HEMOLYTIC DISEASE OF NEWBORN DUE TO ALLOANTIBODIES IN KIDD SYSTEM.

C. Posea*, M. Chiran**, A. Alexe***, A. Ursachi***
*BTC Bucharest, ** BTC Pitesti, *** EUH Bucharest

Haemolytic disease of the fetus and newborn (HDFN) is caused by maternal alloimmunization against red cell antigens. Although the Rh antibody was and still is the most common cause of severe hemolytic disease of the newborn, other alloimmune antibodies belonging to Kell (K and k), Duffy (Fya), Kidd (Jka and Jkb), and MNSs (M, N, S, and s) systems do cause severe hemolytic disease of the newborn. In severe cases, HDFN may lead to fetal anaemia with a risk for fethal death and to severe forms of neonatal hyperbilirubinemia with a risk kernicterus.

We present the case of a multigravida (5G, 4P), blood group A Rh(D) neg ccddeekk,immunized during previous pregnancies in Rh (D) system. In history, one of the infants presented hemolytic disease which required two exchange transfusion. Investigations conducted during last pregnancy revealed only the presence of anti-D, titer increased (1/1024). At birth, the blood group of the fetus is A Rh (D) negative, but TCD (IgG) positive. Laboratory investigations revealed the presence in mother's postpartum and fetus serum, aloantibodies anti-JKa, the mother's phenotype (Jka-Jkb+) and the newborn phenotype (Jka+Jkb-). The selection of compatible blood for exchange transfusion was difficult as there wasn't available units of leucodepleted blood Jka (-) in the blood bank.

The case reveals the importance of detecting maternal alloimmunization early in pregnancy to facilitate the identification of high-risk cases to timely start antenatal and postnatal tratment.