

Post Natal Anaemia: The RBH Story

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Options for Treatment

WHO definition of Post Natal anaemia is Hb < 100 g/L

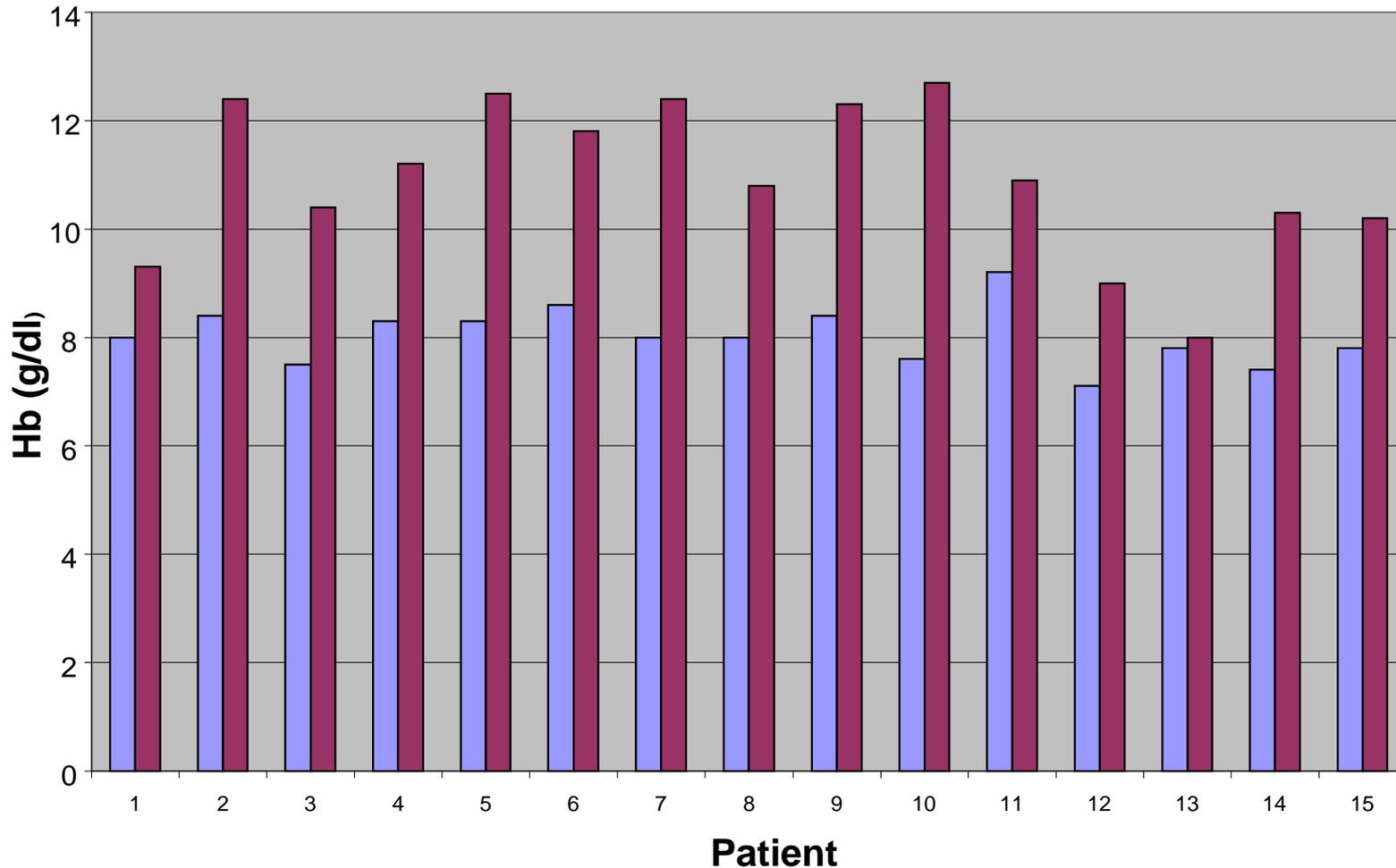
- Red Cell Transfusion
- IV iron
- Oral iron
- Do nothing

The Beginning – IV Iron

- 2007- 2008:-
 - Dynamic Obstetric consultant started using IV iron in post natal women with Hb < 90 g/L after success with AN IV iron in 2006
 - Given consecutive doses, maximum of 3
 - Audited 15 women
 - Results showed average increase in Hb 28.8 g/L

Results of P/N IV Iron

Pre and Post Hb



Maternity Anaemia Guidelines

Anaemia - guideline for the use of Venofer® in pregnancy and post partum for the treatment of iron deficiency anaemia (GL784)

Change History

Version	Date	Author, job title	Reason
6.0	March 2012	J Ablett, Consultant Obstetrician	Flowcharts added

- 2014: Higher dose IV iron added to formulary
- Ability to give 1g at a time
- Better for both AN & PN women
- Version 7 in 2014 added to guidelines

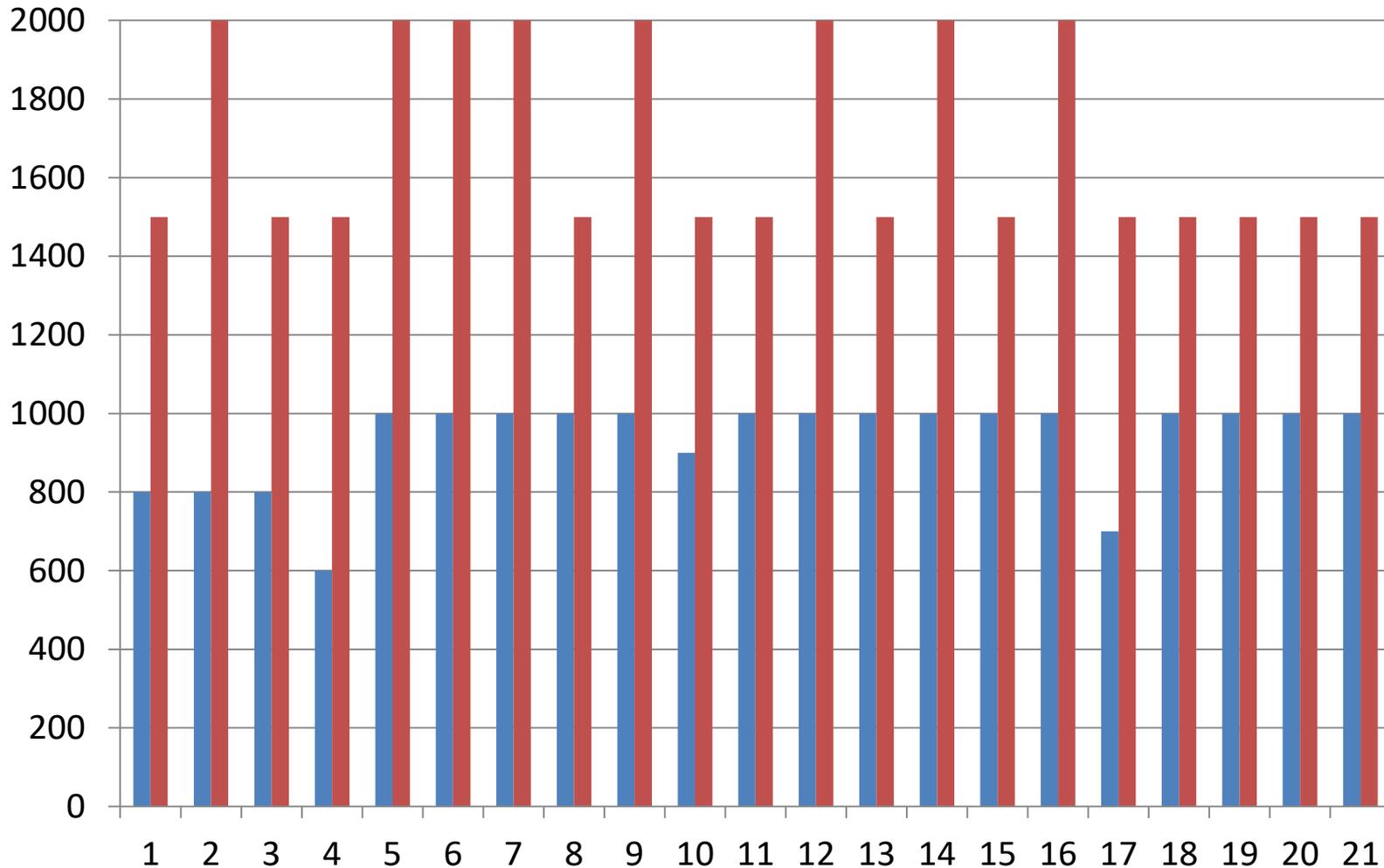
Correct Dose of iron?

Hb g/L	Weight 40 to <70kg	Weight >70kg
<100	1500mg	2000mg
>100	1000mg	1500mg

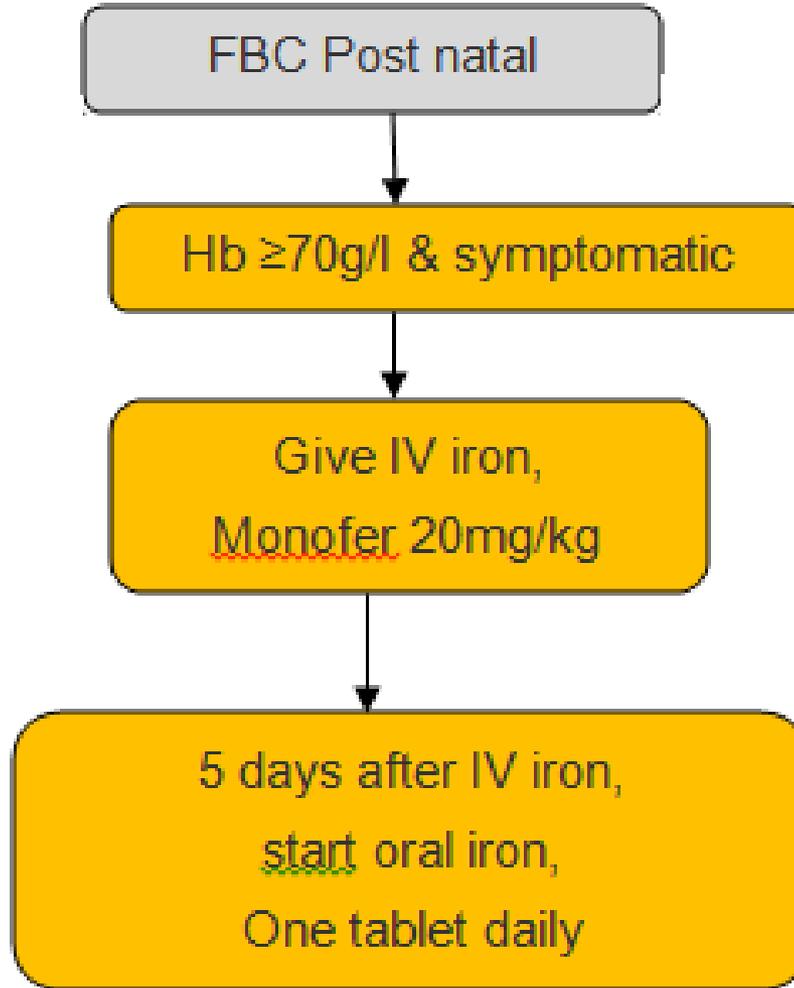
- 2019 Audit of IV iron in the Trust
- 21 P/N woman received IV iron in Jan 2019
- Booking weight ranged 45 – 100kg
- Hb ranged between 65 – 107 g/L

Correct dose of IV iron?

■ Dose ■ Correct Dose



2019: Version 9 of Guidelines



Next Step: Red Cell Transfusion

- 2009:-
 - Enthusiastic FY1
 - Championed the single unit transfusion
 - So Transfusion Policy amended

The Clinical Use of Blood Handbook

Do not transfuse more than necessary. If **one unit** is enough to correct symptoms, **do not give two units**. Remember that:

- Aim is to give sufficient haemoglobin to relieve hypoxia
- Dose should be matched to patient's size & blood volume
- The Hb content of a 450 ml unit may vary from 45 g to 75 g

Single Unit

2013	
02.01.13	2
09.01.13	2
09.01.13	2
09.01.13	2
10.01.13	2
14.01.13	2
14.01.13	2
26.01.13	3
28.01.13	1
29.01.13	1
20%	

2016	
05.01.16	2
06.01.16	1
17.01.16	2
20.01.16	1
24.01.16	3
30.01.16	1
04.02.16	2
05.02.16	2
06.02.16	1
07.02.16	2
40%	

2020	
07.01.20	1
14.01.20	1
15.01.20	1
20.01.20	1
22.01.20	1
23.01.20	1
23.01.20	1
24.01.20	1
08.20.20	1
08.02.20	2
90%	

Challenging requests

Prescribed 2 units for P/N woman and post Hb was 91?

I did ask SpR on the ward whether to transfuse 1 unit or consider IV iron.

However, she felt the Hb was going to drop further and would also have an effect on the desire to breastfeed.

Therefore, she felt that it would be better to give 2 units and improve Hb to >90

Authorised a single unit on sickle cell carrier with a P/N Hb of 91 and then IV iron on discharge day. A/N Hb was 103.

- She had stable obs but was pretty much unable to sit up, let alone stand, to care for her baby.
- I realise this sounds quite ‘wet’ but staff were finding it challenging to get her mobilising, caring for her baby and looking towards discharge

Transfusion Trigger

Blood Transfusion in Obstetrics

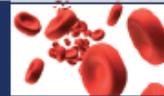
Green-top Guideline No. 47
May 2015

10. How should women with postpartum anaemia be managed in the postnatal period?

If the Hb is less than 70 g/l in the postnatal period, where there is no ongoing or threat of bleeding, the decision to transfuse should be made on an informed individual basis.

**TRANSFUSION
MEDICINE**

Official Journal of
the British Blood Transfusion Society



British Blood
Transfusion Society

Patient blood management in obstetrics: management of anaemia and haematinic deficiencies in pregnancy and in the post-partum period: NATA consensus statement

July 2017: P/N recommendations for RBCs

Transfusion be considered in non-bleeding patients with an Hb <60 g/L, taking clinical signs and symptoms into consideration (1A).

Reducing the Trigger

- Up to 2016: Non bleeding obstetric = 80 g/L
- 2016 reduced to 75 g/L
- 2016–18 SC region TPs audited Maternity Transfusions every quarter
- RBH an outlier – all others had 70 g/L

Appropriate Transfusion

2018:-

- Enthusiastic Anaesthetic CT2
- 35 Transfusions over 3 mths
- 29% Inappropriate
 - Hb 75 - 92
- 100% reason documented
- Transfusion reason?

Documented transfusion reasons	
Low <u>Hb</u>	60%
Tachycardia	34%
Hypotension	14%
Dizziness	22%
Feeling Faint	11%
SOB	0%

Symptoms to Transfuse?

“Symptoms of low iron” Urine very concentrated and patient encouraged to drink”

“Tachycardic ? Septic”

“Patient did not feel better after transfusion”

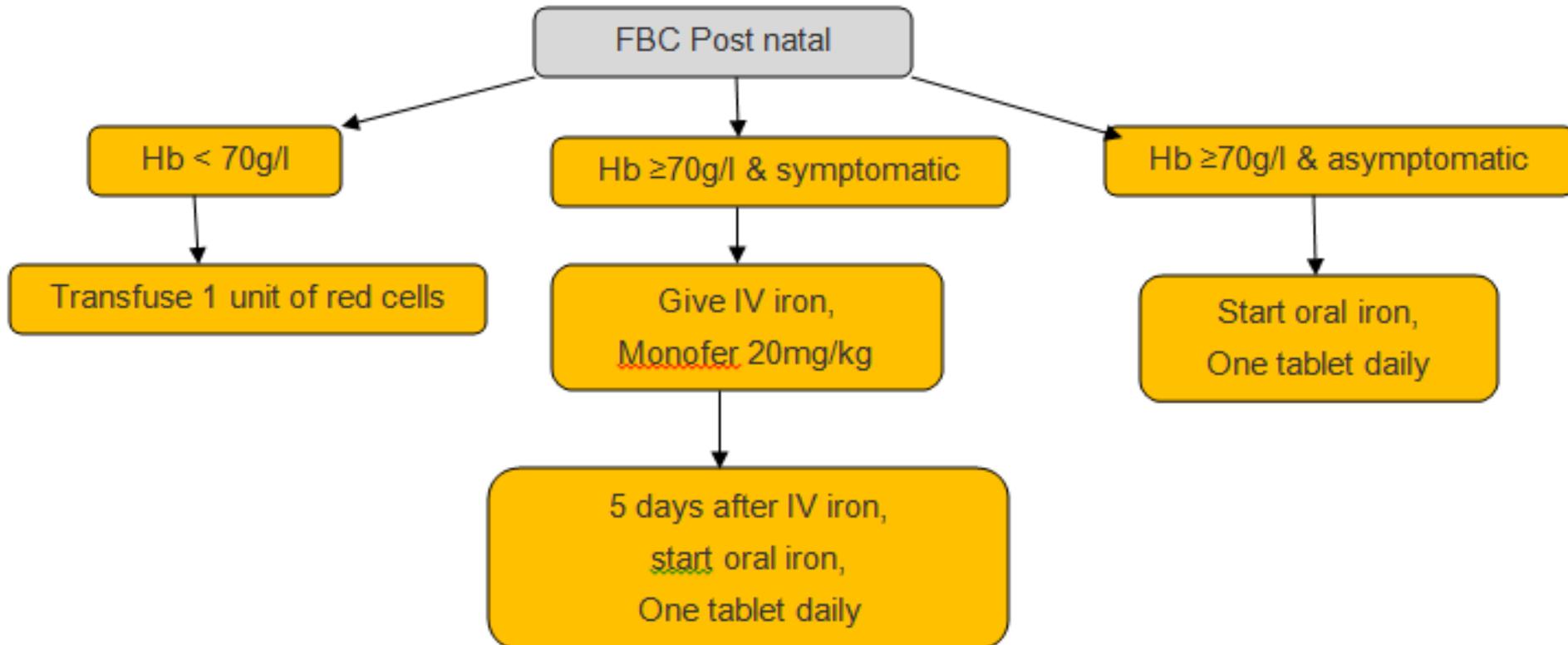
“Feeling faint and tired”

2018: Trigger reduced to 70 g/L

	2018	2019
Transfused not bleeding	73	64
Pre Hb \leq 70	26%	45%
Pre Hb 71 - 79	46%	45%
Pre Hb 80 - 89	28%	10%

2019: Version 9 of Guidelines

Iron deficiency anaemia in Maternity - Guideline for the management of (GL783)



Case Study 1: As per Guideline

- 37 yr old, LC
- Pre delivery Hb = 133
- Forceps episiotomy & tear on 13.12.19 at 03.14
- MOH declared 1900 blood loss
- No units transfused during MOH
- 13.12.19 @ 20:30 Hb = 83, 1g IV iron @ 21:44
- Discharged on 15.12.19, Hb = 77
- Hb on 31.12.19 = 118

Case Study 2: Not as per Guideline

- 35 yr old, UM, Induction of labour 30.12.19
- Pre delivery Hb = 111
- NVD with episiotomy on 30.12.19 @ 20.02
- MOH declared, 1500 mls blood loss not transfused
- 31.12.19 @ 06:30 Hb = 85, 1g IV iron @ 10:18
- Hb @ 12:10 on 31.12.19 = 78, 1 unit @ 14:53
- Discharged on 01.01.20, Hb = 84
- Hb on 20.01.20 = 123

Conclusion

- Addressing P/N anaemia has been a very long process
- Enthusiastic clinical staff is vital
- Auditing of practice shows compliance with best practice / national guidelines
- Challenge “inappropriate transfusions”
- Need to accept guidelines are guidelines
- Individual assessment & documentation is key

Dogs with a Bone

Thanks to:-

Jill Ablett – Consultant Obstetrician

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Edward Norris-Cervetto

