. In a study consisted 120 patients with severe β -TM, the prevalence of obstructive sleep apnea was reported 8.3% and habitual snoring was 15.8%. Furthermore, an increase in periodic limb movement during sleep secondary to sleep fragmentation disorder had also reported in the same study.

<https://doi.org/10.1016/j.htct.2023.09.076>

Pediatric Hematology Abstract Categories

Leukemia

PP 27

IS THERE AN ASSOCIATION BETWEEN PULMONARY EMBOLISM AND THE USE OF PEG-ASPARAGINASE IN CHILDREN WITH LEUKEMIA?

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