HEMATO-ONCOLOGY

AUTOIMMUNE HEMOLYTIC ANEMIA

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Abstract: *Autoimmune hemolytic anemia (AIHA) is caused by autoantibodies to red blood cells resulting in excessive destruction of erythrocytes. AIHA is either idiopathic or associated with infections, malignancies and autoimmune diseases. AIHA is classified into warm, cold and mixed types.Warm AIHA is marked by anemia, jaundice and spherocytes, due to extravascular hemolysis. Cold agglutinin disease results after infections and causes red cell agglutination at colder temperatures. Positive direct antiglobulin test (DAT) in the setting of hemolytic anemia is diagnostic of AIHA. Immunosuppression is the main basis of management.*

Keywords: *Auto antibody, Extravascular hemolysis, Intravascular hemolysis, Hemoglobinuria, Direct Coomb's test, Immunosuppression.*

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Points to Remember

- ***AIHA is either idiopathic or associated with infections, malignancies, autoimmune diseases, and lymphoproliferative syndrome. AIHA is classified into warm, cold and mixed types.***
- ***Warm AIHA is marked by the presence of anemia, jaundice and spherocytes, due to extravascular hemolysis.***
- ***Cold agglutinin disease results after infection with Mycoplasma pneumoniae or Epstein-Barr virus and causes red cell agglutination at colder temperatures. Features of cold antibody AIHA and PCH include features of intravascular hemolysis and microvascular occlusive episodes.***
- ***Primary immunodeficiency diseases associated with AIHA include common variable immune deficiency, autoimmune lymphoproliferative syndrome (ALPS) and Wiskott Aldrich syndrome.***
- ***Positive DAT in the setting of haemolytic anaemia is diagnostic of AIHA. Other laboratory parameters include increased reticulocyte count, indirect bilirubin, and LD, decreased haptoglobin and presence of hemosiderin in urine sediments.***
- ***Bone marrow examination is indicated, in cases of clinical suspicion of hematological malignancy or bone marrow failure syndromes.***
- ***Blood transfusion in AIHA is indicated in case of severe anemia. Immunosuppression is the main basis of management.***
- ***Splenectomy or plasmapheresis are indicated in refractory cases.***

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