

TRANSFUSION THERAPY IN AUTOIMMUNE HEMOLYTIC ANEMIAS – REVIEW OF THE CASES.

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Introduction. Autoimmune hemolytic anemia (AIHA) is characterized by the presence of auto-antibodies directed against antigens presented on the surface of red blood cells (RBC) which lead to their accelerated destruction. AIHAs are divided into warm antibody AIHAs, cold antibody AIHAs and mixed AIHAs. A major role in the diagnosis of AIHA is held by the Coombs test (direct antiglobulin test), which detects immunoglobulins or complement fragments bound to the RBCs.

Materials and methods. Retrospective study on a period of 2 years, in which we present our experience in the laboratory diagnosis of AIHA, solving the blood-type determination issues, validation of the pretransfusion tests, and finding compatible RBC units for patients diagnosed with AIHA.

We used hemotest serums and the Ortho BioVue micromethod, techniques and reagents which are based on column hemagglutination (Ortho BioVue cases with glass microsphere in an antiglobulin serum medium) in liquid phase at temperatures of 4C, 22C, and 37C, using ficin, papain enzymes.

Results. Twenty-three patients were diagnosed with AIHA, 18/23 (78.3%) patients with warm antibodies, 2/23 (8.7%) patients with cold antibodies, and 3/23 (13%) patients with mixed antibodies. Transfusion therapy was needed in only 7/23 (30.4%) patients. Two out of 23 (8.7%) patients had negative irregular antibodies tests, 21/23 (91.3%) patients had positive irregular antibodies tests, which issued further testing to determine the alloantibodies.

Conclusions. The presence of autoantibodies on the surface of RBCs, but also free in the patient's serum made determining the blood-type, the irregular antibodies, and finding a compatible RBC concentrate difficult.