A survey of where and why platelets are used in hospitals in the South West region of England

A. Jones

NHS Blood and Transplant, Filton, England, on behalf of the South West Regional Transfusion Committee (SWRTC)

Introduction
Platelet issue to hospitals from NHS Blood & Transplant increased by 4% each year since 2007-08, and by 8% in 2011-12.

A National Comparative Audit (NCA) of Platelet use in Haematology in 2010-11 identified that 28% of all platelet transfusions were inappropriate. Following this report the SWRTC surveyed platelet use across all specialties.

Methods
A prospective survey was developed for completion by transfusion laboratory staff throughout the month of March 2012.

Data on the requesting specialty, clinical indication, and whether use was prophylaxis or to treat bleeding was sought.

The National Blood Transfusion Committee Indication Codes for Transfusion were used to define indication, however to capture all use (including inappropriate) a ‘chronic bone marrow failure’ category was added.

Conclusion
The findings confirm haematology as the largest user of platelets, the most common reason for transfusion was to treat reversible bone marrow failure (44% of all platelets used) and the second was chronic BMF (21%). This is of concern as conditions causing BMF are likely to increase as the elderly population expands.

In 28% of transfusions the indication of either prophylaxis or therapeutic was not stated. This may indicate uncertainty in the classification of minor bleeding.

Our finding of 3% ‘double doses’ given as prophylaxis compares favourably to the finding of 10% in this category in the NCA of Platelet use in Haematology.

Raising awareness of platelet transfusion through this survey has likely contributed to the 7% regional reduction in use compared to a national increase of 1% in 2012-13.

Survey report authors
South West Regional Transfusion Team:
Dr Patrick Roberts, Consultant Haematologist, South Devon Healthcare NHS Trust & SWRTC Chair
Dr Janet Birchall, SWRTC secretary
Lynda Owens, Transfusion Laboratory Manager North Bristol NHS Trust
Maggie Wilde, Transfusion Laboratory Manager, Northern Devon NHS Foundation Trust
Soo Cooke, Transfusion Practitioner, University Hospitals Bristol NHS Foundation Trust
Karin Must, Transfusion Practitioner, North Bristol NHS Trust
Elaine MacRae, Regional Customer Services Manager, NHSBT
Piers Thompson, Transfusion Liaison Nurse, NHSBT
Jackie Mckinlay, SWRTC administrator, NHSBT

Acknowledgements
Thank you to all the hospitals in the South West region that participated in this survey.

For further information contact alister.jones@nhsbt.nhs.uk; full survey report can be accessed at: http://www.transfusionguidelines.org.uk/index.aspx?Publication=RTC&Section=12&Page=1095

Results
90% (17/19) NHS hospitals in the South West responded.

Data was collected for 1,002 transfusion episodes: 1,122 Adult Therapeutic Doses of platelets were given in 969 episodes and 36 Paediatric Therapeutic Doses were given in 33 episodes.

The median age of recipients was 62 years.

Cardiac was the biggest surgical user, however this only accounted for 7% of all platelets used.

Clinical indication
65% of use was associated with bone marrow failure (BMF): 69% of which was used for patients with reversible BMF and 31% for patients with chronic BMF.

Prophylaxis/therapeutic use
46% of all units were given as prophylaxis and 26% to treat bleeding (28% was ‘neither’ or ‘not stated’).

In 3% of prophylactic use, not associated with a procedure, more than one unit, i.e. a ‘double dose’, was used.