


## Severe anaphylactic reaction in IgA deficient patient following transfusion of whole blood

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Sir,

IgA anaphylactic reaction is a rare event, estimated to occur 1 in 20,000 to 47,000 transfusions.<sup>[1]</sup> The clinical manifestations of anaphylactic reactions are severe and life threatening. Here we report of an anaphylactic reaction in a 56 year old female with severe upper G.I bleed, following whole blood transfusion.

Her haemoglobin dropped to 6 gm/dl and was advised two units of blood transfusion on emergency. So, two units of whole blood of same group were cross matched and one unit was issued for immediate transfusion. After transfusion of approximately 10 ml of blood, she developed light headedness, chest pain, nausea followed by flushing of face and upper part of chest, hypotension (her pretransfusion blood pressure was 130/78 mm of Hg and during transfusion her blood pressure came down to 90/60 mm of Hg and feeble pulse) and laryngeal edema. She was treated conservatively with hydrocortisone and antihistaminic. On stabilization of her clinical condition, she was advised further transfusion of the second unit with bed side leucofilter. She again developed very severe hypotension immediately after transfusion of 10-15 ml of second unit of whole blood. Her blood bag and blood sample were sent to the microbiology department for culture and sensitivity. The blood culture proved to be sterile on both cases following 72 hours of incubation. She was referred to us for evaluation of transfusion reaction and immediate possible solution for safe blood transfusion.

She did not have any history of previous transfusion, she had two uncomplicated pregnancies. Her transfusion reaction work up did not reveal any major ABO mismatch and antibody screen was negative on both pre and post transfusion sample. Direct agglutination test (DAT) was also negative on both occasions.

The patient was in urgent need of blood transfusion as she already had a very low haemoglobin with continuing upper G.I bleeding. We cross matched, two units of packed red cells of same blood group and the first unit was washed three times with normal saline and transfused slowly under medical supervision. This transfusion with washed red cells was uneventful. The second unit was again washed and transfused without any adverse episode. During on going second transfusion she underwent upper G.I endoscopy which revealed an actively bleeding duodenal ulcer. She subsequently required four units of packed red cell units for further resuscitation and all the successive transfusions were uneventful.

These features of transfusion reaction were suggestive of severe anaphylactic reaction possibly due to anti-IgA antibody in IgA deficient individual. Her blood sample was tested for serum IgA and anti-IgA antibody. Anti-IgA estimation could not be done as it is not performed routinely. However, she had almost undetectable amount of IgA (<0.05 mg/dl) by ELISA technique.<sup>[2]</sup> The patient was discharged with haemoglobin of 9.5 gm/dl with an advice of washed red cell transfusion in future if blood transfusion is required.

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### References

1. Pineda AA, Taswell HF. Transfusion reaction associated with anti-IgA antibodies: Report of four cases and review of the literature. *Transfusion* 1975;15:10-5.
2. Sandler SG, Mallory D, Malamut D, Eckrich B. IgA anaphylactic transfusion reactions. *Transfus Med Rev* 1995;9:1-8.