

Anti - KEL-1 antibodies in RHD negative pregnant women

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Introduction: In Georgian republic during pregnancy about 1% of women are producing red cell allo-antibodies and 0.06 % of pregnant women produce anti Kel-1 antibodies, which is a relatively rare cause for HDN. RH system antibodies that mostly cause HDFN are anti-D, anti-c, anti-E, anti-e antibodies. Among the antibodies outside the RH- system responsible for HDFN are mainly anti-KEL-1 antibodies from Kell system.

Case study and results : We describe a case of pregnancy in woman with anti-KEL1-1 acquired by transfusion/ previous pregnancies: A 30- year-old woman O RhD negative, KEL1 Negative had two previous unsuccessful pregnancies. The henotype of husband was RHD-positive, KEL1-positive. The women was tested by indirect antiglobulin test (IAT) using the commercial product ID-DiaCell (3 known cells) of the Diamed company for the detection of RBS antibody .Women's serum contained high titter (1:8) of only anti-KEL-1 antibodies at 12 week of Gestosis. To stop increase of antibodies the patient was treated with plasmopheresis 3 times during pregnancy. At delivery titter of anti KEL1 was 1:2. The newborn had HDFN. The DAT in newborn was positive. This case report shows that despite that fact the pregnant woman did not produce anti- D antibodies, anti KEL1 antibodies induced the same hemolytic anemia in newborn.

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