OP 81. Audit of the Usage of Platelet Products at Groote Schuur Hospital, Cape Town, South Africa

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Background
Platelet concentrate units are costly blood products with relatively short shelf-lives, so should be used judiciously in resource-limited healthcare environments. A audit conducted in 2012 at Universitas Hospital, a tertiary level facility in Bloemfontein, showed poor compliance with local guidelines for platelet product usage, inappropriate ordering of platelet units by specific disciplines within the hospital, and inadequate completion of the blood ordering form in just under half of all orders.

Groote Schuur Hospital (GSH) is a 975-bed tertiary facility located in Cape Town, South Africa. It has a haematology department and stem cell transplant unit, both of which would be expected to have high platelet product transfusion needs.

The primary aim of this study was to audit the clinical usage of all platelet products at Groote Schuur Hospital over a three month period and to ascertain whether this blood product is being ordered appropriately.

Method
A retrospective analysis of 150 consecutive platelet product requests for adult patients from Groote Schuur Hospital was conducted between mid-January to mid-April 2017. Blood ordering request forms were scrutinised to assess the indication for transfusion, appropriateness of the platelet product ordered, and correct completion of the blood ordering request form. The National Health Laboratory Service (NHLS) at GSH provided the platelet counts, which revealed the transfusion triggers for these patients. Ethics approval was obtained from the University of Cape Town Human Research Ethics Committee, Groote Schuur Hospital Research Committee and NHLS.

Results
A total of 194 platelet products were requested, of which 63.9% were for random donor platelet products (RDP). The average patient age was 38 years - 40% were female and 60% male. The Haematology department ordered the highest amount of platelet products (48.7%), followed by the Trauma (11.0%) and Intensive Care (10.0%) departments. Single donor platelet (SDP) products were predominantly ordered by the Haematology Department (85.7%). Only one case of inappropriate use of a SDP product was found for a trauma patient with a subdural haematoma. Of the 150 blood ordering request forms examined, only 35.3% were completed without errors or omissions (minimum requirements included documentation of patient ward, patient details, diagnosis, platelet count, clinician’s contact details and product request). Occasional use of the misnomer ‘mega platelets’ was noticed.

Proper analysis of transfusion trigger platelet counts will be performed in June 2017 once all results are obtained from GSH NHLS.

Conclusion
This is awaiting completion of data collection, as mentioned above.

Provisional analysis of results shows that inappropriate use of SDP products was not identified at Groote Schuur Hospital over the study period. Correct completion of the blood ordering request form was deficient and should be addressed to reduce delays in issuing blood products. Analysis of platelet count transfusion triggers is still outstanding for this study and forms an important aspect of the analysis of appropriate use of this blood product.

References