Bad Blood: A Case of Warm Autoimmune Hemolytic Anemia

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Bad Blood: A Case of Warm Autoimmune Hemolytic Anemia

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INTRODUCTION

Autoimmune Hemolytic Anemia (AIHA) is a rare autoimmune phenomenon where auto antibodies target host erythrocytes for destruction. AIHAs can be classified as idiopathic, warm agglutinin or cold agglutinin mediated. Initial clinical presentation can vary from mild symptomology to fulminant disease. Clinical presentation varies depending on the extent of anemia and the level of physiologic compensation. We describe the case of a patient presenting with symptomatic warm AIHA.

CASE REPORT

A 31 year old female without significant past medical history presented with new onset dyspnea, palpitations and lightheadedness. Physical examination demonstrated, no active or occult bleeding, conjunctival pallor and scleral and sublingual icterus. Serum chemistries demonstrated a Total Bilirubin of 5.1 mg/dL, Haptoglobin of 4 mg/dL and Lactate Dehydrogenase of 533 U/L. Complete Blood Count demonstrated a Hgb of 5.8 g/dL, Hct of 17%, MCV of 122 fL and Reticulocytes of 19.1%. Direct Anti-Globulin Testing was positive for 3+ C3D, 2+ Anti-IgG and warm antibodies. Peripheral smear demonstrated marked polychromasia and basophilic stippling. Computed tomography of the abdomen and pelvis with intravenous contrast demonstrated hepatosplenomegaly, but no masses or lymphadenopathy. The patient received two transfusions of packed red blood cells and was promptly started on high dose corticosteroids with good clinical response and subsequent stabilization of her hemoglobin.

DISCUSSION

This case highlights that while AIHA is a rare cause of anemia, clinicians should maintain a high degree of suspicion for this disease in patients with unexplained severe anemia. AIHA can be subdivided into primary (idiopathic) AIHA and secondary AIHA which has been associated with lymphoma, autoimmune disease, medications or infections. Etiologic determination guides subsequent intervention, as secondary causes must be evaluated and concomitantly treated for sustained therapeutic response. Initial stabilization of the patient is of paramount importance. Blood transfusion should not be delayed due to matching difficulties and transfusion with the “least incompatible” blood products should be started as appropriate. First-line therapy consists of high dose corticosteroids dosed at 1mg/kg until the hemoglobin concentration exceeds 10g/dL, followed by a subsequent slow taper over the course of three to four months. Many patients require either maintenance dose corticosteroids or initiation of second line therapies, such as splenectomy or the anti cd20 monocolonal antibody, Rituximab. Refractory disease is classically treated with cytotoxic agents such as, cyclophosphamide. Rapid stabilization and early initiation of corticosteroids remains the cornerstone of initial management and close follow-up with thorough diagnostic evaluation and appropriate therapeutic escalation is critical to maintaining safe outcomes.

Rapid stabilization and **early initiation of corticosteroids** remain the cornerstone of AIHA management. Close follow-up with **thorough diagnostic evaluation** and **appropriate therapeutic escalation** is critical to maintaining safe outcomes.

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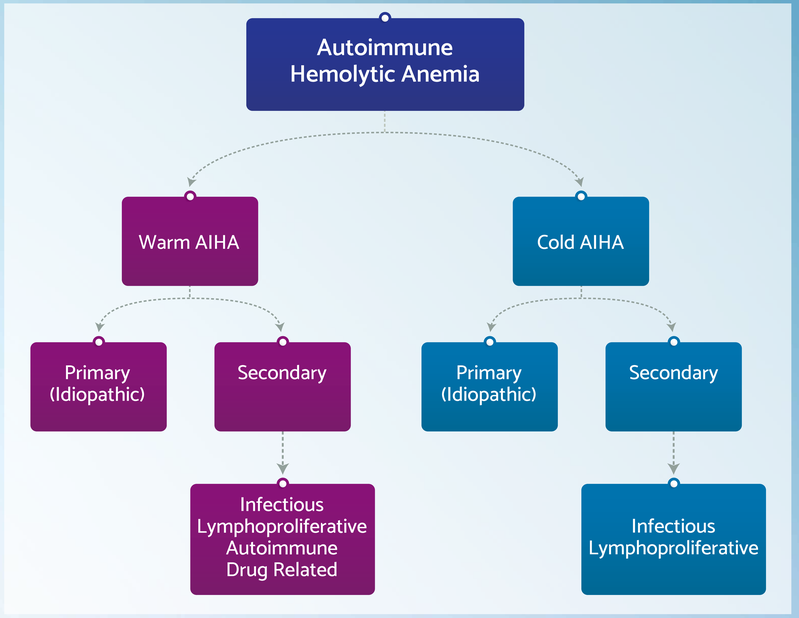

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