PECULIARITIES OF INVESTIGATION OF BLOOD GROUP TYPING

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The aim of the research: to determine blood group type in a person with AB0 discrepancy.

Material and methods: reaction of absorption, hemagglutination at the room temperature and at 37ºC by heated serum with use of complement were conducted.

Results: a female person typed as AB Rh+ (positive) in childhood, in teenage period: as B Rh+ (positive) or Rh- (negative). At the room temperature the erythrocytes were agglutinated by polyclonal anti-B, while at 37ºC the agglutination was significantly weaker. Her erythrocytes did not absorb anti-B, but absorbed anti-A. The erythrocytes were agglutinated by anti-A at 37ºC and hemolysed in the presence of complement. The unwashed erythrocytes were also agglutinated in antiglobulin test by polyclonal anti-A at 37ºC and by heated polyclonal anti-A and anti-A MAB 2-8 at the room temperature. Her serum agglutinated A erythrocytes at the room temperature, with less activity at 37ºC. Her serum agglutinated B erythrocytes at 37ºC. Incubation of the person’s serum with 0 erythrocytes induced the ability of erythrocytes to absorb anti-A and to be hemolysed by anti-A in the presence of complement – in accordance to the person’s characteristics of the erythrocytes.

Conclusions: the person’s ability of the erythrocytes to absorb anti-A came along with the agglutination of the erythrocytes at 37ºC by polyclonal serum, whereas activity of the serum to agglutinate A erythrocytes was less at 37ºC, than at the room temperature. The absence of anti-B absorbance by the erythrocytes was accompanied by more expressed agglutination at the room temperature than at 37 ºC and the presence of anti-B, active at 37ºC.