

INTERVENTION TRIGGERS

- extrapolated from trauma studies
- abnormal PT/APTT = established haemostatic impairment
- fibrinogen level of $>2\text{g/L}$ is more appropriate

Table 3 Comparison of management strategies for postpartum haemorrhage.

	RCOG [8]	AAGBI	WHO [11]	NICE [10]	Authors' strategy
Primary monitoring	Coagulation screen	Coagulation screen	NA	NA	FIBTEM + coagulation screen
Support for point-of-care	Yes	Yes	NA	NA	Yes
Empirical FFP	1 l FFP for every 6 units red cells or $> 4500\text{ ml PPH}$	1 l if massive transfusion anticipated	NA	NA	Only in exceptional circumstances
Goal-directed FFP	15 ml.kg^{-1} if PT/aPTT $> 1.5\times$ normal	15 ml.kg^{-1} to prevent PT/aPTT becoming $> 1.5\times$ normal High volume if $> 1.5\times$ normal	NA	NA	15 ml.kg^{-1} if FIBTEM $< 12\text{ mm}$ or PT/aPPT abnormal Higher volume if $> 1.5\times$ normal
Fibrinogen	2 pools cryoprecipitate if $< 1\text{ g.l}^{-1}$ or if $> 4500\text{ ml PPH}$ and blood tests not available	Cryoprecipitate or fibrinogen concentrate to maintain Clauss fibrinogen $> 1.5\text{ g.l}^{-1}$	NA	NA	Fibrinogen concentrate according to protocol based on POCT to maintain Fibrinogen $> 11\text{ mm}$
Platelets	$< 50 \times 10^9\text{ l}^{-1}$	$< 75 \times 10^9\text{ l}^{-1}$	NA	NA	$< 75 \times 10^9\text{ l}^{-1}$
Tranexamic acid	No	Yes	Yes if second line uterotonics have failed or bleed due to trauma	Yes	Yes
Recombinant factor VIIa	In life-threatening bleeding if fibrinogen $> 1\text{ g.l}^{-1}$ and platelets $> 20 \times 10^9\text{ l}^{-1}$	Centres need agree protocols and fibrinogen should be normal	Insufficient evidence to give opinion	Yes if other coagulation factors normal	Exceptionally rarely used. Fibrinogen $> 2\text{ g.l}^{-1}$ and platelets $> 50 \times 10^9\text{ l}^{-1}$

RCOG, Royal College of Obstetricians and Gynaecologists; AAGBI, Association of Anaesthetists of Great Britain and Ireland; WHO, World Health Organization; NICE, National Institute of Health and Care Excellence. NA, no advice given.

PRODUCTS

- FFP
 - some units use formulaic protocols, eg. 1:1:1
 - however risk of dilution of fibrinogen, VIII, vWF if women have normal coagulation
 - INR >1.5
 - new guidelines - higher fib target

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Fibrinogen	2 pools cryoprecipitate if < 1 g.l ⁻¹ or if > 4500 ml PPH and blood tests not available	Cryoprecipitate or fibrinogen concentrate to maintain Clauss fibrinogen > 1.5 g.l ⁻¹	NA	NA	Fibrinogen concentrate according to protocol based on POCT to maintain Fibrinogen > 11 mm
Platelets	< 50 × 10 ⁹ .l ⁻¹	< 75 × 10 ⁹ .l ⁻¹	NA	NA	< 75 × 10 ⁹ .l ⁻¹
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