Reviewer's report

Title: Severe hydrops in Rh(D) positive mother due to antenatally diagnosed anti-c antibodies: a case report

Version: 3 Date: 9 April 2009

Reviewer: Fouad Boctor

Which of the following best describes what type of case report this is?: Unexpected or unusual presentations of a disease

Has the case been reported coherently?: No

Is the case report authentic?: No

Is the case report ethical?: Yes

Is there any missing information that you think must be added before publication?: Yes

Is this case worth reporting?: No

Is the case report persuasive?: No

Does the case report have explanatory value?: Yes

Does the case report have diagnostic value?: No

Will the case report make a difference to clinical practice?: No

Is the anonymity of the patient protected?: Yes

Comments to authors:

The author describes a case of newborn hemolytic transfusion reaction due to presence of maternal anti-c antibodies. There are several deficiencies in the MS.

1. The mother is typed O Rh(D) positive and the newborn type A Rh(D) positive. The authors did not exclude the possibility that the observed reaction may be due to maternal anti A IgG which could cross the placenta and cause the hemolytic transfusion reaction. ABO incompatibility may cause severe reaction, including a rare hemolysis which may be severe enough to cause hydrops (Gilja BK, Shati VP. Hydrops fetalis due to ABO incompatibility. Clin. Pediatric 1988; 27:210-212).

2. Despite the fact that antibody titers did not prove to have a good prognostic value titer of 4 for anti-c is low to cause, this severe reaction.
3. The author mistakenly uses the term titer of 1:4, 1:16. These values are not titers. They are dilutions. Titers are 4, 16.

4. The authors mentioned the mother haplotype as R1R1 (CDe / CDe) and baby is cDe / cDe. This is wrong; the baby must have CDe haplotype.

5. In the text the authors referred that Kell, Duffy, Kidd antigens are a minor blood group system. On what basis they call them minor? These are common antigens on red cells and could cause hemolytic transfusion reaction.

6. Anti-c can cause hemolytic transfusion reaction for the fetus and newborn. This has been reported previously from other countries include India (Babinszki A, Berkowitz RL. Hemolytic disease of newborn caused by anti-c, anti-E and anti-Fya: Report of five cases. Prenat. Diagn. 1999; 19:533-6. Thakral B, Agrawal SK, Dhawan HK, Saluja K, Dutla S, Marwaha, N. First report from India of hemolytic disease of newborn by anti-c and anti-E in Rh (D) positive mothers. Hematology, 2007; 12:377-80.)

7. Minor point the authors never explained why the mother had esophageal varices, hematemesis and melena for the past 10 years. Is it possible she may have autoimmune hepatitis causing liver cirrhosis which may contribute to the present condition?

Quality of written English: Acceptable

Declaration of competing interests:

I declare that I have no competing interests' below. If your reply is yes to any, please give details below.