died. Five patients (16,1%) had the t(15;17)(q24;q21.3) corresponding to the PML-RARA fusion. Six patients (19,3%) had the *FLT3* mutation that confers a poorer prognosis. During the clinical follow up, a total of 16 patients died due to septic shock, COVID-19, or refractoriness to treatment. **Discussion:** The incidence of cases of adults over 50 years of age with AML was 58%, as it corroborates the expected incidence of cases regarding the age described in the literature. Studies indicate that immunophenotyping is critical to the differential diagnosis among AML subtypes. AML is defined by the mainly expression of the markers MPO, CD117, CD13, CD33, HLA-DR and CD38, corroborating what was observed in the results. In addition, depending on the alteration observed in the karyotype, it may confer poor or good prognosis to the patient. The *PML-RARA* merger, for example, is known as M3 AML or acute promyelocytic leukemia (APL), a subtype of AML with a better prognosis for patients. The *FLT3* mutation is present in 1 in 3 patients with AML. The presence of this altered gene may mean a worse prognosis and a greater possibility of recurrence but allows a specific and differentiated treatment. **Conclusion:** Epidemiological data from this preliminary study indicate that in the state of Ceará AML is more common in male patients aged 50-80 years. In addition, the use of targeted therapies for patients with abnormal karyotypes as well as the adoption of stricter measures to prevent hospital infections may increase patient survival.

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EPIDEMIOLOGICAL AND MOLECULAR PROFILE OF ADULT PATIENTS WITH ACUTE LYMPHOBLASTIC LEUKEMIA IN CEARÁ

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Objective: About 70% of cases of Acute Lymphoblastic Leukemia (ALL) affect children aged 1- 4 years. The incidence increases slightly again in adults over 50 years, characterizing a poor prognosis. According to data from the National Cancer Institute, for the year 2020 leukemias present in men as the fifth most frequent neoplasm in the Northeast Region with a risk of 8.20/100,000 inhabitants, occupying the fifth position. In the case of women, the risk in the Northeast region is 4.42/100,000 inhabitants and ranks tenth. This study aimed to identify the molecular and epidemiological profile of adult patients with ALL in the state of Ceará. **Methodology:** Sample collection was performed in patients with ALL treated at the General Hospital of Fortaleza (GHF), considered the main and largest hematology outpatient clinic in the metropolitan region of Fortaleza, as well as the State of Ceará. All patients participating in this study read and signed the informed consent form. Patients with other types of leukemias or other hematological diseases were excluded. This study was approved by the Research Ethics Committee of the Federal University of Ceará under protocol no. 38680520.9.0000.5054. **Results:** From July 2021 to July 2022, 25 patients with ALL were treated, of whom 9 are women and 16 are men. The mean age observed was 42.5 years. 44% of patients live in the capital (Fortaleza), while the other 56% of patients live in rural areas. Through immunophenotyping it was possible to verify that there were 22 patients (88%) compatible with ALL-B presenting CD19, CD10, CD45, CD38, CD22, CD79a, CD34, CD81 and CD58 as the main markers, while only 3 patients (12%) were compatible with ALL-T, expressing mainly CD3, CD45, CD5, CD7, CD2, CD11c and CD1a. Eleven patients (44%) had abnormal and complex karyotypes. Five patients had the *BCR-ABL* p190 mutation and two had the *E2A-PBX1* mutation. A total of 9 patients died due to septic shock, COVID-19, or refractoriness to treatment. **Discussion:** The literature indicates a new peak of ALL cases after 50 years of age, however the highest incidence observed in the study participants was between 30 and 50 years. Studies indicate that immunophenotyping findings in patients with ALL B line are almost always CD19, CD79a, CD10, CD20 and CD22 positive, while T-strain ALL usually present CD7, CD3, CD1a and CD10 as the main markers, corroborating what was observed in the results. In addition, depending on the alteration observed in the karyotype, it may confer poor or good prognosis to the patient. The *BCR-ABL1* and *E2A-PBX1* mergers, for example, are alterations that give worse prognosis to patients and, therefore, may be targeted for treatment in an attempt to improve the survival of these patients. *TEL-AML1* fusion, on the other hand, represents a good prognosis, being more incident in pediatric ALL. **Conclusion:** Epidemiological data from this preliminary study indicate that in the state of Ceará ALL is more common in male patients aged 30-50 years living in rural regions. In addition, the use of targeted therapies for patients with abnormal karyotypes as well as the adoption of stricter measures to prevent hospital infections may increase patient survival.

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HISTOPLASMOSE DISSEMINADA EM PACIENTE COM TRICOLEUCEMIA: UM RELATO DE CASO

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Introdução: Descrita pela primeira vez em 1923 por Ewald A tricoleucemia (HCL) é uma neoplasia derivada dos linfócitos B. É uma doença insidiosa, sendo infecções as principais complicações. Diante da imunossupressão, a doença fúngica causada pelo *Histoplasma capsulatum* pode surgir de forma disseminada e mimetizar tumores sólidos. **Objetivo:** Descrever a apresentação clínica do caso de uma paciente com Histoplasmose disseminada (HD) e HCL atendida em hospital terciário do sul do Brasil. **Relato de caso:** Paciente feminina, 58 anos, branca, sem comorbidades prévias e com história familiar de

neoplasia pulmonar. Iniciou com astenia, dispneia aos esforços, tosse seca, febre e perda ponderal de 13kg em 3 meses. Procura atendimento com realização de tomografia de tórax com lesão de aspecto expansivo e linfonodomegalias em topografia mediastinal com diagnósticos diferenciais de neoplasia pulmonar ou linfoproliferativa. Procura atendimento em um hospital de Porto Alegre devido piora do quadro geral, com exames de admissão evidenciando pancitopenia. Realiza biópsia de linfonodos mediastinais com diagnóstico de Histoplasmose e, posteriormente, biópsia de medula óssea com diagnóstico de HCL através do aspecto morfológico e imunofenotipagem compatível (CD19, CD20, CD22 e CD103 como patologia de base. Realizou tratamento de 4 semanas com anfotericina B e seguiu acompanhamento ambulatorial com uso de itraconazol, com melhora das lesões mediastinais e melhora parcial da pancitopenia. **Discussão:** A HCL é uma forma incomum de leucemia – corresponde a 2% das leucemias-, 4 a 5 vezes mais comum em homens e com média de idade ao diagnóstico de 59 anos. Em geral é diagnosticada através de suas complicações infecciosas, esplenomegalia ou pela presença de citopenias. O caso descrito, apesar de uma complicação infecciosa, apresentou-se de forma atípica por mimetizar tumor sólido, tendo como primeira hipótese diagnóstica neoplasia pulmonar. Após o diagnóstico de HD em biópsia de linfonodo, foi realizado investigação da doença de base, com diagnóstico de HCL. Por ser uma doença insidiosa e com sobrevida global semelhante à da população em geral, nem todo paciente com HCL necessita de tratamento quimioterápico. Os critérios para terapia incluem citopenias persistentes como hemoglobina <11 g/dL, contagem plaquetária < 100.000/mcL ou neutrófilos <1.000/mcL. Devido à pancitopenia, a paciente preenchia critérios para protocolo terapêutico e diante do quadro de infecção, realizou-se pesquisa de mutação BRAF V600E, o qual veio presente, para avaliar o uso de vemurafenib, tratamento inicial em infecção ativa. No entanto, devido estabilidade do quadro, optou-se por realizar o tratamento da HD, com adequada resposta clínica e resposta laboratorial parcial, permanecendo com trombocitopenia e neutropenia. No momento, paciente sem quadro infeccioso, apta para tratamento de primeira linha com cladribina ou cladribina associada a rituximabe. **Conclusão:** O diagnóstico e tratamento de HCL pode se demonstrar um desafio na prática médica quando associado a quadros infecciosos potencialmente fatais quando expostos a fatores imunossupressores como quimioterápicos. A paucidade de dados na literatura sobre casos semelhantes foram um desafio para definição do momento adequado para iniciar o tratamento da doença de base. Dessa forma, mostra-se a importância em expor casos semelhantes para auxiliar na decisão terapêutica.

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THROMBOSIS DURING VENETOCLAX TREATMENT FOR ACUTE MYELOID LEUKEMIA WITH THE 3Q21Q26 SYNDROME: CRITICAL SURVEILLANCE URGENTLY NEEDED

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Introduction: Acute myeloid leukemia (AML) is associated with dismal outcomes, especially in older patients. The use of intensive chemotherapy currently represents the most common option for young/adult AML patients. Nevertheless, older patients are frequently ineligible for it or have a disease that is refractory to standard chemotherapy. As an alternative, azacitidine or decitabine monotherapy has been used, but hypomethylating agents have been associated with a low chance of survival. Since the results of Viale-A got published in August 2020, we have been living a new era in Hematology due to the possibility of treating elderly patients with AML suffering from comorbidities. The most frequent adverse events of the azacitidine-venetoclax combination were thrombocytopenia, neutropenia, and febrile neutropenia in 45%, 42%, and 42% of the cases, respectively. But now, in real clinical practice outside of a clinical trial, we have detected a few cases with rebound thrombocytosis during initial cycles of treatment. **Objectives:** Describe an AML patient who presented thrombosis of the arm due to very high thrombocytosis of 1,550 x 109/L during the first cycle of azacitidine-venetoclax treatment. **Case report:** Our patient presented translocation involving the long arm of chromosome 3 at 3q26 in which myeloid disorders had already been identified as 3q21q26 syndrome. Very recently, Othman et al. reported the incidence of rebound thrombocytosis without clinical manifestation during azacitidine-venetoclax combination for AML treatment. No case presented had such high platelet count and thrombosis as presented herein. Othman et al. suggested rebound thrombocytosis would be due to the capability of blasts to hide thrombopoietin (TPO) via increased expression of TPO receptor MPL, but the mechanism underlying the thrombocytosis remains unclear. **Discussion:** The 3q21q26 syndrome is rare but occurs in a high-risk myelodysplastic syndrome (MDS) or the setting of AML and is commonly associated with thrombocytosis. These chromosomal abnormalities result in aberrant expression of the protooncogene ecotropic virus integration site – 1 (*EVI1*) located at 3q26.2, and through mechanisms not completely understood, myeloid and erythroid differentiation are profoundly suppressed while the megakaryocytic lineage shows marked hyperplasia. This case illustrates the importance of critical surveillance of