[2] *Istanbul University, Istanbul Faculty of Medicine, Department of Pediatrics, Istanbul, Türkiye*

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 IstanbulSchool 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

Ali Özdemir [1], Funda Erkasar [2], Şefika Toga [3]

[1] *Mersin City Training and Research Hospital, Pediatric Pulmonology Section*
[2] *Mersin City Training and Research Hospital, Pediatric Hematology Section*
[3] *Mersin City Training and Research Hospital, Department of Pediatrics*

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?

Emine Yılmaz Orulluoğlu [1], Zühre Kaya [1], Merve Yazol [2], Büşra Topuz Turkcan [1], Serap Kirkiz Kayalı [1], Ülker Koçak [1,3]

[1] *Gazi University Faculty of Medicine*

[2] *Gazi University Faculty of Medicine, Department of Pediatric Hematology*
[3] *Gazi University Faculty of Medicine, Department of Radiology*

We present two leukemic children who developed pulmonary thromboembolism (PTE) after using PEG-asparaginase.The first child, an eight-year-old boy, was diagnosed with T-acute lymphoblastic leukemia (ALL). The second child, a 6-year-old boy, was diagnosed with B-ALL.They developed PTE following induction phases of BFM protocol's.They were given PEG-asparaginase at a dose of 2500IU/m^2. Heparin was succesfully used in both cases.Physician may consider prophylactic anti-coagulants during induction.

https://doi.org/10.1016/j.htct.2023.09.077

PP 28

A PEDIATRIC CHRONIC EOSINOPHILIC LEUKEMIA CASE SUCCESFULLY TREATED WITH STEM CELL TRANSPLANTATION AFTER TRANSFORMATION TO ACUTE LYMPHOBLASTIC LEUKEMIA

Hasan Fatih Cakmaklı [1], Hatice Erkol Tuncer [1], Esra Pekpak Sahınoglu [2], Elif Unal Ince [1], Talia Ileri [1], Mehmet Ertem [1]

[1] *Ankara University Faculty of Medicine Department of Pediatric Hematology*
[2] *Gaziantep University Faculty of Medicine Department of Pediatric Hematology and Oncology*

Chronic eosinophilic leukemia (CEL) is an extremely severe and rare disease in childhood with a very poor prognosis, frequently transforms to acute leukemia in a few years, and once transformed median survival time is only 2 months. Here we present a 9-year-old boy with CEL, transformed to acute lymphoblastic leukemia 17 months after diagnosis and successfully treated with chemotherapy and unrelated stem cell transplantation, he is still in remission after 7 years without any chronic morbidities.

https://doi.org/10.1016/j.htct.2023.09.078

PP 29

A COMPARATIVE STUDY OF CONVENTIONAL BLOOD CULTURE METHOD VS SEPSIS QPCR MX-30 ® PANEL IN PATIENTS WITH PEDIATRIC LEUKEMIA

F.Burçin Kurtipek [1], Ayca Koca Yozgat [1], Zeliha Güzelküçük [1], Bedia Dinç [1], Dilek Gürlek Gökçebay [1], Namık Yaşar Özbek [1], Neşe Yaralı [2]

[1] *Sağlık Bilimleri Üniversitesi, Ankara Bilkent Şehir Hastanesi Çocuk Hematoloji ve Onkoloji Kliniği*
[2] *Yıldırım Beyazıt Üniversitesi, Ankara Bilkent Şehir Hastanesi Çocuk Hematoloji ve Onkoloji Kliniği*

Objective: Acute leukemia is the most common pediatric hematological malignancy. Blood stream infections (BSI) are severe complications in these patients during chemotherapy. In patients with leukemia, early detection of the infectious agent and rapid initiation of appropriate treatment increase the success of treatment and reduce the death rate. In this study, we aimed to compare the causative microorganism and detection time with classical blood culture and sepsis qPCR MX-30 panel **Methodology:** Patients aged <18 years, diagnosed with acute leukemia from March-July 2023 were enrolled. Clinical presentations, demographic features, and microbiological findings were retrospectively reviewed. Blood culture and sepsis PCR panel were taken simultaneously from the first day of febrile neutropenia or fever persisted. **Results:** In total, 327 samples of 48 patients evaluated. No causative agent was detected in both blood culture and sepsis PCR panel in 262 (%80.2) samples. Although blood culture was negative in 19 (%5.8) samples, the sepsis PCR panel identified some microorganisms. Culture positivity was detected in 29 (%8.8) samples, while the sepsis PCR panel results were negative. Simultaneous identification was detected in 17 (%5.2) samples. **Conclusion:** In our study, we found sepsis panel sensitivity as 90% and positive predictive value as 93%. Although conventional blood culture is a more accessible, inexpensive and reliable method for detecting the causative agent in leukemia patients, it will be useful due to early results with the sepsis qPCR MX-30 panel.

https://doi.org/10.1016/j.htct.2023.09.079

Pediatric Hematology Abstract Categories

Hemoglobinopathies (Sickle Cell Disease, Thalassemia etc. . .)
PP 30

EVALUATION OF GLUCOSE-6-PHOSPHATE DEHYDROGENASE DEFICIENCY IN PATIENTS WITH SICKLE CELL ANEMIA

Şule Çalışkan Kamış [1], Defne Ay Tuncel [1], Begül Yağcı-Küpeli [1]

[1] *Adana City Training and Research Hospital*

Objective: The aim of this study was to evaluate patients with a diagnosis of Sickle Cell Anemia (SCA) for Glucose-6-Phosphate Dehydrogenase (G6PD) enzyme deficiency. **Methodology:** In our study, patients diagnosed with SCA who presented to the Pediatric Hematology and Oncology Clinic at the Adana Faculty of Medicine, Health Sciences University, Adana City Training and Research Hospital, between August 1, 2022, and August 1, 2023, were evaluated. G6PD enzyme data from routine tests performed for the patients were recorded from the patient files or the hospital system. **Results:** A total of 23 patients diagnosed with Sickle Cell Anemia (SCA) were included in the study. 65.2% (n=15) of the patients were female, and 34.8% (n=8) were male. The ages of