indented by 'hug' the surrounding RBC. The nucleus exhibits loosely condensed chromatin with inconspicuous nucleoli. Less frequently, lymphoplasmacytoid lymphocyte was noticed in the stained blood smear. These cells showed ample pale blue unevenly stained cytoplasm with paranuclear of which contains eccentric nucleus with condensed chromatin.

Methodology: In this study, a peripheral blood smear of a COVID-19 patient was examined for the presence of abnormal leukocytes morphological changes.

Results: The blood film showed presence of atypical lymphocytes constituting about 43% of all lymphocytes (14.5% of the white cell count). This case report of COVID-19 patient represents an unusual feature of coronavirus family infections other than severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).

Conclusion: This study shows that the presence of reactive lymphocytes in the patient's blood film can be a pivotal finding in the diagnosis of COVID-19. Additionally, it emphasized the importance of blood film examination as an essential hematological test for COVID-19.

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PP 42

A study of hematological disease prevalence in covid-19 pandemic: a single center experience

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Objective: In the present study we aimed to investigate the prevalence of hematological conditions and patient characteristics among a patient population diagnosed with the COVID-19 infection at our hospital during the COVID-19 pandemic.

Methodology: Our study enrolled patients older than 18 years of age who were diagnosed with COVID-19 infection by physical examination and various studies and managed as inpatients at our hospital designated as a pandemic hospital within a two-month period between 15 March 2020 and 15 May 2020. The patients' age and sex distributions, contact status, comorbidities, primary hematological disorder, polymerase chain reaction (PCR) smear tests, computerized tomographic findings, need for intensive care, treatments regimens, total length of clinic stay, and rates of discharge and mortality were retrospectively reviewed.

Results: We reviewed the medical records of a total of 1928 patients who were admitted to pandemic clinics with the diagnosis of PCR-positive COVID-19 or suspected COVID-19 during the prespecified two-month period. Among these patients, 963 (49.9%) were male, and 965 (50.1%) were female. Their mean age was 51.3 ± 21.4 (min–max: 18–99) years. Eleven (0.57%) patients had a hematological condition and were thus consulted with the hematology department. They consisted of 3 females and 8 males with a mean age of 64.7 ± 18.7 (min–max: 22–89) years. A review of their diagnoses identified 4 patients with chronic lymphocytic leukemia (CLL), 2 patients with acute myeloid leukemia (AML), 1 patient myelodysplastic syndrome (MDS), 1 patient with non-Hodgkin lymphoma (NHL), 1 patient with chronic immune thrombocytopenia (ITP), 1 patient with polycytemia vera (PV), and 1 patient with thalassemia intermedia. While 4 patients had not taken any treatment for a hematological condition prior to the COVID-19 infection, 2 patients had taken azacitidine, 1 patient hydroxyurea, 1 patient chlorambucil, 1 patient R-FC (rituximab- fludarabine, cyclophosphamide), 1 patient R-Benda (rituximab-bendamustine), and 1 patient CHOP (Cyclophosphamide, Vincristine, Doxorubicin, Prednisolone). Three patients had a history of contact with COVID-19. While all patients had pulmonary involvement on a thoracic computerized tomography, three of them had mild involvement. Four patients needed intensive care. Seven (64%) patients had at least one comorbidity such as diabetes, hypertension, or coronary artery disease. All patients were treated with hydroxychloroquine, azithromycin, and enoxoparine. Four patients showing signs of disease progression were administered favipirapir while a patient received IVIG and another one received plasma therapy. The mean length of hospital stay was 12.7 days (min–max 2–27). Three of 11 patients died.

Conclusion: "COVID-19" and the "pandemic" it has caused, every detail of which we have still not understood, is a significant global problem from every aspects. Alongside of particularly the elderly, the patient group with hematological conditions that are immunosuppressed due to conditions themselves or their treatment regimens are at particular risk of infection by the COVID-19 pandemic. Our study have shown that the prevalence of hematological conditions is about 0.5% among patients infected by COVID-19. Patients with hematological conditions taking utmost care of isolation measures, protecting themselves, having strong family support, and being accustomed to the isolation process make a significant contribution to such a low prevalence.

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PP 43

A case of malignant peritoneal mesothelioma as a rare cause of autoimmune haemolytic anaemia

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Objective: Nearly half of the cases of autoimmune haemolytic anaemia (AIHA) are associated with an underlying disorder that leads to immune dysregulation, and malignancies is one of them. Although AIHA is reported in patients with a wide range of haematological malignancies, most frequently in Chronic Lymphocytic Leukameia and Non-Hodgkin Lymphoma, only 1–2% are associated with solid organ malignancy. This case report highlights malignant peritoneal mesothelioma as a rare cause of autoimmune haemolytic anaemia.

Case report: We report a case of a twenty-nine year old female who initially presented to her general practitioner with a six month history of symptoms suggestive of irritable

bowel syndrome. Her blood count identified a significant anaemia (haemoglobin 53 g/L) and thrombocytosis (platelets 1260×10^9/L), and was thus referred to haematology clinic. She was diagnosed with IgG-C3d AIHA. The patient was started on prednisolone 1 mg/kg with a good initial response. To investigate the underlying cause, a whole body CT scan was performed, which identified significant abdominal ascites. Serum CA-125 was raised at 6715U/mL (range 0–35) and paracentesis revealed an LDH of 1203 SU suggesting underlying malignancy, but no malignant cells were found on the ascitic fluid cytology. The patient went on to have a PET scan, which confirmed FDG avid serosal disease, with update in the liver, omentum and peritoneum. Diagnostic laparotomy revealed widespread nodules on all serosal surfaces, and the biopsy confirmed a diagnosis of peritoneal epithelioid malignant mesothelioma. Whilst the patient had her workup with the oncology team, her AIHA became refractory to steroid treatment, and was commenced on Rituximab at 375 mg/m^2 weekly infusions. The patient did not respond to 4 doses of Rituximab, and continued to require regular transfusion support. She eventually started chemotherapy for the mesothelioma, which reduced the briskness of haemolysis, and reduced transfusion requirements; although haemolysis did not completely cease.

Conclusion: To our knowledge, this is the third case of AIHA with malignant peritoneal mesothelioma reported in literature. There is currently no established treatment for AIHA associated with solid organ malignancy. This case highlights the poor response to standard treatments, and only a partial response to the definitive treatment for the underlying malignancy.

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PP 44

Erdheim–Chester disease: a single center experience

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Objective: Erdheim-Chester disease (ECD) is a rare histiocytosis which has typical findings including central diabetes insipidus, restrictive pericarditis, perinephric fibrosis, and sclerotic bone lesions. ECD is primarily a disease of middle-aged adults, with a mean age of 46 years at diagnosis in the United States (range, 20–74 and 56 years in the French cohort (range, 29–86). The exact incidence is unknown due the lack of population-based mandatory reporting to national registries.

Case report: Patient-1 Patient-2 Patient-3 Patient-4 Patient-5 Sex Male Male Female Female Male Age at compilation 32 32 51 65 41 Age at diagnosis 28 29 48 64 37 Follow up from disease onset, mo 59 45 40 12 44 Constitional symptoms – – – – + Skeletal involvement + + + + + Extraskletal involvement + + – + + Cardiac involvement Coronary involvement – – – – – Pericardial involvement + – – – – Right atrial pseudotumor – – – – – Valvulopaty – – – – – Large vessel involvement – – – – – CNS involvement Central DI + – – + – SerebellarSyndrome – – – – – Extra–axial mass – + – – – Hypophyseal involvement – – – – Pulmonary involvement + – – – – Orbital involvement – – – – + Cutaneous involvement (xanthelasma) – – – – + Retroperitoneal involvement – – – – – Adrenal infiltration – – – – – Paranasal sinüs involvement – – – – – Maxillary involvement – – – – – Treatment + + + + + Peg IFN-α/IFN-α + – + + + Radiotherapy – – + – – Corticosteroids – – – – + Other – + – – +

Methodology: Data of five patients were retrospectively analyzed in our center. The mean age of the patients was 41.2 years (28–64 years) at the time of diagnosis. The mean follow-up period was 40 months (12–59 months).

Results: The patients were mostly diagnosed with the bone. The most commonly involved organ was the bone, followed by the central nervous system (CNS), heart, lung, periorbita, and skin, respectively. While bone involvement was observed in all patients, non-skeletal involvement was observed in 4 patients. Diabetes insipidus was detected in 2 patients. Patients received different treatments depending on the type of involvement and extent of the disease. Four patients received treatment with Peg-IFN, and one patient received radiotherapy due to the progression of the disease. Following excision of the mass, no recurrence was observed in one patient, and the patient was under follow-up without treatment. One of the patients was diagnosed with the disease before the first-line treatment with vemurafenib, therefore, a combination of vinblastine and methylprednisolone was used. However, a full response could not be achieved. IFN was used as the second-line treatment, and the patient was under follow-up with stable conditions. No patient passed away during the follow-up.

Conclusion: Of our patients, 60% were male, similar to the general epidemiological data. However, the mean age of our patients, who were American and French, were low. Evaluation of the expression levels of BRAFV600E was performed for three patients, but the results were negative. This may be due to the fact that one patient had overlapping entities with LCH and could not be evaluated with a method as sensitive as ddPCR, which is one of the most recent sequencing techniques. Although skeletal involvement was present in all patients, the absence of extra-axial involvement, such as life-threatening retroperitoneal involvement and adrenal involvement, was remarkable. Although the patients were BRAF V600E mutation negative and this made the conversion to vemurafenib therapy difficult, patients were followed up without progression during the conventional Peg-IFN therapy. Clinical profile and treatment approach algorithms of ECD