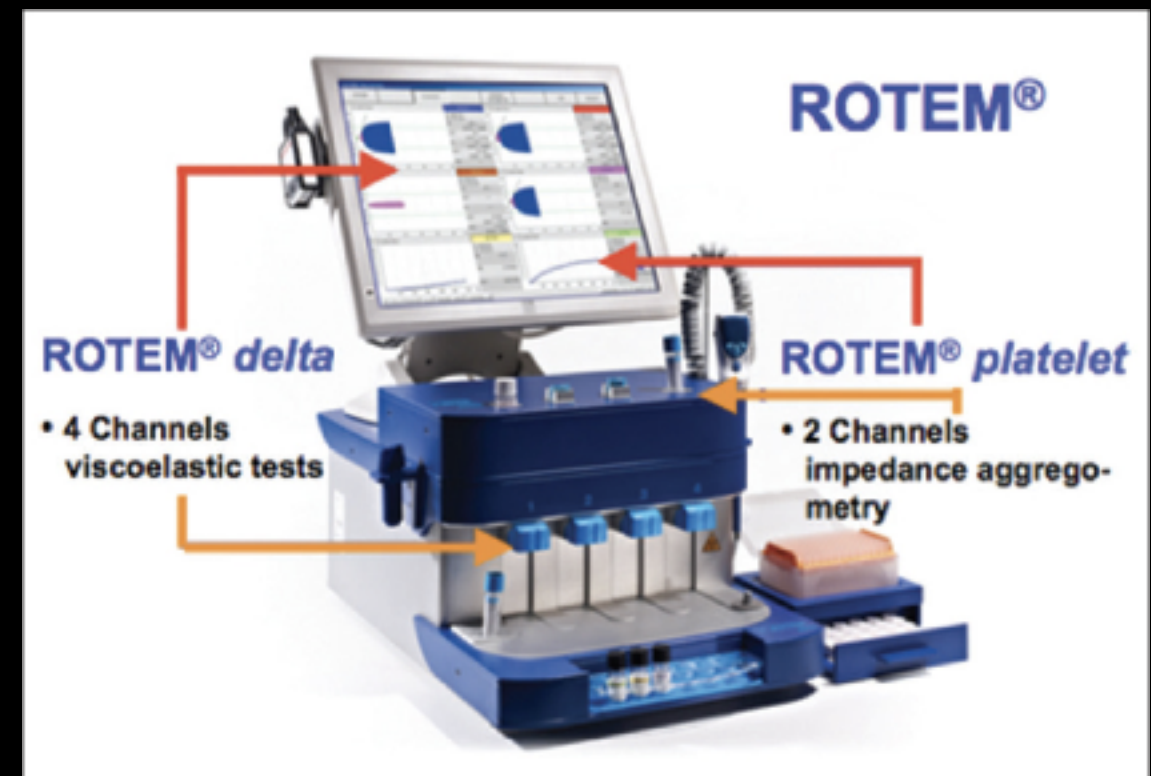
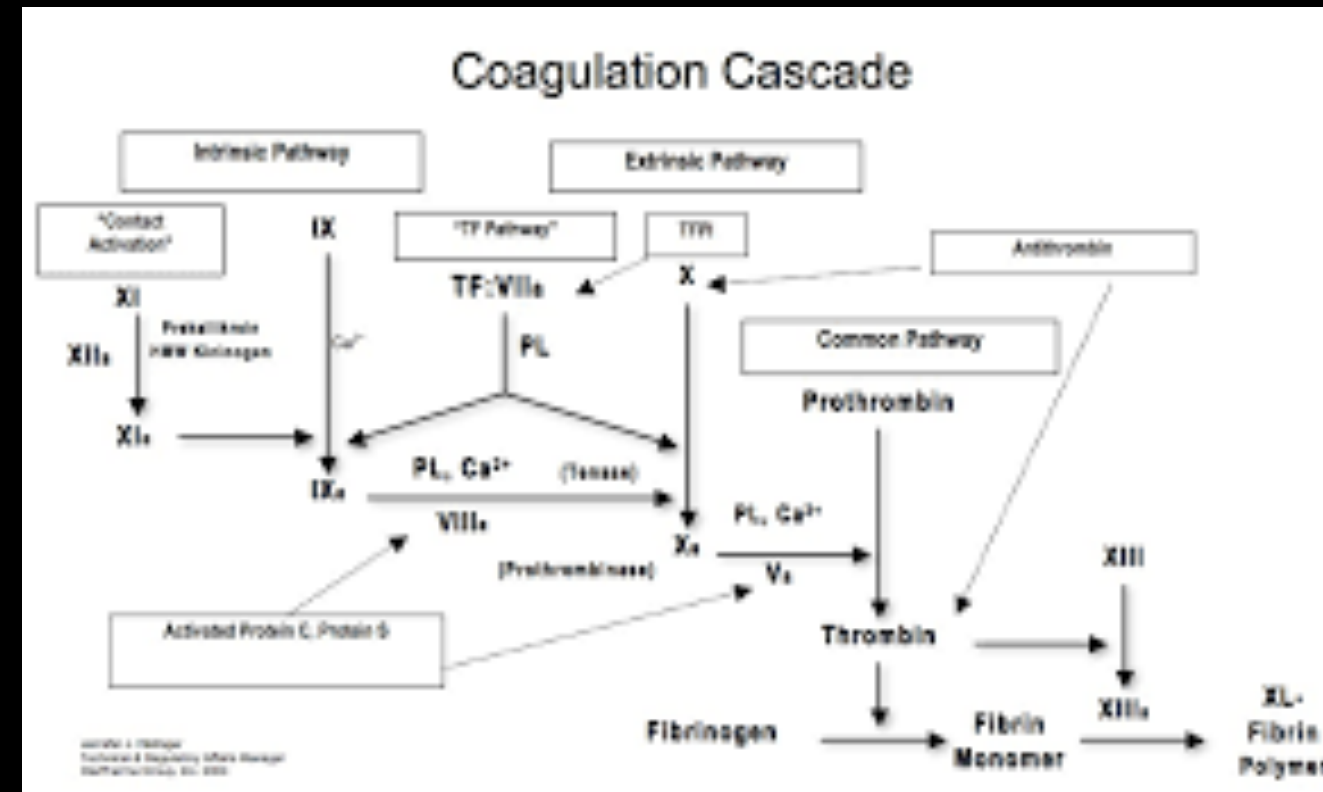


# MONITORING HAEMOSTASIS

- clinical observation
- empirical/formulaic blood product replacement
- lab-based
  - slow
  - PT/APTT limited sensitivity
- POCT
  - resources



# 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	$15\text{ ml.kg}^{-1}$ if PT/aPTT $> 1.5\times$ normal	$15\text{ ml.kg}^{-1}$ to prevent PT/aPTT becoming $> 1.5\times$ normal High volume if $> 1.5\times$ normal	NA	NA	$15\text{ ml.kg}^{-1}$ 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.