

4.9% used herbal medicine. 17.1% of the patients consumed two meals/day a day, 70.7% three meals/day, 7.3% meals/day, 4.9% 4≤ meals/day; 34.1% were fed mostly with carbohydrates, 7.3% mostly with protein, 17.1% with mostly fat-containing food, 4.9% with mostly processed food and 36.6% were fed with a balanced diet. In their daily diets, 51.2% of the patients consumed processed food, and 48.8% did not consume any processed food. Of the patients, 80.5% were not involved in any kind of sports activity. 14.6% of patients stated that they spend > 5 hours/day, 12.2% 3-5 hours/day, 70.7% 1-3 hours/day, and 2.4% < one hour/day in front of a screen. In 73.2% of patients' vitamin D level was <12 ng/mL and in 26.8% between 12 and 20, ng/mL. In 19.5% vitamin B12 level was < 200 pg/mL. Selenium deficiency was detected in 12.2%, zinc deficiency in 29.3%, vitamin C deficiency in 12.2%. **Conclusion:** Nutritional disturbances are not uncommon in survivors of pediatric acute lymphoblastic leukemia. It is important to closely monitor and raise awareness of these children in terms of unbalanced nutrition, inactivity, and the development of a tendency to gain weight.

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#### OP 24

##### ACUTE MEGACARYOBLASTIC LEUKEMIA IN CHILDREN: DIAGNOSTICS AND MRD MONITORING

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**Objective:** Acute megakaryoblastic leukemia (AMKL) is a rare subtype of acute myeloid leukemia (AML) associated with poor prognosis for all patients except children with t(1;22) or Down syndrome. The frequency of complete remission in case of AMKL is comparable to the frequency of it in other variants of AML but the median survival is much lower. This determines the necessity of more thorough evaluation of treatment effect using flow cytometry assessment of minimal residual disease (MRD). **Methodology:** The clinical and immunological profile of 8 girls and 9 boys with de novo AMKL between the ages of 3 months–11 years old was analyzed. The primary leucocytosis median was 10,25; only one patient had hyperleukocytosis (53x10<sup>9</sup>/l) at presentation. The measurement of MRD was performed in 6 patients using multiparameter flow cytometry. The measurement of MRD performed after induction therapy on the basis of megakaryocytic markers, weak CD45 expression using the initial immunophenotype patterns. **Results:** Adequate measurement of the level of MRD had required extensive diagnostic immunophenotyping in order to determine the aberration of megakaryoblasts. CD9(83,3%), CD33(75%), CD34(60%), CD13(50%) apart from megakaryocyte markers (100%) were most

common for blast cells in case of AMKL. The expression of CD7 antigen was as frequent as of CD117-40%. The MRD level ranged from completely negative (0%; 0.006%) to evident (1.05%). **Conclusion:** The detection of residual tumor megakaryoblasts in AML M7 using flow cytometry is a promising method for assessing the effect of therapy. Adequate measurement of MRD requires detailed immunophenotyping in the diagnosis to determine the aberrations of megakaryoblasts immunophenotype.

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#### OP 25

##### JUVENILE MYELOMONOCYTIC LEUKEMIA SINGLE CENTER EXPERIENCE

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**Objective:** In the 5-year follow-up of patients diagnosed with Juvenile Myelomonocytic Leukemia (JMML) in a single center; reveal treatment and survival analyzes **Methodology:** In this study, clinical and laboratory data of 12 JMML patients followed in Ankara Pediatric Hematology Hospital and Ankara City Hospital Pediatric Hematology Clinics between 2015-2020 were analyzed retrospectively. **Results:** The median age at diagnosis was 1.7 years (0.23-5.7). Monosomy 7, 4 PTPN11, 2 NRAS, 4 KRAS, 1 CBL mutations were detected in 2 of the patients. Hematopoietic stem cell transplantation was performed in 8 of the patients. Before transplantation, 7 patients had received a median of 4 cycles of azacitidine treatment. The mean time from diagnosis to transplantation was 15 months (1-29 months). The 5-year overall survival at median 15-month follow-up was 50%. **Conclusion:** With hypomethylating agents and HSCT, survival in JMML improves compared to historical control groups. However, further multicenter prospective studies are needed to prevent long-term mortality and morbidity.

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#### OP 26

##### MYSTERY OF iAMP

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**Objective:** Intrachromosomal amplification of chromosome 21 (iAMP21) is defined as the presence of three or more RUNX1 signals on a single chromosome, or a total of five or more RUNX1 signals per cell. It occurs in 2% of pediatric B-cell