score of 0. The CAS score was higher in females (p= 0.023). Similarly, it was significantly higher in patients who were not in remission for hematological malignancy and who received active chemotherapy (p= 0.010). The mean VAX score was 49.07 ± 8.76 (27-72). Most of the participants (64%) had a neutral attitude towards COVID-19 vaccination. In a survey of 165 patients, 55% said that they were skeptical about vaccination safety, and 58% said that they were concerned about unintended side effects. In addition, 90% expressed moderate concerns about commercial profiteering. Natural immunity was preferred by 30% of the participants. There was no statistically significant correlation between CAS scores and Vaccine Attitudes Review (VAX) Scale. **Conclusion:** This study draws attention to the level of anxiety in patients with hematological malignancies of the COVID-19 pandemic. Negative attitudes towards the COVID-19 vaccine are worrisome for at-risk patient groups. We think that patients with hematological malignancies should be informed to eliminate their hesitations about COVID-19 vaccines.

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OP 12

TREATMENT OF A PATIENT DIAGNOSED WITH ERDHEIM CHESTER'S DISEASE IN COOPERATION WITH PLASTIC SURGERY AND HEMATOLOGY

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Objective: Erdheim Chester disease (ECD) is a rare non-Langerhans histiocytic multisystem disorder. ECD is most commonly manifested as multifocal sclerotic long bone lesions. Orbital and intraocular manifestations are rare. We report an unusual bilateral orbital presentation as xanthomatous infiltration of ECD. **Case report:** A 56-year-old male was admitted due to papular lesions on both eyelids. Eyelid tissue histology showed histiocytic infiltration consistent with ECD. BRAF V600E mutation (-). In the first year, PET-CT showed new lesions on the lymph node, eyelids, knees and elbows. Laboratory investigation was within normal apart of mild increased CRP. The disorder was unresponsive to pegylated interferon alfa. With cladribine of 3 courses and surgical intervention he achieved a nearly normal facial appearance. **Conclusion:** Uncontrolled cell survival, differentiation, and proliferation of histiocytes in ECD result in soft tissue thickening and progressed to chronic fibrotic disease which may be unresponsive to medical treatments and requires surgical interventions.

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OP 13

A RARE PRESENTATION OF SYSTEMIC AL AMYLOIDOSIS; PULMONARY AL AMYLOIDOSIS

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Objective: Involvement of the lung is common in systemic AL amyloidosis in post-mortem series. However, the diagnosis is challenging. Histology is the gold standard but may result in bleeding. Consequently, diagnosis during life is rare. **Case report:** A 58-year-old female was admitted with chest pain, weight loss and cough. Thorax CT showed diffuse ground glass opacities, increased nodular density, and conglomerated mediastinal lymph nodes. Lung biopsy revealed Congo red (+) and anti-amyloid A (-). Bone marrow showed clonal plasma cell increase as 15% of kappa type. No other organ involvement or lytic lesions on PET-CT were documented. Cardiac involvement was detected. Daratumumab-bortezomib-based treatment with doxycycline was started. **Conclusion:** Clinical symptoms and laboratory testing cannot specially confirm the diagnosis of pulmonary amyloidosis. The usual presentation is diffuse-alveolar septal involvement. Diffuse parenchymal involvement is one of the least common forms of respiratory amyloidosis. It should be considered in the differential diagnosis in elderly patients.

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PP14

REAL-LIFE STUDY OF BIO-CLINICAL FOLLOW-UP AFTER BNT162b2 mRNA COVID-19 (BNTCV) VACCINATION IN 235 PATIENTS (PTS) INCLUDING 225 WITH HEMATOLOGICAL MALIGNANCIES (HM).

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Pts with HM may have low or delayed specific immune response after usual vaccination due to immune deficiency, associated to the disease or to the therapy. In this real-life study, 235 pts vaccinated with BNTCV (BioNTech Pfizer) were monitored for 2 years, starting 06/20 in a single Institution. Patients 'population and follow-up. 235 patients including 225 with HM initially received 2 doses of BNTCV (IM) with 3 weeks between the 2 first doses, including 98 lymphomas (L), 28 monoclonal gammopathies with undetermined significance (MGUS), 34 multiple myelomas (MM), 34 myeloproliferative disorders (MPD), 27 chronic lymphocytic leukemias (CLL), 4 acute leukemias and 10 non-malignant hemopathies. The first 43 pts had initial follow-up by telemedicine system connecting the pt to the Institute, developed by La Valeriane Inc. (Montpellier, France), 24/24h, 7 days. Seroconversion was assessed by analyzing IgG anti-Spike protein antibody (AcAS) every 3-4 weeks after the first vaccination and then, every 3-4 months, by SARS-CoV-2 IgG II Quant® Assay (Abbott, France) and Elecsys® Anti-SARS-CoV-2 S (Roche Diagnostics, France), in duplicate with the 2 assays, by 2 independent labs. Additional boosts of vaccine were administered in case of seronegativity or when the level of antibody was <7 BAU/mL. Pts not seroconverted after 4-5 doses of vaccine received tixagevimab/cilgavimab (EVUSHELD®, AstraZeneca). Tolerance using telemedicine application. Local pain (<1 day) was common and transient, particularly after the 2nd dose. 4/43 pts reported significant adverse events through telemedicine, followed by a medical call, including severe asthenia for ≥2 days, fever (>38° C) for at least 2 days, headache, or general pain. The satisfaction survey of monitoring system was good. Adherence to vaccination was excellent (only one refusal/235 pts). AcAS follow-up 15 Results were discordant (12 with Abbott +, Roche -, and 3 with Abbott - Roche +). Semi-quantitative rapid test (BIOSIS HEALING, Beijing China) was compared to Abbott with good concordance on 97 samples. After 2 doses of BNTCV, 72% of the pts were seroconverted, (median, range) (59, 3-319) BAU/mL, Abbott), including 62% CLL (121), 66% L (39), 91% MGUS (204), 61% MM (15) and 81% SMD (50). 50% of the pts receiving daratumumab (median 8 BAU/mL, 1-20) and only 38% of the pts receiving rituximab (median 0, 0-20) were seroconverted, as compared to 71% of the pts receiving other treatment or 80% (42, 2-210) with no therapy (161, 29-637) ($p<0.001$). Low gammaglobulin levels (<5g/L, $p=0.019$), similarly to the IgG level were associated with reduced seroconversion. Median levels of AcAS were 1679 BAU/mL post 2nd dose if seroconverted after the 1st dose and 308 if seronconverted only post 2nd dose. 68% of the pts negative after the 2nd dose were positive after the 3rd dose. 16 pts received tixagevimab/cilgavimab, 6 having symptomatic non-severe COVID-19 in the 15-40 days after the injection. There is a need to follow AcAS (including with rapid test) for pts having HM after BNTCV to adapt vaccine strategy including boosts or EVUSHELD. The usage of telemedicine connecting system may help to follow the early tolerance and to improve the pts' adherence.

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ONCOLOGY

PP15

IMMUNOPHENOTYPIC FEATURES OF MOLECULAR SUBTYPES OF BREAST CANCER

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Introduction: Currently, immunotropic drugs are used in the modern strategy of cancer treatment. Importance is given to immunological markers of the tumor, which may be associated with the prognosis of the disease, the effectiveness of treatment. Therefore, the study of tumor immunophenotype is one of the leading scientific directions. Of particular interest is the study of the immunophenotypic characteristics of breast cancer depending on its biological subtype. **Purpose:** to evaluate the frequency of expression of HLA-I, HLA-II, CD71, MUC1,0 Pgp170 molecules by breast cancer cells and determine their relationship with the molecular biological subtype of the tumor. **Materials and methods:** This study included 120 patients with breast cancer who received treatment at the Federal State Budgetary Institution "N.N. Blokhin" Ministry of Health of the Russian Federation. Tumor stages II and III prevailed: 56.7% and 33.4%, respectively. A moderate degree of differentiation (G2) was more often noted. The luminal subtype was 58.3% (n=70), non-luminal - in 41.7% (n=50). Immunophenotyping of the primary tumor was performed by immunofluorescence on cryostat sections. The reaction was evaluated using a ZEISS luminescent microscope (AXIOSKOP; Germany). The frequency of expression of HLA-I and class II molecules was studied depending on the clinical and morphological characteristics of breast cancer. The frequency of expression of HLA-I, HLA-II, CD71, MUC1.0 Pgp170 molecules depending on the molecular subtype of breast cancer was studied. **Results:** The absence of molecules of the major histocompatibility complex of class I and II on breast cancer cells was found in 89.6% of the samples. In 23.4% of cases, their monomorphic expression was observed. In the luminal subtype, HLA-II class molecules were expressed somewhat more often: in total, mosaic and monomorphic types of reactions were observed in 30.5% (20/65) of cases. With non-luminal - 20.0% (10/47) of cases. The frequency of expression of the transferrin receptor is significantly higher in the luminal subtype than in the nonluminal subtype: 85.9% (n=5) and 65.2% (n=30), p=0.011. Luminal breast cancer cells express transferrin receptors predominantly