considered in patients with clinical and radiographic evidence of diaphyseal dysplasia as well as hematological abnormalities. In addition, bone dysplasia should be investigated in treatment-resistant hematological pathologies of unknown origin. Although GHDD is rare, clinicians should be informed that it responds well to steroid therapy.

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HEMOGLOBINOPATHIES (SICKLE CELL DISEASE, THALASSEMIA ETC...)

OP 20

COMPARISON OF THE QUALITY OF LIFE OF PATIENTS WITH A BETA-THALASSEMIA MAJOR, REGULARLY RECEIVING PARENTERAL AND ORAL CHELATORS

Samira Hasanova [1], Azer Kerimov [1], Khanum Hamidova [1], Konul Baghirova [1]

[1] *Azerbaijan National Center of Hematology and Transfuziology*

Objective: Patients with β-thalassemia major (Mβ-th) are transfusion-dependent, which affects their quality of life . To maintain a safe level of iron in the body, patients with Mβ-th require adequate regular therapy with chelation drugs (CP). Currently, for the correction of iron overload in patients with Mβ-th, along with oral CP, parenteral CP continues to be used. However, oral and parenteral CP are perceived by patients ambiguously. Comparative assessment of the quality of life of transfusion-dependent children with Mβ-th receiving various CPs: parenteral deferoxamine and oral deferasirox. **Methodology:** For 2 years, a survey and clinical observation of 201 children with Mβ-th aged 2 to 18 years (boys 128, girls 73) was conducted. The control group consisted of apparently healthy children from preschool and school institutions (n=30). Patients with Mβ-th underwent a quality of life study (PedsQL- Pediatrics Quality of Life Inventory, Generic Core Scales and PedsQLTM4.0) and a psychological examination. The survey was conducted after obtaining the informed consent of the parents of older children at the beginning and at the end of the study. Once a month, the necessary clinical and biochemical analyzes were carried out.Patients with Mβ-th regularly prescribed various CP regimens: deferoxamine subcutaneously; deferasirox, orally. **Results:** All studied patients with Mβ-th were divided into four age groups: group 1 - children under 4 years old according to parents (n=41); group 2 - children 5-7 years old according to the assessment of children and parents separately (n=62); group 3 - children 8-12 years old according to the assessment of children and parents separately (n= 47); Group 4 - children aged 13-18 years old according to the assessment of children and parents separately (n=51). Each of the 4 groups of Mβ-th patients was divided into a subgroup taking only deferiprone and a subgroup taking only deferasirox. **Conclusion:** According to the Results of the survey, the indicators of the quality of life and the psychological state of children with Mβ-th receiving parenteral and oral CP differed. So, in sick children with Mβ-th of different age groups, when taking parenteral CP in comparison with those taking oral CP, the quality of life was reduced, and the psychological state worsened significantly. This was especially impacted patients in the group of 8-13 years. In this group, there were more complex relationships with peers, parents, there was an increase in anxiety and aggressiveness, which is associated with the need for hours of use of the pump for subcutaneous injection of the drug, the presence of pathology that limits the use of oral chelators. In children of 4 different age groups, there is a significant difference in the values given by patients and their parents to the quality of life in patients receiving parenteral and enteral chelator therapy.

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LYMPHOMAS

OP 21

LABORATORY AND CLINICAL FEATURES OF TUMOR LYSIS SYNDROME IN CHILDREN WITH HIGH-GRADE NON-HODGKIN LYMPHOMA AND EVALUATION LONG-TERM RENAL FUNCTIONS IN SURVIVORS

Selcen BOZKURT [1], Dildar Bahar GENC [2], Sema VURAL [2]

[1] *Department of Pediatrics, Karadeniz Eregli State Hospital, Zonguldak, Turkey*
[2] *University of Health Sciences, Sisli Hamidiye Etfal Training and Research Hospital, Department of Pediatric Oncology, Istanbul, Turkey*

Objective: Tumor lysis syndrome (TLS) describes biochemical and clinical abnormalities resulting from spontaneous or treatment-induced necrosis of rapidly proliferating tumors such as Burkitt's lymphoma (BL). TLS can lead to complications like acute kidney injury (AKI) which can be fatal. In patients who had AKI in childhood, the frequency of kidney problems increases in later ages. Therefore, there is a need to examine long term kidney functions in patients with TLS. The purpose of our study is to investigate the laboratory and clinical features of tumor lysis syndrome in childhood non-Hodgkin lymphomas (NHL) and to reveal its impact on long term kidney function in survivors. **Methodology:** Our study was a single center retrospective study. 107 patients (0-18 years of age) admitted to our hospital between 1998-2020 years with a diagnosis of NHL and who received chemotherapy were included in the study. Clinical and laboratory characteristics of the patients at the time of diagnosis and within 14 days from the start of chemotherapy were examined. The presence of TLS and its laboratory and clinical features were examined according to the Cairo-Bishop criteria. The relationship between TLS and age, gender, histopathological subgroup, tumor stage, lactate dehydrogenase (LDH) level at presentation, bone marrow and kidney involvement were investigated. The presence of AKI was determined according to the Kidney Disease: Improving Global outcomes criteria.

Long-term renal functions of the patients were investigated. **Results:** 80.3% of the patients with a median age of 9.8 years were male. The most common histopathological subgroup was BL (77.5%), while the majority of patients (76.7%) had advanced disease. Clinical TLS (CTLS) was observed in 12.1% of the cases, and isolated laboratory TLS (LTLS) was observed in 18.7%. Hyperhydration±alkalinization and allopurinol were used in first-line treatment and prophylaxis. A significant correlation was found between young age, advanced stage, high lactate dehydrogenase level at presentation and LTLS. Bone marrow involvement was found to be significantly higher in the group with CTLS. AKI was observed in 12.1% of the patients. Out of a total of 103 patients whose treatment was completed, 93 (90.3%) patients survived and 10 deaths were observed. No death due to TLS was observed. The mean survival time was 215.55±7.502 months. After an average of 6.9 years, when the glomerular filtration rate values of the patients at the first admission and at the last admission were compared, a mean decrease of 10 mL/min/1.73 m2 was detected. However, it was not found to be statistically significant. **Conclusion:** In our study, lower age, advanced stage, high LDH level at presentation were found to be risk factors for TLS. Long-term renal function loss was not detected in the survivors, for whom early and careful prophylaxis/treatment approaches were applied for TLS. The survivors are still being followed up.

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SUPPORTIVE CARE AND PALLIATIVE CARE

OP 22

IMPACT OF COVID-19 PANDEMIC ON DELAY OF CHILDHOOD CANCER DIAGNOSIS AND THE OUTCOMES IN A PEDIATRIC HEMATOLOGY/ ONCOLOGY DEPARTMENT

Selma CAKMAKCI [1], Neriman SARI [1], Arzu YAZAL ERDEM [1], Sonay INCESOY OZDEMIR [1], Derya OZYORUK [1], Aslınur OZKAYA PARLAKAY [1], İnci ERGURHAN ILHAN [1]

[1] *Ankara City Hospital*

Objective: Restriction of access to healthcare during COVID-19 pandemic is undoubtedly a major problem for patients with cancer. Although childhood cancers are highly curable, it is obvious that diagnostic and treatment disruptions will lead to poor Results. In this study we investigated the effects of pandemic on diagnosis and treatment delays of children with cancer along with their consequences. **Methodology:** We searched all pediatric patients treated for cancer between March 2020 and January 2022 for COVID-19 infection. Data were collected collected from medical files of patients diagnosed with COVID-19, confirmed by polymerase chain reaction (PCR), who received active antineoplastic treatment. **Results:** Fifty-eight patients developed COVID-19 infection at different stages of their anticancer treatment. Twenty-five had an asymptomatic COVID-19 infection, twenty-six had mild symptoms, three had moderate symptoms and four had severe disease. All of them recovered from COVID-19 infection. Chemotherapy courses were continued during active infection in four patients and interrupted in other patients. **Conclusion:** While strict measures are required to control the pandemic, patients with severe critical illness such as cancer should be carefully evaluated and treatment delays that may have vital consequences should be avoided. In pediatric patients with cancer whom infected by COVID-19, continuation of anticancer treatment may be considered by evaluating the clinical status of the patient.

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TUMOR BIOLOGY, IMMUNOLOGY AND IMMUNOTHERAPY

OP 23

INTRAPLEURAL THERAPY TO DISRUPT IL-6/IL-8 JUXTACTINE SIGNALLING TO BLOCK TUMOR EMT AND TO DRIVE SYSTEMIC ANTI-TUMOR IMMUNITY

Vera Donnenberg [1], Albert Donnenberg [1], Ibrahim Sultan [1], Shannon Puhalla [1], James Luketich [1], Christie Hilton [2], David Bartlett [2]

[1] *University of Pittsburgh*
[2] *AHN*

Objective: The goal of this study was to determine whether antiIL-6Rα block (tocilizumab) will alter the pleural secretome and will diminish tumor-specific immune responses. **Methodology:** Pleural T cells were isolated from freshly drained pleural effusions (n=6). Autologous pleural tumor was expanded in vitro using the Mammary Epithelial Growth Medium (Lonza). Pleural T cells were stimulated using anti-CD3/CD28 Dynal beads and low dose IL-2 (60 Cetus U/ml) for 2,4,7, 14 or 21 days in the presence of tocilizumab for the last 48h (0, 0.35, 0.72, 1.43, 2.86 and 5.72ug/ml). Pleural T cell effectors were counted and plated on tumor targets at 12.5:1 E:T in the presence of tocilizumab. **Results:** Ex vivo expanded pleural T cells were effector-memory phenotype (CD45RA-CD27-) and were highly cytotoxic against autologous tumor (89-100%). The majority of CD8+ T cells were central memory (CD45RA-/CD27-) or effector memory (CD45RA+/CD27-); the majority co-expressed granzyme B, perforin, 20-60% expressed PD-1. Most CD4+ co-expressed granzyme B and perforin and were PD-1+, suggesting cytotoxic CD4+ T cells. The presence of tocilizumab reversed tumor EMT but did not alter cytotoxicity. **Conclusion:** We show that the IL-6/IL-6Rα axis is prominent in MPE, drives tumor growth and inhibits anti-tumor immunity. Pleural T cells are neither exhausted nor dysfunctional but are suppressed by the pleural environment. Ex vivo expanded MPE CD8 and CD4 T cells are highly cytotoxic against