

# IMMUNOLOGICAL INVESTIGATION OF A BLOOD GROUP DISCREPANCY

**S.Bran, I. Ștefan**

Craiova Regional Blood Transfusion Center,  
Craiova, Romania

Blood transfusion is an essential component of modern health care, and it helps to save lives and can improve our health. In our practice, medical centers providing blood and blood products are preferred to the existence of "Professional" donors biologically and serologically controlled, which are available to the needs of medical-surgical emergency service.

**Materials and methods.** A 45-year-old female with group 0/A Rh positive, occasional donor, was investigated. We determined the blood group by agglutination reaction using Beth-Vincent globular method with hemotest, anti-A1 and anti-H serum and, Simonini method with 0, A1, A2 and B erythrocytes. If the results are unclear we perform other determinations: secretor status, fixation-elution and genetic.

**Results.** In this case the Beth-Vincent globular method could not establish individual blood group and a very low agglutination with anti-A serum was observed. No agglutination was seen with anti-A1 serum and, we found that red blood cells agglutinated with anti-H serum. Both determination shows the same result indicating the presence of group A subgroup 2 with low titer. No other measurements were continued as we found that the donor is group A subgroup 2 with low titer.

In this study we can conclude that, for current transfusion medicine, blood from this type of donor can transfuse to patients of group A, but it can only receive from donors of group 0, in order to avoid injury of posttransfusion.