acute lymphoblastic leukemia (ALL), but is associated with older age, low white blood cell count, and high risk of relapse. In our study, it was aimed to review our patients with ALL in terms of possible iAMP21 at the time of diagnosis and to evaluate the clinical features. **Methodology:** The results of the patients who were diagnosed with B-cell ALL between 2012 and 2019 and whose treatment was completed, and whose signal increase in the RUNX1 region in the t(12;21) FISH analysis were detected, were reviewed together with the medical genetics section in terms of possible i amp. Those with 5 or more signal increases on a single gene in RUNX1 were considered as i amp. **Results:** In the t(12;21) FISH analysis, signal increases were observed in the RUNX 1 region in 15 (8.3%) of 180 B-cell ALL patients included in the study. Although these signal increases varied between 3-4 in 14 patients, 4-7 signal increases were detected in only 1 patient and were considered as iamp. The patient with iamp was a 6-year-old patient with a white blood cell count of 7600/mm3 at presentation and followed in the intermediate risk group. . Bone marrow relapse developed in 2 years. **Conclusion:** The presence of iAMP21 is associated with a delay in treatment response and increased recurrence in the late period. Patients should be carefully evaluated for iAMP21.

https://doi.org/10.1016/j.htct.2021.10.994

MYELODYSPLASTIC SYNDROMES

OP 27

DIAGNOSTIC APPLICATION AND CLINICAL SIGNIFICANCE OF FCM WELLS SCORING SYSTEM IN MYELODYSPLASTIC SYNDROMES

Reyhan Aliyeva, Agarza Aghayev,
Adam Najafli, Reyhan Tagizade, Azer Kerimov

National Haematology and Transfusiology Center

Objective: Myelodysplastic syndromes (MDS) are group of clonal diseases of the hematopoietic system characterized by ineffective hematopoiesis, dysmyelopoiesis, a high frequency karyotype abnormalities and the risk of transformation into acute leukemias. Cytopenic and dysplastic changes are not pathognomonic for MDS, and there are many diseases that can imitate MDS. According to various sources, clonal karyotypic abnormalities are present only in 20-60% of MDS. The diagnosis of MDS is not difficult if blasts or sideroblasts are present in the bone marrow, or there are chromosomal aberrations as evidence of clonal hematopoiesis. The diagnostic problem arises in cases of MDS without sideroblasts, with normal karyotype and/or bone marrow hypoplasia. Since 2012, the ELNet Working Group has proposed and subsequently supplemented guidelines for Flow Cytometry as a complementary diagnostic tool. The aim of the study was to compare the results of the FCM Wells score MDS with the results of the İPSS-R score MDS **Methodology:** The study included 30 patients initially diagnosed with MDS . The classification was carried out according to the WHO Classification of MDS 2016: MDS SLD-6 (20%), MDS-MLD-5 (16.7%), MDS RS-MLD-2 (6.7%), MDS-EB1-9 (30%), MDS EB2-8(27%). According to the IPPS-R, patients were scored based on blasts, cytogenetic examination, hemoglobin/platelet/absolute neutrophil count and scored as very-low, low, intermediate, high, very-high. **Results:** Using the Wells evaluation criteria, which takes into account cytometric analysis of the cells of the main myelopoiesis lines, changes were found in the compartment of granulocytes in 93%, monocytes in 40% and erythrocytes in 73% of cases. High scores on the Wells scale (> 4) were obtained in 89% of (8/9) MDS-EB1, 100%(8/8) MDS-EB2, 80% (4/5) MDS MLD patients, 17% (1/6) MDS −SLD, 50%(1/2) MDS RS-MLD. According to IPPS-R, MDS patients received a score <1.5 very low risk group include 50%(3/6) MDS −SLD, 20%(1/5) MDS-MLD, score > 1.5-3 - Low risk group include MDS −SLD 50%(3/ 6), MDS-MLD-80% (4/5), MDS RS-MLD 50% (1/2), MDS-EB1-78%(7/ 9), score > 3- 4.5-intermediate risk qroup got MDS-EB1 22%(2/ 9), MDS EB2-25% (2/8), MDS RS-MLD- 50%(1/2), Score > 4.5 respectively high risk group got patients MDS −SLD- 17%(1/6), MDS EB2-50%(4/8), Score > 6 very high risk group got MDS EB2- 25%(2/8). The Pearson's correlation coefficient (PCC) showed high correlation between İPSS-R and FCM Wells score was 0.83, p<0.002. **Conclusion:** In our study, the FCM score had a positive correlation with the IPSS-R prediction. Expanded analysis of the main compartments of the bone marrow (early precursors of myelopoiesis, the population of granulocytes and monocytes, erythrocytes) using the Wells scale as an additional tool improves the diagnosis and distinguish low-grade MDS from non-clonal cytopenias.

https://doi.org/10.1016/j.htct.2021.10.995

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

OP 28

THE FREQUENCY OF HLA-A, B AND DRB1 ALLELES IN PATIENTS WITH BETA THALASSEMIA

Zeynep Karakas [1], Yasin Yilmaz [2], Ayse Erol [1],
Demet Kivanc [1], Mediha Suleymanoglu [1],
Hayriye Senturk Ciftci [1], Cigdem Cinar [1],
Serap Karaman [1], Mustafa Bilici [1],
Aysegul Unuvar [1], Deniz Tugcu [1],
Gulsah Tanyildiz [1], Fatma Savran Oguz [1]

[1] *Istanbul University*
[2] *Ankara University*

Objective: HLA class I and II alleles are shown to be associated with certain diseases. A restricted numbers of alleles were found to be related to alloimmunisation in thalassemia population. The role of human leucocyte antigens in thalassemia is trend topic. In this study, the aim was to evaluate the differences in HLA frequencies of beta thalassemia patients comparing with healthy controls. **Methodology:** The data were collected of 100 patients who were diagnosed with beta thalassemia and 100 healthy controls were included in the study. The low resolution HLA-A, -B, -DRB1, tissue group data were performed Istanbul University, Faculty of Medicine, Medical Biology Department HLA typing laboratory. All data were