

Indications for neonatal transfusion and use of specific components

Introduction

+ Indications for transfusion

- ventilated

- non-ventilated

Use of other components

- platelets

- fresh frozen plasma

- other specific components

Indications for transfusion

- + Depends upon:
- + -whether baby is ventilated or not
- + -specific indications
- + -age of baby
- + -symptoms

Ventilated babies

- + May be transfused to increase oxygen carrying capacity of the blood
- + Often at an arbitrary level (?110g/l haemoglobin level)
- + Is there any science involved?
- + The oxygen dissociation curve
- + Acute indications

Non-ventilated babies

- + Usually not an emergency
- + -often older babies who are anaemic: symptoms?
- + -can be urgent: severe haemolytic disease of the newborn
- + -may be required as part of resuscitation
- + -what level of anaemia?
- + (Prevention)

Other components

+ Platelets:

- + -To treat thrombocytopaenia: what level?
- + -Prophylaxis or treatment
- + -(Thrombopoietin)
- + Specific diseases
- + -sepsis
- + -alloimmune thrombocytopenia

Fresh frozen plasma

- + Used to treat deranged clotting in newborns (especially prolonged APTT)
- + May be used with Vitamin K (Vit K particularly used if PT prolonged)
- + What is “normal” clotting-preterm, unwell
- + Contains many clotting factors

Other specific components

- + Isolated clotting factor disorders are rarely diagnosed in the newborn
- + Other disorders (antithrombin III deficiency, protein C or S deficiency)
- + White cells
- + -direct
- + -use of stimulating factors

Summary

- + Indication for transfusion
- + Use of other blood components
 - + -platelets
 - + -FFP
 - + -others