proportion of peripheral blood B-lymphocytes (up to 0,9% of B-cells) specifically bound LeC, i.e. expressed B-cell receptor for LeC. Up to 50% of these B-cells expressed CD5, so belonged to B1-natural immunity branch. Serum levels of antibodies to LeC were significantly higher in healthy woman then in breast cancer patients. Opposite relations between anti- LeC and serum levels of CA 15.3 were noticed. Membrane expression of LeC on breast cancer cells was confirmed by flow cytometry. In 36% cases patient's tumor cells were LeC -positive with low concentrations or absence of anti- LeC in sera. The last group of patients seem to be perspective in study of anti- LeC adoptive therapy approach. In conclusion. Lewis C blood group antigen expression takes place in 57% of early breast cancer, associated with poorer prognosis. Levels of anti- LeC in breast cancer patients are lower than in healthy woman, in 36% of LeC-positive cases being almost no detectable. Taking in mind important role of natural IgM antiglycan's in cancer surveillance, it seems perspective to study in this well characterized group of breast cancer patients some anti-LeC adoptive therapy to see if compensation of anti- LeC immune deficiency can be beneficial for patients.

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OP 14

B1-CELLS OF INNATE IMMUNITY IN THE BONE MARROW IN BREAST CANCER PATIENTS: IDENTIFICATION AND THEIR RELATIONSHIP WITH CLINICAL AND MORPHOLOGICAL PARAMETERS

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Objective: In recent years more attention has been paid to the study of the innate immune system, which includes B1-lymphocytes. They produce pentameric M antibodies, which play an important role in the induction of apoptosis in tumor cells. The study of lymphocyte populations can help to reveal the phenomenon of persistence of disseminated tumor cells in the bone marrow (BM) of breast cancer (BC) patients. **Methodology:** This study included BM punctuates from 64 BC patients and 10 women with benign processes. The study was carried out by two methods: morphological and immunological. Calculation of the myelogram under light microscopy was performed by two expert morphologists. Multiparameter flow cytometry (FACSCanto II cytometer) has been used to assess the populations of BM lymphocytes. Antibodies CD20, CD5, CD19, CD38, CD22, CD45 were used. **Results:** The content of B1 (CD5+) cells is higher in luminal B-Her2 "+" BC, than with B-Her2 "-": 10.2% (n=10) versus 4.0% (n=20), p=0.032. The highest levels of B1-cells were observed in stage IIA (12.4±10.7%), also with 2 affected lymph nodes and their maximum size: 16.0±10.2% (n=5) and 5.8±1.6% (n=29), p=0.07. The content of B1-cells correlated with eosinophilic myelocytes (R=0.365; p=0.011; n=48), plasma cells (R=0.409; p=0.004; n=48) in BC. **Conclusion:** The determination of the level of B1-lymphocytes in the BM can serve as an additional marker of the molecular subtype of BC. It is described that an increase in the content of plasma cells takes place with DTC in the bone marrow. Based on this it can be assumed an increase in the level of B1-lymphocytes is associated with a high probability of metastases in the BM.

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PEDIATRIC HEMATOLOGY ABSTRACT CATEGORIES

COAGULATION AND FIBRINOLYSIS DISORDERS

OP 15

COMPARISON OF INDIVIDUAL PHARMACOKINETIC DOSING TOOLS IN PATIENTS WITH HEMOPHILIA A

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Objective: Prophylaxis treatment is recommended for the prevention of bleeding and complications in patients with hemophilia A. Personalized treatment methods are an up-to-date approach. Hemophilia treatment is suitable for optimization with pharmacokinetic (PK) methods. It has been shown that prophylaxis regulated with PK data reduces the frequency of bleeding and the cost of treatment. To determine the best prophylaxis regimen, PK dose tools using the Bayesian method have been developed. **Methodology:** Blood samples were obtained from 42 patients with severe hemophilia A (median age 13.4 years) with factor VIII (FVIII) inhibitor <0.6 BU/ml and no additional disease that would affect the FVIII level before the FVIII infusion, 4, 24 and 48 hours after the infusion. FVIII levels from blood samples were measured by PTT-based one-stage assay method. PK parameters obtained using WAPPS and myPKFIT programs, which are two web-accessed PK dosing tools using the Bayesian algorithm, were compared. **Results:** There was no significant difference between the daily dose of FVIII given in prophylaxis and the dose amount recommended by the myPKFIT program for the 1% trough, but a difference was found with the WAPPS program. While there was no significant difference between the half-lives (t1/2) and the time to 5% of plasma FVIII between the two PK tools, there were significant differences in the recommended dose amounts, clearance (CL), times up to 1% and 2% of plasma FVIII. **Conclusion:** As a result of cross-pair comparison between the treatment doses received by the patients and the doses recommended by the PK dosing tools, significant differences were found as well as similarities.

Besides similar results, significant differences were also found among the PK parameters. Previous studies didn't compare CLs between myPKFIT and WAPPS, this is the first in our study. While no difference was found between t1/2's, the difference between recommended doses may be due to CL difference.

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PLATELET DISORDERS / THROMBOSIS AND ANTITHROMBOTIC THERAPY

OP 16

IMMUNE THROMBOCYTOPENIA PURPURA FLARE POST SARS-COV-2 VACCINATION

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Case report: The main strategy to control the SARS-CoV-2 pandemic is through global vaccination. One of the rare side effects of vaccination is Immune Thrombocytopenic Purpura (ITP). We present a 31 years old lady with a history of ITP, came on her 8th week of pregnancy with fever and dry cough after receiving the first dose of Pfizer vaccine. The ITP flare worsened after the second dose of the vaccine. Patients with ITP should have their second dose of vaccine delayed if they had flare particularly if pregnant.

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OP 17

THE OUTCOME OF IMMUNE THROMBOCYTOPENIC PURPURA IN CHILDHOOD AND THE RISK FACTORS FOR CHRONICITY

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Objective: Immune thrombocytopenic purpura (ITP) is the most common cause of pediatric thrombocytopenia. It is usually a self-limiting disease; however, 20-30% of cases become chronic. In this study, we aimed to investigate pediatric ITP cases' outcomes and whether there are any factors affecting chronicity. **Methodology:** We analyzed retrospectively our 184 newly diagnosed pediatric ITP cases. Thrombocytopenia was defined as chronic ITP if it persists after 12 months. We evaluated the role of clinical and laboratory findings of patients and treatment modalities in the chronicity of ITP. **Results:** The mean age of patients was 5.4 ± 4.75 years at diagnosis. As first-line treatment, 87 (47.3%) of patients were given Intravenous Immune Globulin, 65 (35.3%) of patients were given methylprednisolone, and 32 (17.4%) of patients were followed without any medication. Chronic ITP developed in 39 patients (21.1%). Chronic ITP development rate was 20.19% in boys and 22.5% in girls (p=0.7). While the chronicity rate was 7.02% in children younger than two years old and 17.81% in children between 2 and 6 years, it was 42.59% in children older than six years old (p<0.0001). Mean hemoglobin and absolute lymphocyte count were significantly lower in chronic ITP patients in the 2-6 years age group. (p=0.014 and p=0.048, respectively). The first-line treatment choice had no important effect on chronicity (p=0.61). **Conclusion:** Our results suggest that the most critical factor in developing chronic ITP was the age at diagnosis. Low lymphocyte counts at diagnosis may be associated with a high chronicity ratio.

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RED BLOOD CELL DISORDERS

OP 18

CLINICAL AND LABORATORY EVALUATION OF OUR PATIENTS WITH HEREDITARY SPHEROCYTOSIS

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Objective: Hereditary spherocytosis (HS) is a non-immune hemolytic anemia occurring with anemia, jaundice, splenomegaly symptoms in which the cell membrane of the erythrocytes is transformed into the shape of spherocytes due to congenital membrane protein defects. In this study, the demographic characteristics, clinical and laboratory findings, as well as complications during the follow up of our patients with HS are presented. **Methodology:** All patients who were diagnosed with hereditary spherocytosis and followed in our pediatric hematology clinic between 2000 and 2021 years were included in the study. Gender, age consanguinity of the parents, family history of HS and splenectomy, the neonatal phototherapy history were retrospectively recorded from patients' files. The complaints, physical examination findings, and laboratory findings at the first admission were evaluated. Duration of follow-up, transfusion frequency,splenectomy requirement, and response to splenectomy were also recorded. **Results:** Sixty-seven patients (41 male, 27 female) were religible for the study. The median age of diagnosis was 3 years (range 18 day-15 years). Consanguineous marriage rate was 29.9% whereas 62.7% of the patients had a family history of HS. Neonatal hyperbilirubinemia was present in 67.1% of the patients. The median follow-up period was 8.5 years.The complaints at admission were jaundice (64.2 %), fatigue (26.9 %) and fainting (7.5 %). Physical examination revealed hepatomegaly and splenomegaly in 65.6% and 77.6% of the patients, respectively. Hemoglobin mean values at the time of the admission was 8.3± 2.1 g/dl, ranging between 5.1-15.3 g/dl. The mean MCV value was 83.1±9.7fl, mean value of MCH was 28.8±2.9 pg, mean MCHC value was 34.9±1.6 g/l, mean indirect bilirubin was 3.5 ± 4 mg/dl. There were various degrees of spherocytosis observed in peripheral smear examinations in all patients. Incubated osmotic fragility test confirmed the diagnosis in all cases.