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.