

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/m². Heparin was successfully 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 SUCCESSFULLY TREATED WITH STEM CELL TRANSPLANTATION AFTER TRANSFORMATION TO ACUTE LYMPHOBLASTIC LEUKEMIA

Hasan Fatih Cakmaklı¹, Hatice Erkol Tuncer¹, Esra Pekpak Sahinoglu², Elif Unal Ince¹, Talia Ileri¹, Mehmet Ertem¹

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 Kurtipek¹, Ayca Koca Yozgat¹, Zeliha Güzelkçük¹, Bedia Dinç¹, Dilek Gürlek Gökçebay¹, Namık Yaşar Özbek¹, Neşe Yaralı²

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 Kamış¹, Defne Ay Tuncel¹, Begül Yağcı-Küpel¹

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

the cases ranged from 4 to 30 years, with a median age of 12. Among the cases, 20 were within the age range of 0-18 years (87%), while 3 cases (13%) were over 18 years old. The median G6PD value was found to be 26.28 U/g Hb (2.22-36.98). G6PD deficiency was detected in 2 patients (8.7%), while it was not detected in 21 patient **Conclusion:** Screening for G6PD deficiency is necessary in patients with Sickle Cell Anemia (SCA) to prevent deterioration of their condition during treatment. The co-inheritance of both diseases can worsen hemolysis in SCA patients. Therefore, caution should be exercised in drug selection for SCA patients with G6PD enzyme deficiency.

<https://doi.org/10.1016/j.htct.2023.09.080>

Pediatric Hematology Abstract Categories

Stem Cell Transplantation

PP 31

VIRAL INFECTIONS IN PEDIATRIC HEAMATOPOIETIC STEM CELL TRANSPLANT PATIENTS

Irem Bozkurt¹, Ikbal Ok Bozkaya¹,
Ozlem Arman Bilir¹, Mehtap Kanbur¹,
Namik Yasar Ozbek¹

¹ Ankara Bilkent City Hospital

Objective: The aim of this study is to determine the frequency and causative virus of viral infections seen after hematopoietic stem cell transplantation (HSCT) in pediatric patients, the effect of the immunosuppressive agents and antiviral prophylaxis to viral infections, to evaluate the efficacy of antiviral treatment used for viral infections, the impact of viral infections on mortality after HSCT. **Methodology:** 295 pediatric HSCT patients between April 2010-August 2022 from a Children's Stem Cell Transplantation Unit were included. Patients' demographic info, HSCT-related data, GVHD prophylaxis regime, antiviral prophylaxis after HSCT, the time span of prophylaxes applied, 27 different viral infections diagnosed from serum, stool and nasopharyngeal swab samples after HSCT, their frequencies and their timespans, patients' mortalities were documented from patients' files. **Results:** 68% of 295 patients were documented with a viral infection, most common isolates are CMV 26%, EBV 11%, ADV 9%, COVID-19 9%, BKV 7%, VZV 6%. Mortality rates are CMV 27%, EBV 38%, ADV 47%. Virus detection after HSCT is 1,10 months for CMV, 2,33 for EBV, 1,16 for ADV, 11 for VZV, 1 for BKV. The most common co-infections documented are CMV/EBV. For CMV treatment 69% valgancyclovir, 54% gancyclovir, 7% foscarnet is used. 53% of VZV infections were seen after acyclovir prophylaxis is stopped. **Conclusion:** HSCT is a curative treatment for a variety of hematological diseases, immune deficiencies, solid organ tumors, some genetic and metabolic disorders. With preparations before HSCT and the GVHD prophylaxis after HSCT, patients become immunosuppressive and susceptible to opportunistic viral infections. Viral infections have an impact on mortality, and it is beneficial to know the

common viral agents, when they are detected, viruses that are frequently detected together, and their treatment responses.

<https://doi.org/10.1016/j.htct.2023.09.081>

Pediatric Hematology Abstract Categories

Quality improvement / Patient safety

PP 32

EVALUATION OF MENSTRUATION RELATED QUALITY OF LIFE IN ADOLESCENTS WITH ABNORMAL UTERINE BLEEDING

Mine Dedeoğlu¹, Neşe Yaralı¹, Alkım Akman²,
Demet Taş¹

¹ Ankara Yıldırım Beyazıt University Medicine

Faculty Bilkent City Hospital

² Ankara Bilkent City Hospital

Objective: Abnormal uterine bleeding (AUB) is a common menstrual problem in adolescent girls. Every adolescent with AUB should also be evaluated for bleeding disorders. This study evaluated adolescent girls with AUB, with and without bleeding disorders, as well as their coping skills and menstruation specific quality of life compared to their peers. **Methodology:** The research was conducted in Ankara Bilkent City Hospital, Department of Pediatric Hematology and Adolescent Health as a prospective cross sectional study. The aim of this study was to determine coping skills and menstruation-related quality of life of adolescent girls with AUB according to Pediatric Bleeding Questionnaire Scoring and Menstrual Assessment Chart. 167 patients with AUB and 165 control group, were included in our study. Each patient was evaluated by the hematology department in terms of bleeding disorder. The participants completed the Adolescent Coping Scale (CEIBO), the Children's Quality of Life Scale (PedsQL) and a scale developed by the researchers to determine the directly menstruation related quality of life (MRQL). **Results:** Bleeding disorder was found in 10.1% of adolescents diagnosed with AUB. When the CIBS sub-dimensions were compared between the patient and control groups, no significant difference was found between them (p=0,056). In adolescents with AUK; total quality of life score, and quality of life score related to school and physical health functionality were found to be statistically significantly lower than the adolescents in the control group (p=0,004; p=0,007). When the adolescents with AUK were compared with the adolescents in the control group, there was no significant difference between the social functionality and emotional functionality quality of life sub-dimensions (p=0,116; 0,063). Menstruation related quality of life was found to be significantly lower in adolescents with AUB (p<0,001). The quality of life of adolescents with severe AUB was found to be lower than those with moderate and mild AUB (p=0,026). When the total PedsQL scores were compared between the patient, control, the patient group's score was significantly lower than the control group (p=0,012). However, there was no significant difference between the patients