of cases. **Conclusion:** In our center splenectomy was performed in more than half of the patients within the second-line treatment and resulted in permanent remission of the disease in 50% of cases. It is still a considerable method of ITP treatment, however its frequency decreases over time due to introduction and wider availability of thrombopoietin receptor agonists.

OTHER DISEASES

OP 09

DIRECT ORAL ANTICOAGULANTS IN SICKLE CELL DISEASE, WHERE WE STAND AND WHERE WE ARE HEADING: A SYSTEMATIC REVIEW

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Objective: The evidence guiding VTE management in SCD, specifically in terms of anticoagulant choice, is scarce. Therefore, we conducted a systematic review that evaluates the effectiveness and safety of direct oral anticoagulants (DOACs) in SCD with VTE. **Methodology:** We performed a systematic review following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. We searched the English literature (PubMed, SCOPUS, and Google Scholar) for randomized controlled trials, observational studies, reviews, case series, and case reports for patients with SCD treated with DOAC for thromboembolic disease. **Results:** The current data demonstrated that the use of DOACs for VTE in SCD has similar effectiveness in the prevention of VTE recurrence in comparison to other anticoagulants, including VKAs and injectable anticoagulants with a better safety profile. However, given the absence of clinical practice guidelines for the treatment of VTE among patients with SCD, the clinical practice guidelines recommendations for VTE treatment can be applied to patients with SCD. **Conclusion:** In view of the current evidence and based on the results observed; using DOACs was associated with lesser bleeding incidence and fewer complications comparing to VKAs. We think it is rational to use DOACs for VTE treatment among patients with SCD rather than use VKAs.

OP 10

ANTI-GLYCAN ANTIBODIES IN THE DIAGNOSIS OF GASTRIC CANCER

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Objective: Gastric cancer (GC) is traditionally considered a difficult disease to diagnose and treat. The search for new markers for GC is an extremely urgent purpose. Previously has been shown, that serum anti-glycan antibodies (AGAT) are very large reservoir of markers which can be reliably detected using an instrument called glycoarray (PGA). A ";signature"; approach, i.e. searching of combinations of diagnostically significant markers − AGAT detected by PGA, is used in this study. **Methodology:** The cohort of the serum of apparently healthy donors from the National Medical Research Center of Oncology (NMRC) (n = 55, 69%/31% - m/f) and previously untreated patients with an established diagnosis of GC I-IV stages from the NMRC (n = 146, 52%/48% - m/f) were collected. To study serum AGATs glycoarray containing 300 different glycans was used. To search for a diagnostic signature, the mathematical apparatus ";Immunoruler"; [Int. J. Bioinformatics Res. Appl., 7, 402-426 (2011)] was applied. **Results:** Using glycoarray IgG and IgM profiles of donors and GC patients were obtained and data quality control has been performed. The mathematical apparatus Immunoruler was applied to the resulting database and a signature was obtained. It includes antibodies to 11 glycans: 7 IgM (directed to KDNb6'LN-C3, b3'SLN, LN-C8, Aa4A, TF, 3'SiaLeC and Tn3Su) and 4 IgG (GN6Su, TF, para-Fs and bGU). The quality of the developed diagnostic approach was assessed: the AUC value was 0.87, and the accuracy was 0.81. **Conclusion:** Thus, the use of glycoarray technology in combination with a mathematical signature search apparatus has made it possible to find a reliable combination of molecular markers for the diagnosis of gastric cancer. Since the tumor can dramatically change as it progresses, the AGAT profile can also change. This opens up the possibility for a differentiated diagnosis of GC depending on the stage of the disease and, first of all, to develop early diagnosis of this disease.

OP 11

THE IMPACT OF HEMATOLOGICAL PARAMETERS ON SURVIVAL FOR PATIENTS WITH COVID-19

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Objective: Coronavirus disease 2019 is an infectious disease caused by the novel severe acute respiratory syndrome

coronavirus 2 (SARS-CoV-2). Clinical and laboratory predictors may identification of patients at risk of mortality and guide treatment .To analyze laboratory abnormalities in patients with COVID-19 and define which parameters affect mortality and hospitalization **Methodology:** This retrospective study was conducted on 101 patients diagnosed with COVID-19. Demographic characteristics, laboratory parameters including complete blood count (CBC) parameters, biochemical tests, coagulation parameters, duration of hospitalization and final status (discharge or death) were recorded **Results:** Comparisons were made of survivors and non-survivors at the end of follow up period. Multivariate analysis showed mean platelet volume (MPV), platelet distribution width (PDW) and lactate dehydrogenase (LDH) to be significant predictors of mortality. The cut-off value of the hospitalization period was found to be 10 days, so patients were divided into two groups. In the multivariate models, no significant independent parameter was observed for the prediction of hospitalization duration. **Conclusion:** The results of the current study demonstrated that MPV, PDW and LDH were significant independent variables for the prediction of mortality. As SARS-CoV and SARS-CoV-2 are known to use the same receptor, there may be a similar structure and receptor for mutant variants and the first variant, so these predictive parameters can be considered to be as effective in mutant variants.

https://doi.org/10.1016/j.htct.2021.10.979

OP 12

AN UNUSUAL SURVIVING HISTORY: MULTISYSTEM INVOLVEMENT UNTIL ADULT LIFE WITH NIEMANN PICK TYPE B

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Objective: Niemann-Pick disease (NPD) occurs with the storage of lipids including sphingomyelin and cholesterol due to acid sphyngomyelinase deficiency. Based on genetic cause and clinical picture NPD are divided in four main types. The type B is called as non-neuronopathic variant in which many patients may survive several decades. Infiltration by lipid-laden foam cells of tissues contribute to life-threatening complications. We here present a case who has been diagnosed as having NPD in the adulthood. **Case report:** A 46-year-old male patient with peripheral edema and dyspnea and abdominal distention was investigated. He has a medical history of aortic and tricuspid valve regurgitation with severe pulmonary hypertansion, decreased ejection fraction as 35% and acsending aort aneurism on 30 years old. He experienced three years later ascending aortic replacement and aortic valve replacement. He developed dyspnea, bleeding gums, and alveolar hemorrhage was diagnosed on 40s. **Methodology:** Pancytopenia associated massive splenomegaly and hepatomegaly contibute reassesment of the disease. Bone marrow revealed moderate

hypercellularity T lymphocytosis, focal mild dysplasic changes, and mild reticulin fiber increase. No cytogenetic abnormality and PNH clone was detected. He had developed congestive heart failure and massive proteinuria. Also he had medically controlled hyperlipidemia and interstitial lung disease. **Results:** A storage disease investigation was started. Plasma Chitotriosidase was found to be increased and leukocyte sphingomyelinase activity was decreased. A genetic screening for NPD revealed homozygote (SMPD1 p.V36A (c.107T> C) (rs1050228) and heterozygote G508R (c.1522G> A) (rs1050239).NPD type was diagnosed with probable kidney involevement and cardiac cirrhosis. Supportive treatment was decided. He succumbed in a short time on sepsis atack unfortunetaly. **Conclusion:** NPD type B is a rare storage disease. It is a multisystemic disease characterized by its clinical variability and could be overlooked until adulthood life with various differential diagnosis option. It should be considered.

https://doi.org/10.1016/j.htct.2021.10.980

OP 13

LEWIS C IN BREAST CANCER PROGRESSION

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ФГБУЗ МСЧ 174 ФМБА

Case report: Lewis C in breast cancer progressionN.A.Gadetskaya1, N.N.Tupitsyn2, N.V.Bovin3, Udalova Ya.A.11At the moment of receiving these data - FSBU "Blokhin national cancer research center" of the Russian Ministry of Health, Moscow, Russia2FSBU "Blokhin national cancer research center" of the Russian Ministry of Health, Moscow, Russia3Yu.A. Ovchinnicov and M.M.Shemiakin Institute of Bio-organic chemistry of Russian Academy of Sciences, Moscow, RussiaExact evidences on the role of natural IgM antibodies in anti-tumor immune surveillance were proved by German team of scientists (Vollmers H.P. et al.) Binding of those antibodies to tumor cells leads in many cases to malignant cell death via lipoapoptosis. In 1994, P.D. Rye & R.A. Walker produced monoclonal IgM antibody LU-BCRU-G7 against breast cancer-associated glycoprotein. In early breast cancer, expression of this marker was seen in a group of patients with poor prognosis. Antibody recognized disaccharide Galβ1- 3GlcNAc or LewisC (LeC), blood group H1-antigen precursor. We have studied glycan expression on tumor cells and antiglycan antibodies in more than 240 breast cancer patients. Immunohistochemical study in 89 cases of early breast cancer (pT1- 2 N0 M0) revealed antigen expression in 57% of cases. Expression of LeC was significantly more frequent in tumors of larger sizes (> 3 cm): 85,0% vs 48,5% (p=0,004). Expression of LeC was much more frequent in breast cancers in which lung metastases were noticed in patient's follow up (more than 1 year) after operation (p=0,047). In LeC positive cases shorter (p < 0,1) DFS (disease-free survival) was noted, differences in DFS being near significant (p = 0,05) in malignancy grade 3 and in moderate or prominent lymphoid infiltration (p=0,02), as well as long (> 4 years) patient's follow up. That data confirmed the note of Rye and Walker on poor prognosis of early LeC-positive breast cancer. In 67% of breast cancer patients small