

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

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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 with no additional risk factors for bleeding' 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

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Acknowledgements

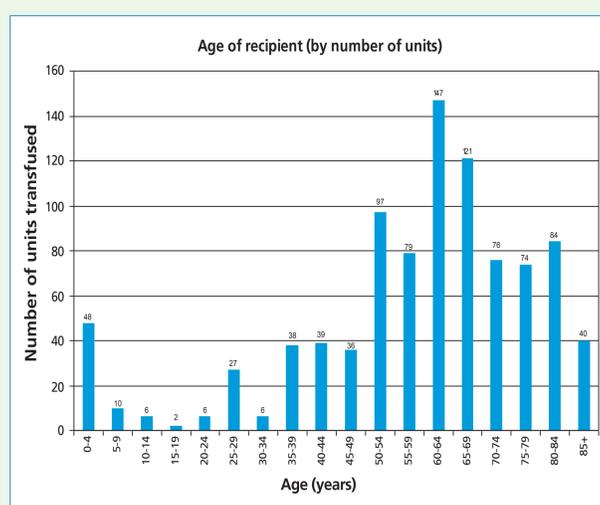
Thank you to all the hospitals in the South West region that participated in this survey. For further information contact alister.jones@nhsbt.nhs.uk ; full survey report can be accessed at: <http://www.transfusionguidelines.org.uk/Index.aspx?Publication=RTC&Section=28&pageid=1085>

Results

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

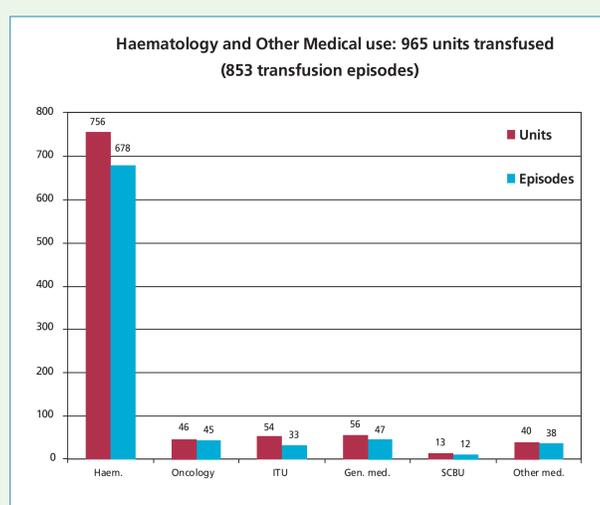
Data was collected for 1,002 transfusion episodes: 1,122 Adult Therapeutic Doses of platelets were given in 969 episodes and 36 Paediatric Therapeutic Doses were given in 33 episodes.

The median age of recipients was 62 years.

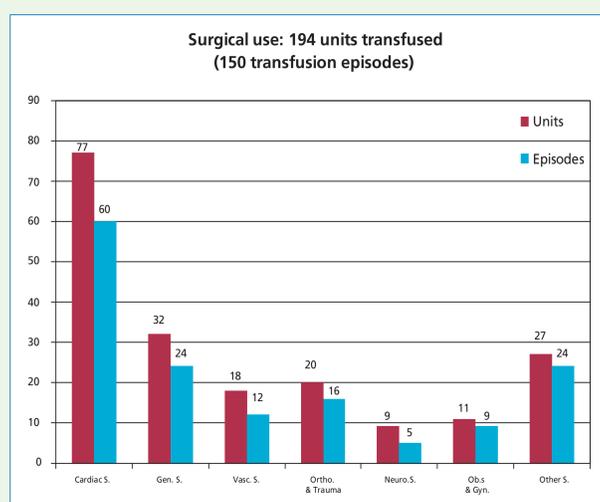


Specialty

65% of use was in Haematology, 18% other medical specialties, 17% surgical specialties.

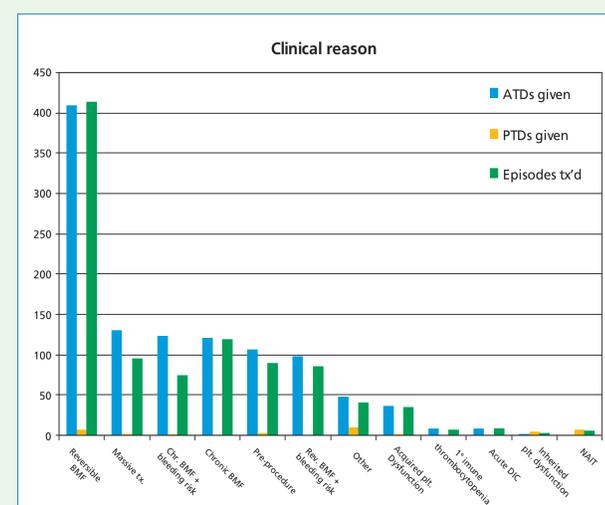


Cardiac was the biggest surgical user, however this only accounted for 7% of all platelets used.



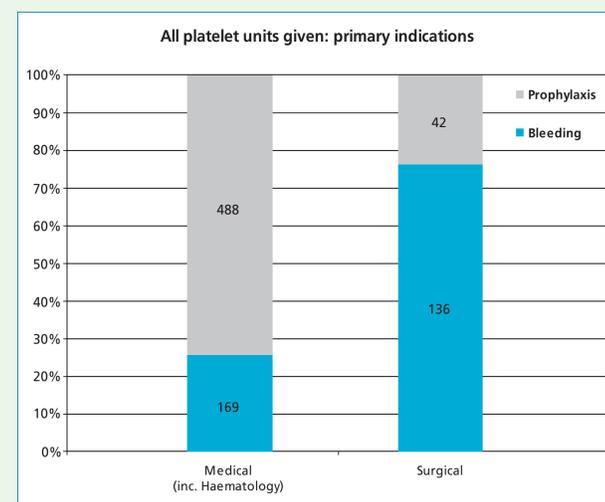
Clinical indication

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.

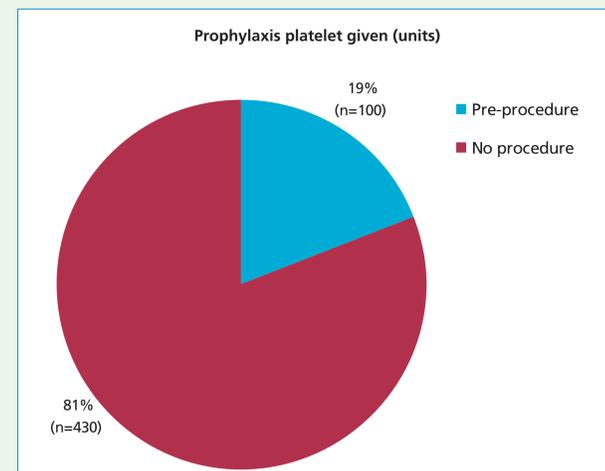


Prophylaxis/therapeutic use

46% of all units were given as prophylaxis and 26% to treat bleeding (28% was 'neither' or 'not stated').



Only 19% of prophylactic use was pre-procedure.



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