

LABOUR WARD LESSONS OF THE WEEK

Pillars of Patient Blood Management

	PILLAR ONE	PILLAR TWO	PILLAR THREE	THREE PILLARS OF PATIENT BLOOD MANAGEMENT
	Optimise RBC Mass	Minimise Blood Loss	Manage Anaemia	
PREOPERATIVE	<ul style="list-style-type: none"> > detect/treat anaemia & iron deficiency > treat underlying causes > optimise haemoglobin > cease medications 	<ul style="list-style-type: none"> > identify, manage & treat bleeding/bleeding risk > minimise phlebotomy > plan/rehearse procedure 	<ul style="list-style-type: none"> > patient's bleeding history & develop management plan > estimate the patient's tolerance for blood loss > optimise cardiopulmonary function 	
INTRAOPERATIVE	<ul style="list-style-type: none"> > time surgery with optimisation of erythropoiesis & red blood cell mass 	<ul style="list-style-type: none"> > meticulous haemostasis/ surgical/anaesthetic techniques > cell salvage techniques > avoid coagulopathy > patient positioning/warming > pharmacological agents 	<ul style="list-style-type: none"> > optimise cardiopulmonary function > optimise ventilation & oxygenation > restrictive transfusion strategies 	
POSTOPERATIVE	<ul style="list-style-type: none"> > manage anaemia & iron deficiency > manage medications & potential interactions 	<ul style="list-style-type: none"> > monitor & manage post op bleeding > keep patient warm > minimise phlebotomy > awareness of drug interactions & adverse events > treat infections promptly 	<ul style="list-style-type: none"> > maximise oxygen delivery > minimise oxygen use > treat infections promptly > tolerance of anaemia > restrictive transfusion strategies 	

LESSON 1

PILLAR ONE

Optimise RBC Mass

> detect/treat anaemia & iron deficiency

- IRON DEFICIENCY is the most common cause of anaemia in pregnancy
- Patients with Hb <110g/L (1st trimester) and Hb <105g/L (2nd/3rd trimester) should receive 1st line ORAL IRON therapy as soon as anaemia is detected
 - Request HAEMATINICS (Iron deficiency ~ Ferritin <100µg/L or transferrin sats <20%)
 - 1ST LINE ORAL IRON THERAPY: Ferrous Sulphate 200mg tds
 - Give advice to reduce to BD/OD or alternate day regimens if poorly tolerated/side effects
 - Consider addition of laxatives
 - Improve absorption by taking with orange juice
 - RECHECK Hb 3-4 weeks post oral iron to ensure appropriate incrementation (>10g/L)
- INTRAVENOUS IRON should be considered where:
 - Poor tolerance/compliance with oral iron
 - Failure to increment Hb with oral iron (<10g/L by 3-4 week recheck)
 - Inflammatory bowel disease
 - >34 weeks gestation (not enough time for oral iron to be effective pre delivery)
- INTRAVENOUS IRON is contraindicated <13 weeks gestation

Outpatients at the Royal Free trust will now receive MONOFER as a rapid IV iron preparation that can be infused at a dose of up to 20mg/kg over 15 – 30 minutes

- If a patient has been anaemic during her pregnancy ensure a FBC is sent if admitted pre delivery to Labour ward/5S

- LESSON 2

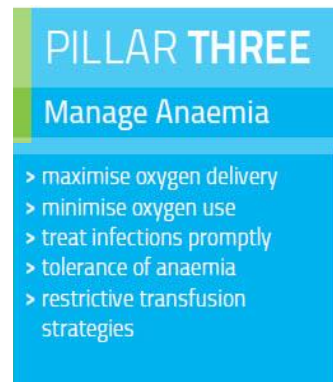


A green rectangular slide with white text. The top section contains the text 'PILLAR TWO' in a large, bold, sans-serif font. Below this, the text 'Minimise Blood Loss' is written in a smaller, bold, sans-serif font. The bottom section of the slide contains a list of five items, each preceded by a right-pointing chevron (>). The items are: 'meticulous haemostasis/ surgical/anaesthetic techniques', 'cell salvage techniques', 'avoid coagulopathy', 'patient positioning/warming', and 'pharmacological agents'.

- CELL SALVAGE should be considered for all patients who are at high risk of massive obstetric haemorrhage undergoing caesarean section:
 - Emergency LSCS
 - Abnormal placental site: praevia, accreta
 - Risk of atony: fibroids, uterine anatomy, multiparous pregnancy
 - Previous MOH
 - Coagulopathy
- The basic standby suction and reservoir kit can be set up (£18.50) and collected blood only need be processed and reinfused if a sufficient volume is collected

NB. In a Rh D Neg woman with Rh D Pos cord blood group, the mother will require Anti D immunoglobulin if cell salvage is used

LESSON 3



PILLAR THREE
Manage Anaemia

- > maximise oxygen delivery
- > minimise oxygen use
- > treat infections promptly
- > tolerance of anaemia
- > restrictive transfusion strategies

- STABLE anaemic post partum women rarely require RBC transfusion if Hb $>70\text{gL}^{-1}$
- INFORMED CONSENT about the implications of transfusion (inc being unable to donate blood in future) and alternatives to transfusion (do nothing/give oral or IV iron) should be discussed
- Giving IRON to replenish stores and support sustained incrementation of Hb is more effective than RBC transfusion (which does little to replenish iron stores)
- If transfusion is deemed necessary, RBC should be given one unit at a time (SINGLE UNIT TRANSFUSION) followed by reassessment of the patient clinically and a check Hb
- **If patient is unstable or has ongoing dynamic bleeding RBC should not be withheld and transfusion should be administered as part of trust MOH protocol**