Pathogenesis

· Massive transfusions are needed when a huge/massive amount of blood is lost which cause loss of coagulation factors, inhibitors and PLTs. However, when there is a massive transfusion, RBCs are transfused - not coagulation factors, inhibitors, or PLTs - so these RBCs dilute the levels of coagulation factors, inhibitors and PLTs, which are already low - results in bleeding.

Lab findings

- Prolonged PT, PTT, TT
- · Decreased levels of PLT count

Treatment

- Cryoprecipitation
- Fresh-frozen plasma

Heparin

- Interferes with PTT factors
- Activates thrombin (inhibitor)
- Decreased PLT count Heparin Induced Thrombocytopenia (HIT)
- PTT used to monitor heparin

Warfarin (a.k.a Coumarin)

- Inhibits cofactor function of Vit K dependent coagulation factors (II, VII, IX, X)
- Less than 5% variation on PLT count
- PT prolonged
- PT used to monitor Warfarin

References

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