AUTOIMMUNE HEMOLYTIC ANEMIA – PEDIATRIC CLINICAL CASES.

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acquired condition of accentuated hemolysis due to the presence of the antibodies directed against the body's own red blood cells antigens. Autoimmune hemolytic anemia can be classified according to the optimum thermal activity of the anti-red blood cells antigens auto-antibodies in "hot" "cold" "mixed" type AHAI. Depending on the etiology, AHAI are classified in idiopathic, secondary to certain diseases or induced by certain medications. Medicines (penicillin, ampicillin, rifampicillin, tetracycline, cephalosporin etc.) can induce antibodies that connect to the surface of the red blood cells and can determine hemolysis by a series of mechanisms. The hemolysis produced by the action of the antibodies can be intravascular or extravascular and its consequence is severe anemia endangering the patient's life.

Materials and methods: In the last years we had a series of clinical cases of AHAI in children of various ages. We present a case of a three years old child admitted within the Pediatrics Clinical Hospital of Brasov with the initial diagnosis of severe hemolytic anemia, hemoglobin 4 mg/dl occurred during the treatment with broad spectrum antibiotics prescribed by the doctor for a respiratory disease.

The Blood Transfusions Center of Brasov received samples from the patient for the direct Coombs test; then we made some pre-transfusion tests to select the compatible blood.

We used the ID-DIAMED MICRO TYPING SYSTEM gel column agglutination technique: irregular antibodies screening and direct antiglobulinic test (TCD) made with poly-and mono-specific antiglobulic serums.

Results: the Coombs test revealed the presence on the surface of the red blood cell of $C_3c = C_3d$ complement fixating auto-antibodies. No irregular antibodies were highlighted in the serum.

The patient responded very well to the corticotherapy (SOLU-MEDROL) and to the blood transfusion (4 *50 ml CER)

Diagnosis when discharged: medication-induced autoimmune hemolytic anemia, good general condition, no signs of hemolysis, hemoglobin 8 mg/dl.

Conclusions:

Necessary immunohematological evaluation in case of hemolytic anemia

The positive role of a correct immunohematological diagnosis in orienting the clinical diagnosis and for the application of the appropriate therapy, including the transfusions with compatible blood components.

Importance of team work in solving a clinical case.