

neuroectodérmico primitivo com base na histopatologia da biópsia de medula. **Discussão:** Apresentamos o caso de uma paciente jovem com o diagnóstico de PNET avançado, com manifestações hemorrágicas cutâneo-mucosas de evolução aguda, associado a plaquetopenia grave e infiltração da medula óssea por células imaturas com características blásticas, que faziam suspeitar fortemente de uma leucemia aguda, portanto, uma apresentação atípica para um tumor sólido raro e de comportamento agressivo, cujo diagnóstico só foi possível através de exames especializados. **Conclusão:** O diagnóstico de certas neoplasias pode ser desafiador devido a sua rara incidência e, por vezes, apresentação clínica atípica, que pode simular outras doenças. O envolvimento primário do sangue periférico e da medula óssea suscita a avaliação inicial do hematologista que, com base nos conhecimentos clínico e laboratorial, é capaz de estabelecer um raciocínio amplo e diferencial, cuja confirmação requer o conhecimento de um especialista experiente para diagnóstico assertivo e precoce.

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ASPERGILOSE PULMONAR INVASIVA PRECOCE EM LEUCEMIA AGUDA BIFENOTÍPICA

CAT Alves, MLM Nucci, ACA Silveira, NCC Oliveira

Universidade Federal do Rio de Janeiro (UFRJ), Rio de Janeiro, RJ, Brasil

Introdução: Aspergilose pulmonar invasiva (API) é uma das principais doenças fúngicas invasivas em pacientes hematológicos de alto risco, como os portadores de leucemia aguda. A mortalidade associada a API diminuiu na última década devido ao diagnóstico e tratamento precoce. Em leucemia aguda, API costuma ocorrer na segunda ou terceira semana do tratamento. Entretanto, há relatos de API ocorrendo no momento do diagnóstico da leucemia aguda. **Objetivo:** Apresentar o caso de uma leucemia aguda bifenotípica com Aspergilose Pulmonar Invasiva ao diagnóstico. **Relato de caso:** Paciente masculino de 30 anos, previamente hígido, relatava ter apresentado 4 meses antes tosse seca, perda ponderal de 30Kg, febre, sudorese noturna e diversas intercorrências infecciosas, como pneumonia e celulite periorbitária. Exames laboratoriais evidenciavam anemia e leucopenia com neutropenia e um diagnóstico de leucemia aguda de fenótipo misto foi feito (mieloide e linfóide T). A tomografia computadorizada (TC) de tórax da admissão mostrou opacidade nodular heterogênea de limites imprecisos com discreto vidro fosco ao redor e bronquiectasia. Galactomanana sérica foi normal. Um lavado broncoalveolar mostrou BAAR e GeneXpert para *Mycobacterium tuberculosis* negativos, mas galactomanana de 1,7. Foi feito diagnóstico de API e iniciado tratamento com anfotericina B complexo lipídico por 14 dias e depois voriconazol por 32 dias. Evoluiu com melhora completa dos sintomas e TC de tórax de controle ao final da indução de remissão mostrou melhora significativa. O paciente recebeu voriconazol como profilaxia secundária nos ciclos subsequentes de quimioterapia e não apresentou recidiva da API. **Discussão:** Esse caso mostra o valor da TC e galactomanana no lavado

broncoalveolar como ferramenta diagnóstica para API. Um estudo prospectivo mostrou uma prevalência de 11% de API em pacientes com leucemia aguda antes do início do tratamento. Uma vez que não existem marcadores clínicos específicos para a API, exames de imagem de rastreamento devem ser considerados, embora não seja rotina. Achados tomográficos sugestivos de API são árvore em brotamento, vidro fosco e nódulos com ou sem sinal do halo. Na presença de tais achados, deve-se fazer galactomanana no soro e, se normal, lavado broncoalveolar. **Conclusão:** A realização de uma TC de tórax deve ser considerada no diagnóstico das leucemias agudas, principalmente quando há outro fator de risco associado, como neutropenia crônica. O diagnóstico e o tratamento precoces melhoram o prognóstico da API.

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EPIDEMIOLOGICAL AND MOLECULAR PROFILE OF PATIENTS WITH ACUTE MIELOID LEUKEMIA IN CEARÁ

FMCP Pessoa^a, CB Machado^a, IV Barreto^a, RB Gadelha^a, RM Ribeiro^b, DS Oliveira^b, MOM Filho^a, RC Montenegro^a, MEA Moraes^a, CA Moreira-Nunes^a

^a Universidade Federal do Ceará (UFC), Fortaleza, CE, Brazil

^b Hospital Geral de Fortaleza (HGF), Fortaleza, CE, Brazil

Objective: Acute myeloid leukemia (AML) is the second most common leukemia in adults and older patients represent most cases. The states of the Northeast of the country have stood out in the frequency of leukemia cases, and the frequencies are higher than the rate of 35% compared to other neoplasms, especially in the metropolitan regions of Fortaleza. In the State of Ceará, the number of cases of leukemia expected for the year 2020 is 6.17 cases/100,000 inhabitants in men and 4.29 cases/100,000 inhabitants in women. In view of this information, the aim of this study was to identify the molecular and epidemiological profile of patients with AML in the state of Ceará. **Methodology:** Sample collection was performed in patients with AML treated at the General Hospital of Fortaleza, 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, 31 patients with AML were treated, of which 8 are women and 23 are men. The mean age observed was 50.4 years. 54.8% of patients live in the capital, while the other 45.2% of patients live in rural areas. Through immunophenotyping it was possible to verify that the main markers presented by LMA patients were CD33, CD13, CD117, CD45, MPO, CD34, CD64, HLA-DR, CD11c, CD11b e CD38. Thirteen patients (42%) had abnormal and complex karyotypes, of which six

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

FMCP Pessoa^a, CB Machado^a, IV Barreto^a, RB Gadelha^a, RM Ribeiro^b, DS Oliveira^b, MOM Filho^a, RC Montenegro^a, MEA Moraes^a, CA Moreira-Nunes^a

^a Universidade Federal do Ceará (UFC), Fortaleza, CE, Brazil

^b Hospital Geral de Fortaleza (HGF), Fortaleza, CE, Brazil

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

CK Weber, CE Wiggers, AA Hofmann, F Dortzbacher, V Predebon, XPH Condori, VR Siqueira, RS Ferrelli, CS Weber, AA Paz

Hospital de Clínicas de Porto Alegre (HCPA), Porto Alegre, RS, Brasil

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 Histoplasmoze 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