

WARM AUTOIMMUNE HEMOLYTIC ANEMIA ASSOCIATED WITH EPSTEIN BARR VIRUS INFECTION

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Introduction: Autoimmune hemolytic anemia (AIHA) is a disease mediated by autoantibodies, with or without complement involvement. The clinical presentation varies from mild forms with compensated hemolysis to severe forms with life-threatening risk. Warm AIHA occurs in 60-70% of cases, while cold forms occur in 20-25%. Epstein Barr Virus (EBV) has a well-established connection with cold AIHA, but it is not clear how EBV induces warm antibodies agglutination. **Objective:** To report a rare case of warm AIHA associated with EBV. **Methodology:** Descriptive study of a single case conducted through data collection recorded in the hospital's operational system. **Results:** A 54-year-old female patient was admitted to the Emergency room with weakness, lethargy, dyspnea, abdominal pain, painful ulcerative lesions of the oral mucosa, splenomegaly, cervical and retroperitoneal lymphadenopathy, that started one month before admission. Initial laboratory tests revealed hemoglobin 5.4 g/dL, hematocrit 15.5%, mean corpuscular volume 94fL, mean corpuscular hemoglobin 32.7pg, red cell distribution width 20.9%, leukocytes 11,400/mm³ (neutrophils 4275; lymphocytes 5905); platelets 158,000/mm³, C-reactive protein 22.7 mg/dL, creatinine 2.47 mg/dL (baseline 0.78), with no liver abnormalities. Further investigations revealed positive direct antiglobulin test 4 + with high titles of IgG, slightly elevated lactate dehydrogenase, consumed haptoglobin and increased reticulocytes. Rheumatological causes were ruled out, cryoglobulins were negative, but positive IgM for EBV was identified. A diagnosis of severe AIHA associated with EBV was established. Initially treated with methylprednisolone 1 g/day for 3 days, and prednisone 1 mg/kg/day for the following 7 days. Due to hematimetric decline and the risk of clinical deterioration, the patient received 1 g/kg/day Immunoglobulin with good clinical and laboratory evolution. The patient was discharged and followed up as an outpatient, with complete weaning of corticosteroid therapy, complete improvement of the blood count and negative tests for hemolysis. **Discussion:** Secondary warm AIHA, as presented in this case, is strongly associated with chronic conditions such as rheumatological disorders, immunodeficiencies, chronic lymphocytic leukemia, non-Hodgkin lymphoma, and solid tumors; medications, antibiotics, chemotherapeutic agents and infections, mainly viral. The reported case demonstrated warm autoantibodies probably due to EBV infection, which is rarely described. Other causes of AIHA were excluded after extensive etiological investigation, leading us to conclude that the probable etiology of warm AIHA in this case was due to EBV infection, which is poorly described in the literature. **Conclusion:** We presented a rare case of severe AIHA, mediated by warm antibodies in association with EBV infection. There was a

worsening of laboratory results during conventional management with corticosteroid therapy, but with good evolution after treatment with Immunoglobulin, a new pulse therapy and clinical management of EBV infection. To the best of our knowledge, this is the third case of warm AIHA associated to EBV described. Due to the low frequency of this association, the physiopathological mechanisms of warm antibodies agglutination caused by EBV are still not clarified in the literature.

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ANEMIA HEMOLÍTICA INDUZIDA POR ALECTINIB – UM RELATO DE CASO

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Introdução/Objetivos: Anemia hemolítica induzida por drogas é uma causa rara de anemia associada a um amplo espectro de medicamentos, dos quais se destacam antimicrobianos. Neste relato descrevemos um caso de anemia hemolítica associada ao uso de Alectinib - inibidor de quinase de linfoma anaplásico (ALK) de segunda geração. **Materiais e métodos:** trata-se de um relato de caso acerca de rara etiologia de anemia hemolítica. Para este fim, os termos contidos na Declaração de Helsinque foram respeitados. **Resultados:** K.A.S.C, sexo feminino, 30 anos de idade, portadora de adenocarcinoma de pulmão com metástase cerebral e de Doença de Graves. Faz uso de Alectinib (600 mg 12/12horas) há 2 anos e 3 meses e Tapazol 5 mg/dia. Encaminhada ao hematologista devido anemia com aumento dos níveis séricos de desidrogenase láctica. Ao exame físico: regular estado geral, corada, afebril, sem visceromegalias, traube livre. Exames laboratoriais (03/07/2023): Hb: 10,5; VCM 89; RDW: 14%; Leucócitos: 6.930; Plaquetas: 296.000; Haptoglobina 136 (36-195); Reticulócitos: 3,5%; Ferritina: 101; ácido fólico > 24; saturação de transferrina: 18% (15-50%); Ferro sérico: 77; Teste da antiglobulina direto: negativo; DHL: 389 (135 – 214); Bilirrubinas totais: 0,74, Bilirrubina indireta: 0,54; Creatinina 0,8; Esfregaço de sangue periférico: observados acantócitos e esferócitos. Considerando importância do inibidor de ALK no presente contexto, definido por conduta expectante no momento. **Discussão:** Alectinib, inibidor de ALK de segunda geração, induz hemólise com alterações morfológicas em eritrócitos, como acantócitos e esferócitos, em todos os casos com exposição prolongada à droga. Até a presente data, não há descrição do mecanismo exato de hemólise induzida pelo alectinib. A presença de anormalidades morfológicas nas hemácias sugere envolvimento do citoesqueleto como potencial mecanismo deflagrador da hemólise. Na maioria dos eventos a hemólise é subclínica, ocorrendo nos primeiros 90 dias de uso do inibidor de ALK. Existem raros casos desta associação relatados na literatura. **Conclusão:** Há um subdiagnóstico desta alteração devido à falta de conhecimento por parte dos médicos sobre