Evidence-based patient blood management guidelines for obstetric and maternity patients

Pollock W, Rowlands S, Thomson A, Whitby C, Abstract 1131

Introduction
The National Blood Authority, Australia, is managing a comprehensive review and update of the 2001 National Health and Medical Research Council/Australasian Society of Blood Transfusion (NHMRC/ASBT) Clinical Practice Guidelines on the Use of Blood Components. Six evidence-based Patient Blood Management (PBM) Modules will replace the 2001 Guideline. The modules are being developed by clinical experts for specific populations: Critical Bleeding/Massive Transfusion (2011), Perioperative (2012), Medical (2012), Critical Care (2013), Obstetric and Maternity (2014) and Paediatric/Neonatal populations. PBM minimises the need for transfusion by improving red cell mass, conserving the patient’s own blood and improving tolerance of anaemia. This poster presents a selection of findings of Module 5 – Obstetrics and Maternity.

Methods
Clinical/Consumer Reference Group (CRG) with experts from clinical colleges and societies was established and defined the scope of the questions for systematic review for Module 5. These questions included:
- the effect of red cell and other blood component transfusion on patient outcomes
- the effect of non-transfusion measures on haemoglobin
- the effect of non-obstetric strategies to minimise maternal blood loss on transfusion and clinical outcomes

The NHMRC guideline development process was used to develop the research protocol, conduct the systematic reviews and generate guidance as follows:

- sufficient high quality data: R2
- partial data: R1
- no evidence: R3

Discussion
The low number of recommendations (4) in Module 5, compared with other modules, Medical (8), Perioperative (22), reflects the paucity of quality evidence in this population. Evidence gaps and areas for future research have been identified including:
- Hb and ferritin levels that are associated with optimal maternal and fetal outcomes
- the degree of anaemia that is clinically relevant
- optimal strategies for using blood components and plasma products in the management of obstetric haemorrhage
- the role, safety and efficacy of various interventions (e.g. interventional radiology, cell salvage, tranexamic acid) in selected high risk maternity populations

Results
Submitted to NHMRC and approved in December 2014. Received an Appraisal of Guidelines for Research & Evaluation (AGREE) II methodological assessment rating of 6/7 from two independent assessors. Contains four evidence-based Recommendations, 31 Practice Points and 18 Expert Opinion Points; those related to iron, massive transfusion protocols and haemorrhage/critical bleeding are presented here.

Obstetric haemorrhage/critical bleeding

Oral and/or parenteral iron

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Discussion

Conclusion
If blood components are likely to be indicated, transfusion should not be a default decision. Instead, the decision on whether to transfuse should give consideration to local resources, transport and access to relevant specialist advice, blood products and equipment.