Patient Blood Management on Labour Ward

Patient blood management (PBM) is a multidisciplinary, evidence based approach to optimising a person's own blood to improve their outcomes. The following slides demonstrate how this can be implemented in the labour ward setting.



There are three pillars to PBM Pillar one: optimise red blood cell mass Pillar two: minimise blood loss Pillar three: manage anaemia

Pillar one: optimise red blood cell mass

Iron deficiency anaemia (IDA) affects 1 in 4 women of childbearing age in the UK. Commence oral iron therapy when the Hb is less than 110g/L in the first trimester, less than 105g/L in the second or third trimester and less than 100g/L postpartum.

If the Hb is lower than these thresholds request haematinics. Iron deficiency is indicated if ferritin is less than 100 micrograms/L or transferrin sats are less than 20%. Consider if a haemoglobinopathy screen is indicated.

First line therapy - ferrous sulphate 200mg up to TDS. If unable to tolerate, this can be reduced down to OD on alternate days. Taking with vitamin C may improve absorption. Some people may need laxatives. Recheck Hb 2-4 weeks after commencing iron to ensure appropriate incrementation (greater than 10g/L).



Pillar one: optimise red blood cell mass

Consider intravenous iron in the following circumstances - poor tolerance or compliance with oral iron, failure to increment Hb by more than 10g/L at 2-4 weeks (depending on dosing strategy) after commencing treatment with oral iron, the presence of inflammatory bowel disease or gestation 34 weeks or more - insufficient time for oral iron to be effective.



Intravenous iron is contraindicated in gestations less than 13 weeks.

After this gestation the Royal Free London NHS Trust administers Monofer at a dose of up to 20mg/kg given over 15 to 30 minutes. Refer to your Trust policy for local guidance.

> If anaemia is detected during pregnancy ensure a full blood count is taken pre-delivery.

Pillar two: minimise blood loss

Meticulous haemostasis, surgical and anaesthetic techniques Consider the use of cell salvage Avoid coagulopathy Patient positioning/warming Use of pharmacological agents

Consider the use of cell salvage at caesarean section where there is an increased risk of massive obstetric haemorrhage. This includes emergency LSCS, abnormal placental site, previous massive obstetric haemorrhage, risk of atony - fibroids, uterine anatomy, multiparous pregnancy and coagulopathy. Several Trusts in England have implemented vaginal cell salvage.

Verify the correct dose of anti-D required if cell salvage is used for D negative women who have a D positive baby.

Consider a hospital birth and active management of the third stage for those with anaemia in pregnancy.



Pillar three: manage anaemia

Maximise oxygen delivery Minimise oxygen requirements Treat infections promptly Tolerance of anaemia **Restrictive transfusion strategies**

Stable postpartum women rarely need a blood transfusion if the Hb is greater than 70g/L.

Giving iron to replenish stores and support sustained incrementation is more effective than a red blood cell (RBC) transfusion.

For stable adults, if clinically indicated, RBC should be given one unit at a time, followed with a clinical reassessment and check of Hb.

Document informed consent, including risks and ineligibility to donate blood in the future. Alternatives to transfusion should be discussed.



If unstable or actively bleeding blood components should not be withheld