

Key notes on: Obstetric haemorrhage

- Obstetric haemorrhage is a leading cause of maternal mortality and morbidity – in Australia it is the leading cause of ICU admission
- The lack of close post-birth monitoring and the failure to act on signs and symptoms that a woman is seriously unwell, remain important contributors to maternal death from haemorrhage
- Active management of the third stage reduces the likelihood of postpartum haemorrhage and is recommended for all women
- Estimated blood loss (EBL) is virtually always under-estimated when bleeding is severe – consider the clinical picture – treat the woman, rather than base treatment on EBL – **try to quantify blood loss**
- Assess and act on signs/symptoms that deviate from normal – i.e. routinely assess the fundus (on presentation to ED, following birth, including post-caesarean); persistent, unrelieved pain requires further investigation; vital sign changes are a late sign
- Request senior medical involvement early
- Plan and practice massive obstetric haemorrhage drills – as a team – may not be able to predict who will have a massive haemorrhage, but you can plan for it
- Be aware of how many and where O-neg blood units are stored at your hospital
- Crystalloid, e.g. Hartmann's solution, as good as anything whilst waiting for blood
- All maternity hospitals should have a massive transfusion protocol – with maternity adaptations and suitable to the context of the service
 - Consider early trigger of massive transfusion protocol; keep fibrinogen > 2g/L; avoid permissive hypotension if uterus in-situ
- Need to avoid hypothermia, acidosis, hypoperfusion, hypoxaemia – if you want the uterus to respond to uterotonics and the clotting system to optimally function
- Remember the woman's partner – often 'put in a waiting room and forgotten'
- Remember 'normal postpartum care' – e.g. anti-D if woman is a negative blood group
- Offer follow-up and discussion about what happened after the woman has recovered (not while she is still sick)

Key resources

National Blood Authority Patient Blood Management Guideline: Module 5 – Obstetrics and Maternity. 2015. National Blood Authority. Canberra. Available at: <http://www.blood.gov.au/pbm-guidelines>

National Blood Authority Patient Blood Management Guideline: Module 1 – Critical Bleeding/Massive Transfusion. 2011. National Blood Authority. Canberra. Available at: <http://www.blood.gov.au/pbm-guidelines>

South Australian Perinatal Practice Guidelines. Balloon tamponade and uterine packing for major PPH. SA Health 2012. <http://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/clinical+resources/clinical+topic/s/perinatal+practice+guidelines/perinatal+practice+guidelines>

NSW Health. Maternity - Maternity - Prevention, Detection, Escalation and Management of Postpartum Haemorrhage (PPH) Sydney: Department of Health, NSW, 2017. http://www1.health.nsw.gov.au/pds/Pages/doc.aspx?dn=GL2017_018

Blood Safe elearning website. <https://bloodsafelearning.org.au/our-courses/>

Mavrides E, Allard S, Chandraran E, Collins P, Green L, Hunt BJ, Riris S, Thomson AJ on behalf of the Royal College of Obstetricians and Gynaecologists. Prevention and management of postpartum haemorrhage. *BJOG* 2016;124:e106–e149. Available at: https://www.ranzcog.edu.au/RANZCOG_SITE/media/RANZCOG-MEDIA/Women%27s%20Health/Statement%20and%20guidelines/Clinical-Obstetrics/RCOG-Prevention-and-Management-of-Postpartum-Haemorrhage-2016.pdf?ext=.pdf

Youtube video on insertion of a Bakri balloon: <https://www.youtube.com/watch?v=IRNxLFB8Vqw>

California Maternal Quality Care Collaborative. Obstetric Haemorrhage Toolkit 2.0. <https://www.cmqcc.org/resources-tool-kits/toolkits>

References and additional reading

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Patient story

Kristen Terlizzi – placenta accreta

<https://www.youtube.com/watch?v=RMnQZUqQhIU>