TEG6s Guide for Clotting Product Use on Labour ward - *Alastair Hughes 1/7/20*

Blood sample taken from patient using a blue top (citrated) blood tube.

Sample transferred to TEG cartridge using pipette supplied, so that it equals or exceeds the fill line.

Patient ID entered onto machine and sample analysis commenced.

The TEG6s analyser will produce 4 TEG traces and associated results.

1) CK – Citrated Kaolin – normal TEG
2) CKH – Citrated Kaolin Heparinase – to assess the effect of heparin
3) CRT – Citrated Rapid TEG – a quicker assessment of clot strength, without assessment of clot initiation
4) CFF – Citrated Functional Fibrinogen – provides clot strength based on fibrinogen contribution

When assessing the TEG6s analysis, the following results will guide our management in massive obstetric haemorrhage:

CK – Prolonged **R time** suggests a deficiency in clotting factors

CK **R time** > 9.1 minutes then give 15ml/kg of FFP **or** 2 pools of cryoprecipitate.

FFP contains all clotting factors whereas cryoprecipitate contains high levels of factor VIII, fibrinogen and von Willebrand factor.

CKH – Very rarely an issue on labour ward. A prolonged **R time** may suggest heparin effect.

If CK **R time** is > 9.1 minutes **and** is more than 3 minutes longer than the CKH **R time** then consider heparin effect and give protamine 1mg per 100 units of heparin given.

CFF – Reduced **MA** suggests fibrinogen deficiency

Fibrinogen <3g/L and especially <2g/L is associated with poor outcomes.

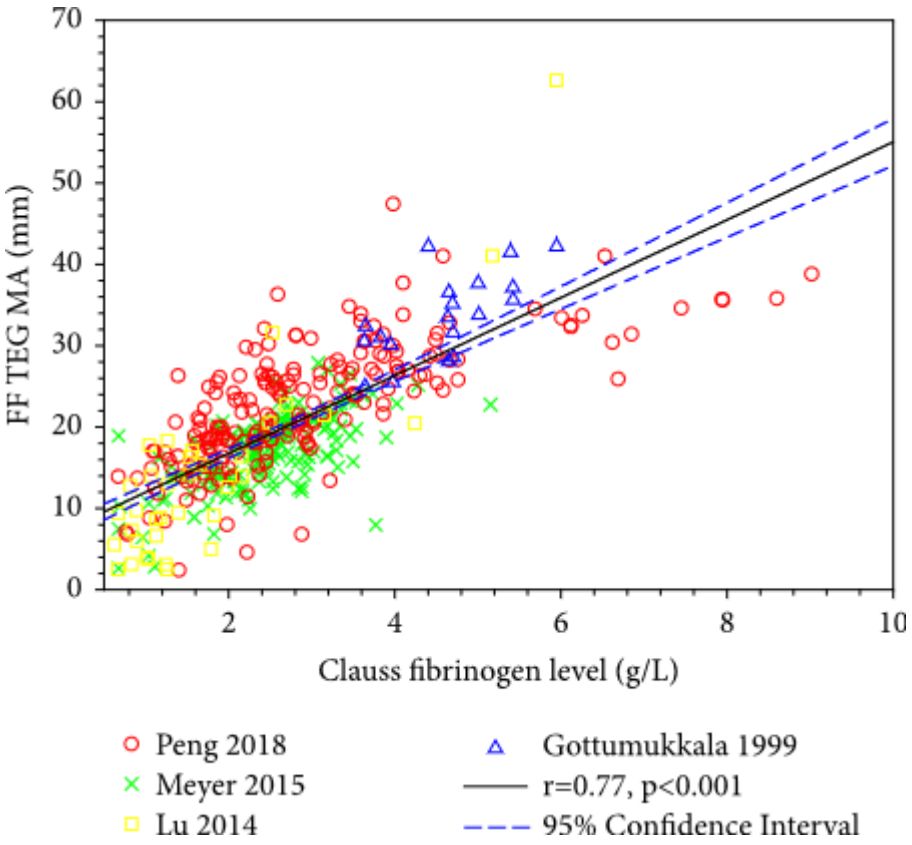
Fibrinogen < 2gL occurs in 1-2/1000 deliveries

Fibrinogen > 2 g/L is adequate for haemostasis during obstetric bleeding.

If CFF **MA** < 16mm give 3g of fibrinogen concentrate

MA 16mm correlates with fibrinogen concentration of 2g/L

MA 22mm correlates with fibrinogen concentration of 3 g/L



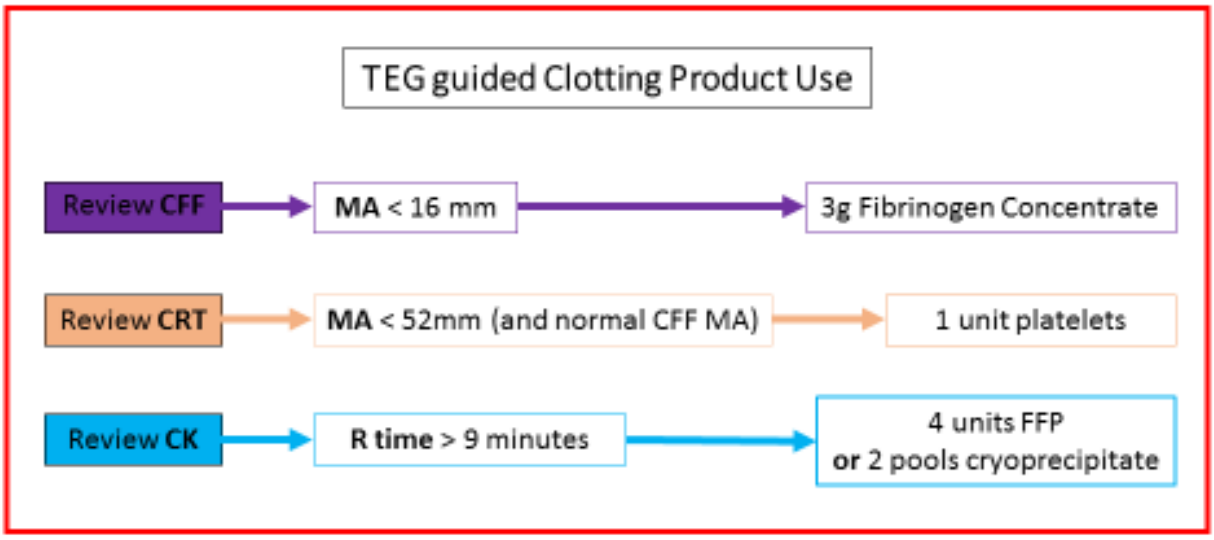
(https://doi.org/10.1155/2018/7020539)

CRT and CK – Reduced **MA** (in the presence of a normal CFF **MA**) suggests a platelet deficiency

CRT **MA** < 52mm give 1 unit of platelets

CK **MA** < 50mm give 1 unit of platelets

Summary:


TEG guided Clotting Product Use
Review CFF
MA < 16 mm
3g Fibrinogen Concentrate
Review CRT
MA < 52mm (and normal CFF MA)
1 unit platelets
Review CK
R time > 9 minutes
4 units FFP
or 2 pools cryoprecipitate