pediatria ainda em andamento. Este caso desafiador ilustra a possibilidade do uso em vida real de casos selecionados de leucemias e linfomas pediátricos.

https://doi.org/10.1016/j.htct.2024.09.1088

A MORBIDADE HOSPITALAR DA DOENÇA HEMOLÍTICA DO FETO E DO RECÉM NASCIDO, PERFIL EPIDEMIOLÓGICO DA REGIÃO CENTRO-OESTE, PERÍODO DE 2019-2023

NR Teixeira [a], TSL Câmara [b], JS Cardoso [c], GC Ribas [d], NSC Carvalho [e], MS Veloso [f], LHMSG Graciolli [g], DFS Moraes [h], TRN Silva [i], JVD Filho [a]

[a] *Centro Universitário São Lucas (Afya), Ji-Paraná, RO, Brasil*
[b] *Faculdade Pernambucana de Saúde (FPS), Recife, PE, Brasil*
[c] *Universidade Municipal de São Caetano do Sul (USCS), São Caetano do Sul, SP, Brasil*
[d] *Universidade Feevale, Novo Hamburgo, RS, Brasil*
[e] *Universidade de Ribeirão Preto (UNAERP), Ribeirão Preto, SP, Brasil.*
[f] *Faculdade de Ensino Superior da Amazônia Reunida (FESAR), Redenção, PA, Brasil*
[g] *Faculdade de Medicina Jundiaí, Jundiaí, SP, Brasil*
[h] *Centro Universitário de Volta Redonda (UniFOA), Volta Redonda, RJ, Brasil*
[i] *Universidade de Rio Verde (UNIRV), Goianésia, GO, Brasil*

Objetivo: Analisar o indicador de morbidade hospitalar da doença hemolítica do feto e do recém nascido, com informações contidas na base de dados DATASUS a respeito da região Centro-Oeste, nos anos de 2019 a 2023. **Material e métodos:** Trata-se de um estudo descritivo e quantitativo acerca da doença hemolítica do feto e do recém-nascido, abordando o perfil epidemiológico da região Centro-Oeste no período de 2019-2023. Os dados foram obtidos através do Departamento de Informática do Sistema Único de Saúde (DATASUS). As variáveis analisadas foram: região/ unidade de federação, faixa etária, cor/raça, sexo, ano de processamento e custo. **Resultados:** Com base nos dados obtidos desses últimos 5 anos, foi possível observar a existência de 2773 internações, constituindo um custo de R$948.730,99 em serviços hospitalares e uma média de permanência de 8,12 dias. A maioria dos pacientes internados são do sexo masculino, representando 53,73% do total de internações, enquanto que o sexo feminino respondia a 46,3%. Além disso, dentre os anos estudados, o ano de 2020 foi o que apresentou a maior quantidade de casos, com um total de 682 internações. Foram registrados apenas 2 óbitos no período analisado, um em 2020 e outro em 2022. **Discussão:** A doença hemolítica do feto e do recém-nascido (RN), também conhecida como eritroblastose fetal, se caracteriza pela destruição dos glóbulos vermelhos do feto ou recém-nascido. Essa destruição ocorre através da produção de anticorpos de imunoglobulina G (IgG) pela mãe contra os antígenos fetais, processo conhecido como isoimunização, ocasionando hemólise, anemia e liberação de bilirrubina. Sua identificação pode ser realizada através do teste de Coombs indireto, sendo assim, essa doença ocorre devido acompanhamento ineficiente das gestantes na atenção básica ou admnistração tardia da imunoglobulina anti-Rh(D). Se a doença for identificada, é indispensável no pós-natal o tratamento da hiperbilirrubinemia e anemia, visto que estes podem acarretar em neurotoxicidade e, em casos mais graves, a morte. **Conclusão:** Os resultados indicam grande demanda de internações por doença hemolítica do feto e do recém-nascido na rede pública de saúde da região Centro-Oeste e maior impacto entre crianças com idade inferior a 1 ano (99,78%), sexo masculino (53,73%) e cor parda 36,99%. De acordo com os dados analisados, demonstra-se necessidade de melhorar o acompanhamento durante o período do pré-natal, por meio da realização de exames de sangue durante a gestação, visando a detecção precoce de incompatibilidade sanguínea fator Rh entre mãe e feto, com priorização da utilização de imunoglobulina e transfusão sanguínea para os casos mais preocupantes. Há uma lacuna governamental que necessita ser abordada para o cuidado e manejo, visando a redução de hospitalizações e melhoria na qualidade de vida e saúde de mães portadoras de incompatibilidades sanguíneas durante a gestação.

https://doi.org/10.1016/j.htct.2024.09.1089

SECONDARY INVOLVEMENT OF THE ADRENAL, PANCREAS AND THYROID IN AN ADOLESCENT WITH DISSEMINATED BURKITT LYMPHOMA

GCF Souza, BP Martins, YA Moura, AP Dutra, LGPME Souza, BF Baglioli, R Balceiro, JL Neves, AF Oliveira, MJA Paula

Hospital de Câncer Infantojuvenil de Barretos, Barretos, SP, Brazil

Introduction: Lymphomas are cancers that arise from the white blood cells and have been traditionally divided into two large subtypes: Hodgkin and non-Hodgkin lymphoma. B-cell lymphoma is the most common subtype of non-Hodgkin lymphoma; almost 75% of patients with lymphoma have this variant. Lymphomas can potentially arise from any lymphoid tissue located in the body; however, secondary involvement in the adrenal, pancreas and thyroid is very uncommon. We report the history, examination findings, staging images results of a 17 -year-old adolescent man diagnosed with a Burkitt lymphoma. **Case report:** Adolescent, male, 17 years old, with the appearance of a subclavicular nodule on the right since November 2023, extending to the axillary region; without presenting fever, weight loss, night sweats, abdominal pain. Admitted to the service in June 2024 with a previous lymph node biopsy result with a reactional appearance. Evolving from April 2024 with a significant increase in the mass, associated with paresthesia of the hand and pain when moving the right upper limb. Chest tomography showed a solid mass in the right axillary region ($16.4 \times 12.7 \times 15.5$ cm); with involvement of the axillary and subclavian vessels on

the right, maintaining contact with the right lateral and anterior chest wall up to the skin; nodular lesions in the bilateral thyroid parenchyma; lesions compatible with lymphoproliferative disease. Abdominal tomography showed a solid mass in the body of the pancreas (5.8 × 5.2 cm), a solid mass in the topography of the left adrenal gland (10.4 × 6.2 cm), solid nodular lesions in the cortex of the bilateral kidneys (up to 3.2cm on the left); all lesions compatible with metastases. Performed on the lymph node conglomerate that diagnosed Burkitt's lymphoma, the patient concluded the stage without bone marrow involvement but with involvement in the cerebrospinal fluid, defining it as stage IV. Chemotherapy treatment was started with good clinical response and images. **Conclusion:** Based on this case and a review of the literature, secondary involvement of the adrenal, pancreas and thyroid does not affect the patient's prognosis like involvement of the cerebrospinal fluid or bone marrow. However, this case characterizes an unusual presentation of Burkitt's lymphoma with involvement of three endocrinological organs simultaneously.

https://doi.org/10.1016/j.htct.2024.09.1090

RESPONSE BY FLOW CYTOMETRY IN PATIENTS WITH BURKITT'S LYMPHOMA AND SECONDARY INVOLVEMENT IN THE CSF

GCF Souza, BP Martins, YA Moura, AP Dutra, LGPME Souza, BF Baglioli, R Balceiro, JL Neves, AF Oliveira, MJA Paula

Hospital de Câncer Infantojuvenil de Barretos, Barretos, SP, Brazil

Introduction: Central nervous system (CNS) involvement is a poor prognostic factor of non-Hodgkin's lymphoma (NHL) in children. Therefore, early diagnosis and treatment of CNS disease is important to improve long-term disease-free survival rates in children. With the continuous progress of science and technology, the methods and technologies used for the diagnosis of CNS disease are constantly improving, from imaging and cerebrospinal fluid (CSF) morphology studies to cerebrospinal fluid CSF flow pattern and genetics studies, and so on. With the continuous progress of diagnosis technology, the clinical staging of patients, which has a vital role in follow-up treatments, has also become more accurate. Most patients with early CNS invasion have no obvious clinical manifestations. Therefore, to improve the diagnostic rate of CNS invasion, flow cytometry (FC) and conventional cytomorphology (CC) of CSF were performed in newly diagnosed NHL patients for the first time of intrathecal chemotherapy. We report the examination findings and flow cytometry (FC) and conventional cytomorphology (CC) of two patients diagnosed with a Burkitt lymphoma and treatment response. **Case Report:** : Case 1: Adolescent, male, 16 years old, with stage IV Burkitt lymphoma. In first evaluation cerebrospinal fluid, absence of atypical cells in cytological examination, immunophenotyping, presence of 38 cells/mL with immunophenotype: CD10+, CD19+, CD20+, CD38+, CD45+, Kappa+, CD34-, Lambda-. In the second CSF, absence of atypical cells and in the immunophenotyping, absence of monoclonal B lymphoid cells. Currently, the patient is 7 months out of treatment in remission. Case 2: Adolescent, male, 17 years old, with stage IV Burkitt lymphoma; in the first evaluation of the CSF with absence of atypical cells on cytology, on immunophenotyping, presence of 40% of anomalous B cells with immunophenotype: CD10+, CD19+, strong CD20, CD34 weak, CD38 strong. In a second CSF evaluation, the patient presented absence of atypical cells on cytological examination and absence of monoclonal B lymphoid cells. Currently, the patient is undergoing treatment with no evidence of CSF involvement. **Conclusion:** Central invasion is more common to be found in pediatric NHL patients with bulky disease and/or BM involvement and/or involvement of more than 4 organs. It was also common in the EBV with Burkitt Lymphoma. CSF detection by FC has important clinical significance in the diagnosis of CNS invasion in children with NHL, as it can significantly improve the detection rate of CNS involvement and evaluation during the treatment.

https://doi.org/10.1016/j.htct.2024.09.1091

COPY NUMBER ALTERATIONS ASSOCIATED WITH HYPERDIPLOIDY IN CHILDHOOD WITH B-CELL ACUTE LYMPHOBLASTIC LEUKEMIA

RS Torres [a,b], V Vieira [b], MSP Oliveira [b], TS Fernandez [a]

[a] *Laboratório de Citogenética, Instituto Nacional de Câncer (INCA), Rio de Janeiro, RJ, Brazil*
[b] *Centro de Pesquisa, Instituto Nacional de Câncer (INCA), Rio de Janeiro, RJ, Brazil*

Introduction: : The presence of genetic alterations is widely used to stratify B-cell precursor Acute Lymphoblastic Leukemia (BCP-ALL) treatment. The most common cytogenetic abnormality in BCP-ALL is hyperdiploidy (good prognosis) which can be classified as low or near-hyperdiploidy (47-49 chromosomes) and high hyperdiploidy (HeH, more than 50 chromosomes). However, the presence of secondary abnormalities, such as copy number alterations (CNA), associated with a hyperdiploid karyotype may alter the prognosis. **Objective:** : The aim of this study was to analyze the frequency of hyperdiploidy associated with CNA in a cohort of BCP-ALL patients. **Material and methods:** : Forty-nine bone marrow samples of BCP-ALL patients were tested with conventional karyotype, and the DNA undergone to the MLPA SALSA Probemix P036 to detect aneuploidies and to MLPA SALSA Probemix P335 to identify specific gene deletions and amplifications. **Results:** Most patients were aged less than 6 years-old (31/49). The molecular cytogenetic showed that 35/49 (71,4%) cases had low hyperdiploidy and the minority had high hyperdiploidy (28,6%). The presence of somatic trissomies of chromosome 21 was frequent. However, amplifications were observed in *CDKN2A/B* (5/49), *EBF1* (11/49), *IKZF1* (3/49), *PAX5* (11/49), *JAK2* (1/49), *ETV6* (7/49), *BTG1* (4/49), *RB1* (1/49), *CRLF2* (10/49) and PAR1 region (31/49). Deletions were observed in *CDKN2A/B* (7/49), *EBF1* (1/49), *IKZF1* (4/49), *PAX5* (7/49), *JAK2* (1/49), *ETV6* (2/49) and *RB1* (2/49). **Discussion:** : According to the