

Antibody Titer for Group O Platelets

From Dr. Rainer:

Historically the use of ABO mismatched platelets was a routine practice when using platelets for transfusion. However, when The Blood Connection (TBC) switched from whole-blood derived platelets to apheresis (Single donor) platelets, the use of ABO mismatched platelets was discouraged. The reason related to the amount of Anti A and Anti B antibodies present in the plasma associated with the platelet product. On rare occasions, there was sufficient antibody to cause a moderate hemolytic reaction.

Recent studies have demonstrated that ABO mismatched platelets can be utilized safely if an anti A and Anti B titer is performed on the group O platelets. As long as the antibody titer does not exceed a certain threshold, platelet transfusion can safely occur. To support the use of group O platelets in non-group O patients, The Blood Connection will begin to titer all group O platelet products. Furthermore, group O platelet products with high titers (>200), will be tagged "Antibody Titer to Anti-A and/or Anti-B is greater than 200." This will alert the transfusion service that the tagged units have the potential to produce a hemolytic reaction in non-group O recipients. Group O platelet products with a titer less than 200 will be tagged "Antibody Titer to Anti-A and Anti-B is less than 200."

We are following the transfusion protocol outlined by Quillen et al in a 2011 article published in Transfusion. In this article, the authors report a successful use of their protocol. To this end, TBC will identify titer results for group O platelet donors. We also encourage transfusion services to consider using the low titer group O platelets in non-group O patients.

Reference

Quillen K, *et al.* A practical strategy to reduce the risk of passive hemolysis by screening plateletpheresis donors for high-titer ABO antibodies. Transfusion. 2011 Jan;51(1):92-6.

Expected start: Early July

User Group Meeting

The next TBC user Group Meeting will be held July 25. Lunch will be provided beginning at 12 noon and the meeting will start around 12:30. Following the meeting an AABB audio-conference will be presented. Please make plans to attend. If you have any topics you would like discussed/added to the agenda- please contact Tracy Bridges at (864-751-3019) or tbridges@thebloodconnection.org

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