FFP – is it ever indicated?

SHOT Symposium 2013
10th July 2013
Common Indications for FFP

- Prolonged clotting screen itself
- Abnormal clotting screen + interventions
- Abnormal clotting screen + bleeding
- TTP
- Massive haemorrhage
Platelet as a procoagulant surface

Ca++

Normal Platelet

Activated Platelet
Fast spin
PT & APTT

Mann et al, JTH
Mann et al, JTH
So PT and APTT

- Are useful to diagnose haemophilia
- Useful to screen families with strong history of bleeding
- NOT useful to predict bleeding in pre-op, procedures, ITU, liver disease patients
When do patients get FFP?
Endogenous Thrombin Potential

Clotting factors

Platelets

Fibrinolytics

VWF

Antifibrinolytics

AntiCoagulants
THE MAGIC DOSE OF 10 - 20 ML/KG
Number of units of FFP given
What happens to clotting screen with FFP?
The other factors
Problems with clotting screen?

- No cells!!!
- Does not measure anticoagulant factors
- Preanalytical variables too many
- Reagents and quality control
- Only the initial bit of coagulation
Indications for FFP ?!

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Recombinant ADAMTS13 normalizes von Willebrand factor-cleaving activity in plasma of acquired TTP patients by overriding inhibitory antibodies


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Massive bleeding

- Fibrinogen – the key factor
- Is large volumes of FFP replacing fibrinogen?
  - If clotting factor replacement needed – POC better?
  - Measured amounts of factors & safer?
  - Is FFP causing delay in resuscitation?!!
R.I.P.

Here lies FFP

Born: 1950  Died: 2015