

ABID CASE #11

1. What antibody(ies) is present in this case?

Allo-anti-D and anti-E. There is also a cold autoantibody of probable anti-I specificity.

2. What is the corresponding antigen phenotype? How is this possible?

This patient has a partial D antigen, presumably of "group IV", as well as the antigen Go^a which is frequently associated with it.

3. How could your hypothesis be confirmed?

Test the patient's serum with other partial D RBC examples of the same group; lack of a reaction suggests that they have the same form of the antigen. Today one can also do genotyping.

4. Discuss the variation in reaction strength with different test systems and antigen positive phenotypes.

Rh antibodies tend to react strongly with enzyme treated RBCs, including direct agglutination at 37°. The latter system is also very sensitive to cold autoantibody reactions, however. Note that, like many anti-D antisera, the patient's serum reacts more strongly with the R2R2 cells than it does with R1R1 cells

5. Is this patient at risk for hemolytic transfusion reactions? Is her infant at risk for HDN?

"Yes" on both counts.