Reference Number: Version Number: 1	Date of Next Review: 29/06/2020 Previous Trust/LHB Reference Number: N/A

Anaemia in Pregnancy – Management in the Context of COVID-19
Guideline for the Management of Anaemia in the Antenatal and Postnatal Period During the COVID-19 Pandemic

Introduction and Aim

This guideline includes an updated antenatal anaemia pathway, specifically for use in the current COVID-19 national emergency. **Please be aware that there will be a change to this guideline once the emergency is over.**

According to the NICE classification, local audit data indicates that nearly 10% of women are anaemic when giving birth in Cardiff. This figure is unchanged since 2015.

This guideline details the C&V maternity strategy to detect and treat iron deficiency during the antenatal period to prevent the development of IDA during pregnancy.

We describe the use of oral iron to combat iron deficiency, the introduction of Ferritin levels in routine antenatal bloodwork and detail the use of IV iron where oral iron therapy has failed or is unsuitable.

Executive Summary

This guideline includes an updated antenatal anaemia pathway, specifically for use in the current COVID-19 national emergency. During the COVID-19 pandemic there is likely to be a shortage of blood and blood products available for transfusion which will be prioritised for women who experience a life-threatening bleed. Therefore, it is likely that blood transfusions will not be available for even symptomatic anaemia caused by a postpartum haemorrhage in an otherwise haemodynamically stable mother. Consequently, this pathway has been designed to safely achieve a **target haemoglobin of 120g/L at term**, to minimise blood requirements during the anticipated shortage.

As a matter of urgency, all women should have their latest FBC checked by their community midwife and the results managed as follows:

- For women <28 weeks gestation on 1st April 2020, follow the anaemia pathways in Section 3.1 (Booking bloods: screening for and managing anaemia) and 3.2 (28 week bloods: screening for and managing anaemia). This guidance has lower thresholds for treatment of anaemia and referral to clinic.
- For women >28 weeks gestation on 1st April 2020, follow the Urgent FBC review pathway in Section 3.3.

All women commenced on oral iron should be provided with information on the best way of taking oral iron and dietary advice on iron rich foods in pregnancy, which can be found in Section 6.

Criteria for referral to consultant led antenatal clinic are relatively unchanged. This guideline includes the indications for IV iron therapy, and the protocols for the administration of IV Iron

therapy. It should be noted that the department is switching to the use of Monofer.

There is also guidance on the definition and management of postnatal anaemia.

This guideline will be reviewed regularly during the current emergency, and updated after the COVID-19 pandemic.

Objectives

- Guidance on the appropriate frequency of tests to screen for anaemia.
- Advice on the management of anaemia identified in the antenatal and postnatal period.

This guideline replaces previous guidelines:
– *Administration of Cosmofer to Pregnant Women 2007 (Update 2019/Version 5)*

– *Guidance on administering Iron for anaemia in pregnancy and postnatal and for testing Ferritin levels 2014*

– Full Blood Count Screening 2010

And the following sub-sections
– *Routine antenatal investigations (Antenatal Care Guideline 2018)*
– *Low Hb or Ferritin results (Antenatal Screening Guideline 2018)*

Scope

This procedure applies to all of our staff in all locations including those with honorary contracts.

Equality Health Impact Assessment	An Equality Health Impact Assessment (EHIA) has/has not been completed. (please delete as necessary) Where it has not been completed indicate why e.g. 'This is because a procedure has been written to support the implementation the ……. Policy. The Equality Impact Assessment completed for the policy found here to be a negative/positive/no impact.
Documents to read alongside this Procedure	
Approved by	Maternity Professional Forum Quality and Safety Meeting, Maternity

Accountable Executive or Clinical Board Director	Title of post holder

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Summary of reviews/amendments			
Version Number	Date of Review Approved	Date Published	Summary of Amendments
	Date of Committee or Group Approval	TBA	State if either a new document, revised document (please list main amendments). List title and reference number of any documents that may be superseded

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2 Introduction

Iron deficiency is the commonest cause of anaemia in pregnancy and is potentially a preventable condition. It is well recognised that iron stores decrease in pregnancy, due to the physiological changes of pregnancy and the needs of the growing foetus.

Un-supplemented ingestion of iron from the diet is insufficient to meet this increased demand therefore iron levels decrease significantly during this time. An iron deficient state causes

iron deficiency anaemia (IDA) where there is impaired production of red blood cells leading to abnormally low levels of haemoglobin in the mother[1].

IDA has recognised adverse consequences for both mother and baby during pregnancy[1,2]. Common maternal symptoms are fatigue and breathlessness on exertion. The rates of IUGR and stillbirth are increased in anaemic mothers. IDA may also increase the risk of developing post-partum depression and difficulty with breast feeding.

There is also an increased maternal risk of post-partum haemorrhage and increased risk of the need for blood transfusion. This is particularly important during the COVID-19 pandemic because there is likely to be a shortage of blood and blood products available for transfusion which will be prioritised for women who experience a life-threatening bleed. Therefore, it is likely that blood transfusions will not be available for even symptomatic anaemia caused by a postpartum haemorrhage in an otherwise haemodynamically stable mother.

According to the NICE classification, local audit data indicates that nearly 10% of women are anaemic when giving birth in Cardiff. This figure is unchanged since 2015.

Recent evidence has highlighted the role of Ferritin levels when investigating and treating IDA. Ferritin is a protein biomarker that may act as a surrogate for determining whole body iron stores therefore helping to identify women who would benefit from iron supplementation[1].

There is much work around preoptimisation for surgery in non-pregnant adults where a target Hb of >130 has been shown to improve outcomes and reduce blood transfusion requirements[3], although there is also evidence that once the Hb levels increase over 130, adverse pregnancy outcomes may increase[4]. Consequently, this pathway has been designed to safely achieve a **target haemoglobin of 120g/L at term**, to minimise blood requirements during the anticipated blood shortage in the COVID-19 pandemic.

Oral iron at a minimum effective dose is preferable in the first instance to increment iron stores, given sufficient time to be effective and is preferred up to 28 weeks gestation. IV iron is preferable where there is limited time to increment iron stores, or where oral iron is either contraindicated or it is not tolerated by the patient, in spite of correct adherence to the appropriate dose and instructions for administration.

It is estimated the prevalence of anaemia (Hb **<**100g/L) may be as high as 20% in the postpartum period, with many women potentially undiagnosed[5]. In the postnatal period, iron deficiency anaemia is associated with emotional instability, depression and lower cognitive performance in the mother[6,7]. This may lead to reduced parent-child bonding and difficulty with breastfeeding[5]. Treating post-natal anaemia has proven benefits[8,9]. Therefore, targeted screening of women for anaemia in the postpartum period could identify those who may benefit from iron replacement.

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2.1 Definition of Anaemia

NICE Definition of Anaemia in Pregnancy[6]

- Hb ≤110g/L at booking until 28 weeks
- Hb ≤105g/L after 28 weeks

Indication of Iron deficiency in Pregnancy[1]

- Ferritin ≤30mcg/L

Definition of Postnatal Anaemia[5]

- Hb <100g/L at 24 hours post delivery

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2.2 Abbreviations used within this guideline

Abbreviation	Definition
CAV UHB	Cardiff and Vale University Health Board
Hb	Haemoglobin
IDA	Iron Deficiency Anaemia
HSR	Hypersensitivity Reaction
IUGR	Intrauterine Growth Restriction
FBC	Full Blood Count
PET	Pre-eclampsia

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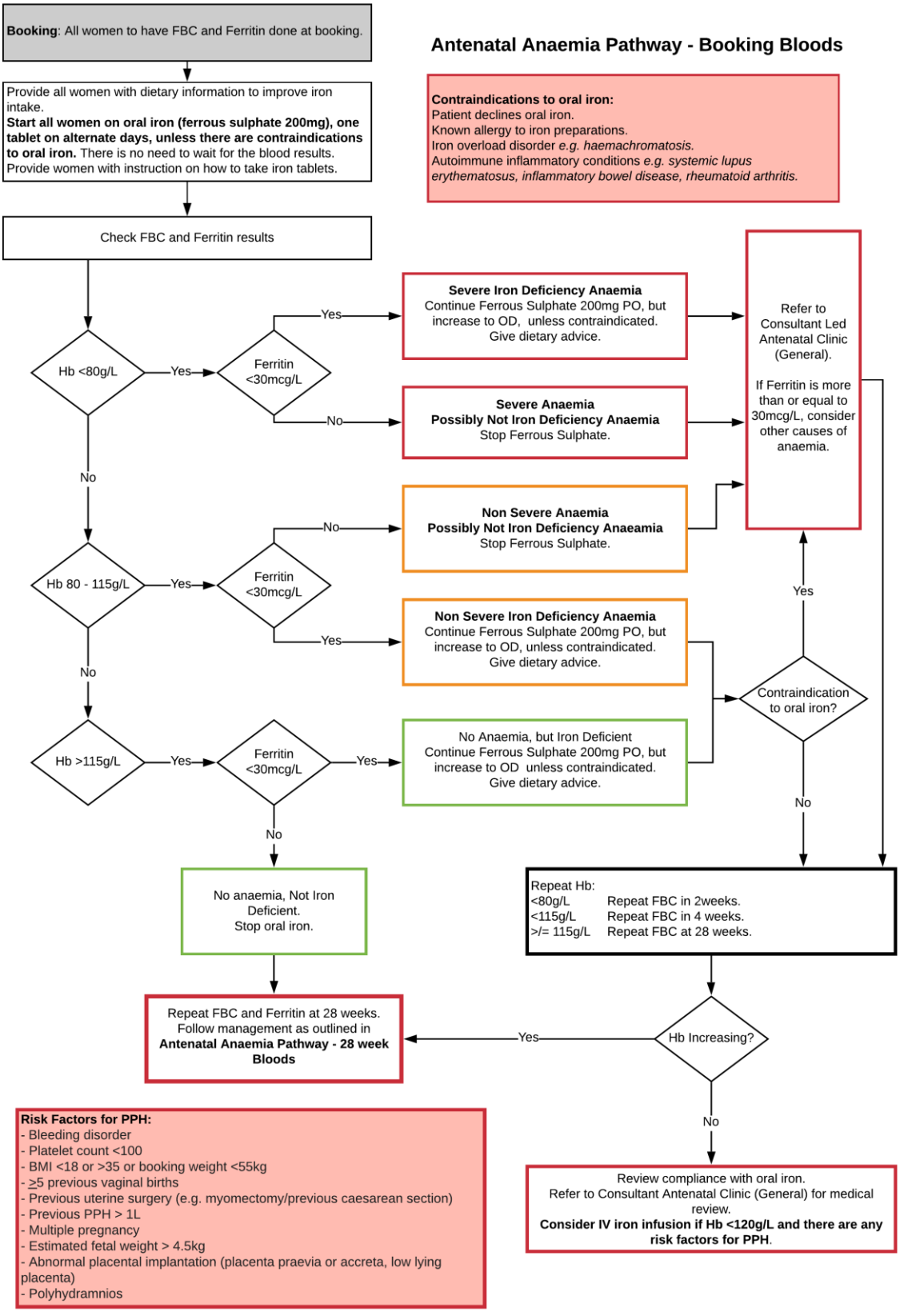
3 Antenatal Anaemia

3.1 Booking Bloods: screening for and managing anaemia.

This pathway is to be used for all women <28 weeks gestation on 1st April 2020. All antenatal patients should have their most recent FBC checked by the community midwife and actioned as per the pathway.

Please note, any women having booking blood tests should have an FBC **and ferritin** performed. If a woman has had her booking bloods and did not have a ferritin, this should be performed at her 28 week blood tests. Please discuss with the consultant in antenatal clinic if anaemia is diagnosed and you are unsure how to manage it without the ferritin level.



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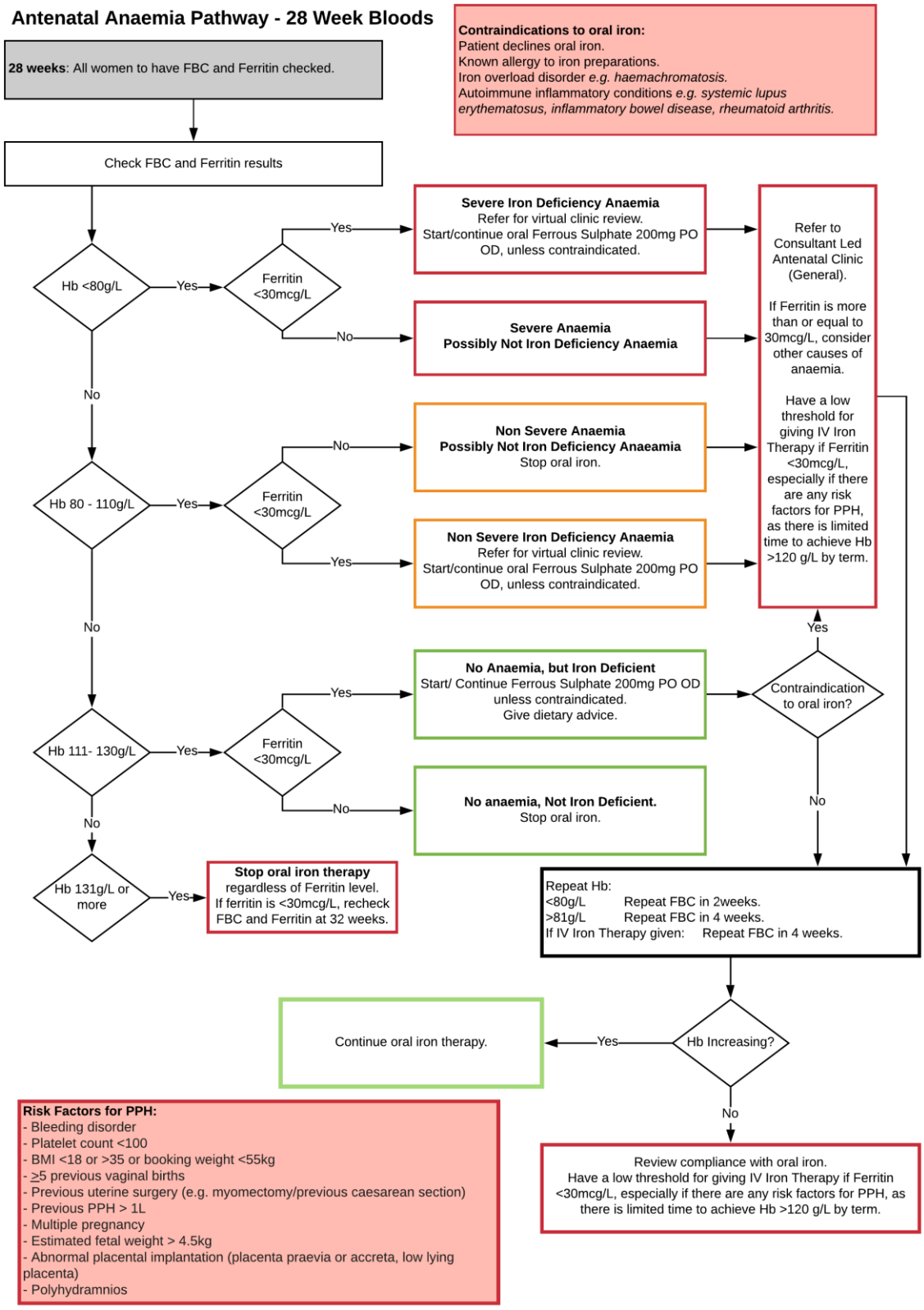
3.2 28 week bloods: screening for and management of anaemia

This pathway is to be used for women who were under 28 weeks gestation on 1st April 2020). Please note, FBC **and ferritin** should be done.



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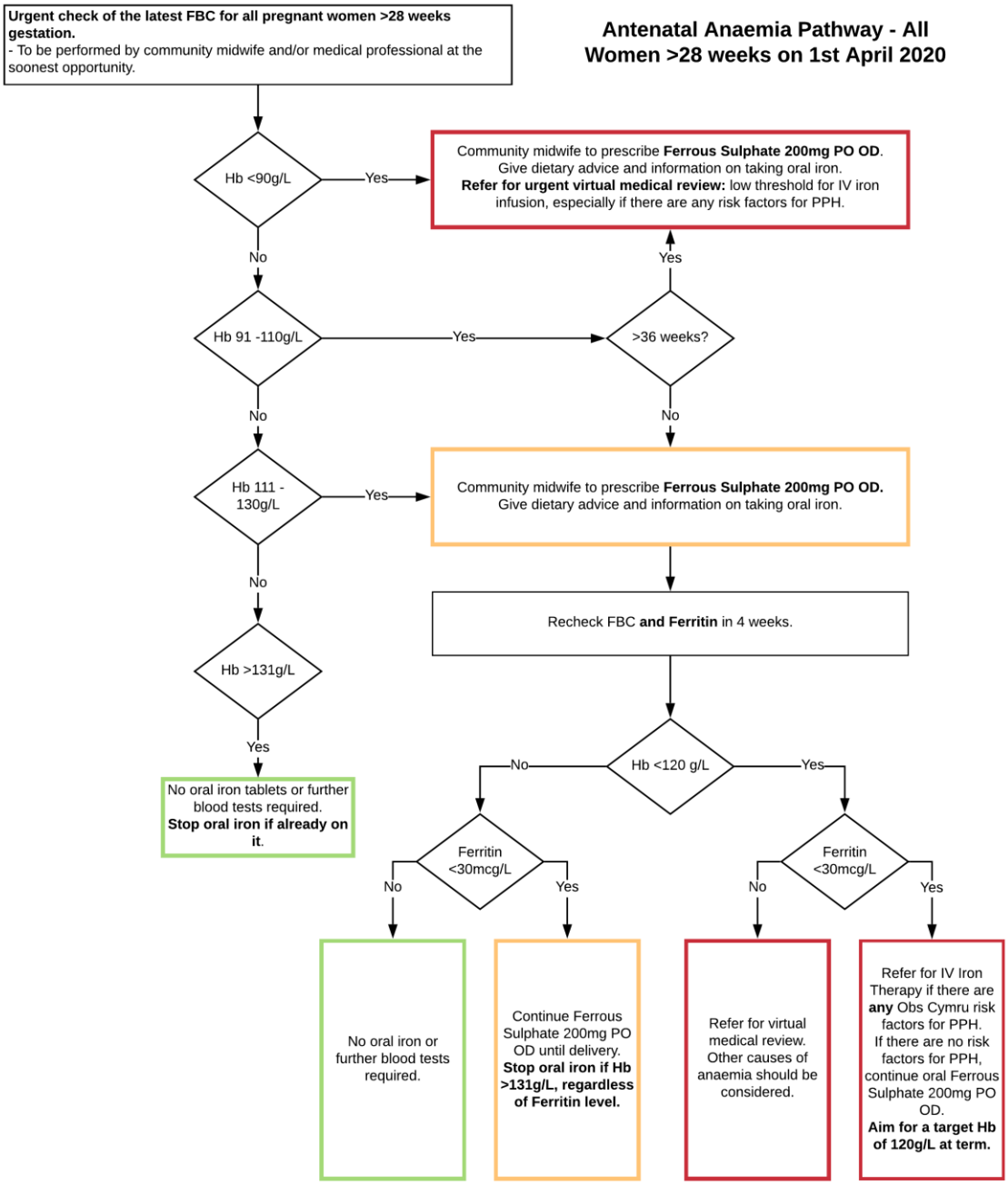
3.3 Urgent FBC review for all women >28 weeks on 1st April 2020: management of results.

The latest FBC should be reviewed by the community midwife for all women >28 weeks gestation on 1st April 2020. If a woman is being reviewed either face to face or by telephone consultation in antenatal clinic, the latest blood results should be checked by the reviewing doctor who should confirm the appropriate management has been started.



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3.4 Criteria for Referral to Medical Clinic

The following patients need medical review prior to starting iron therapy:

- Anaemia (Hb <110g/L) with any of the following:
  - Mean corpuscular volume (MCV) ≥105fL
  - Pancytopenia (WCC ≤4 x10^9/L or platelet count ≤140 x 10^9/L)
  - Ferritin >30 mcg/L
  - Other concerns meriting consultant review
- Low ferritin <30mcg/L with contraindication to oral iron, including:
  - Patient declines oral iron
  - Known allergy to iron preparations
  - Iron overload disorder *e.g. haemochromatosis*
  - Autoimmune inflammatory conditions *e.g. Systemic Lupus Erythematosus, Inflammatory Bowel Disease, Rheumatoid Arthritis*

The following patients need medical review, but can be started on oral iron therapy prior to the consultant appointment:

- Severe anaemia (Hb <80g/L) with ferritin <30mcg/L

The following patients need medical review whilst continuing oral iron:

- Non severe anaemia (Hb <100g/L) with ferritin <30mcg/L if Hb is not increasing on repeat FBC.

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3.5 Alternative Oral Iron Preparations Available in CAV UHB pharmacy

First line oral iron therapy should be with Ferrous Sulphate 200mg tablets OD. Alternative preparations are listed below:

Preparation	Pack size
Ferrous Fumarate 210mg	One tablet daily PO
Ferrous fumarate syrup 140mg in 5ml	5mls PO BD

4 Postnatal Anaemia

Ferritin is not recommended to assess iron stores postpartum as it is an acute phase reactant and may be acutely raised after childbirth, therefore no longer accurately reflecting iron stores.

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4.1 Definition of Postnatal Anaemia

Postnatal anaemia is defined as an Hb <100g/L at 24 hours after delivery[5].

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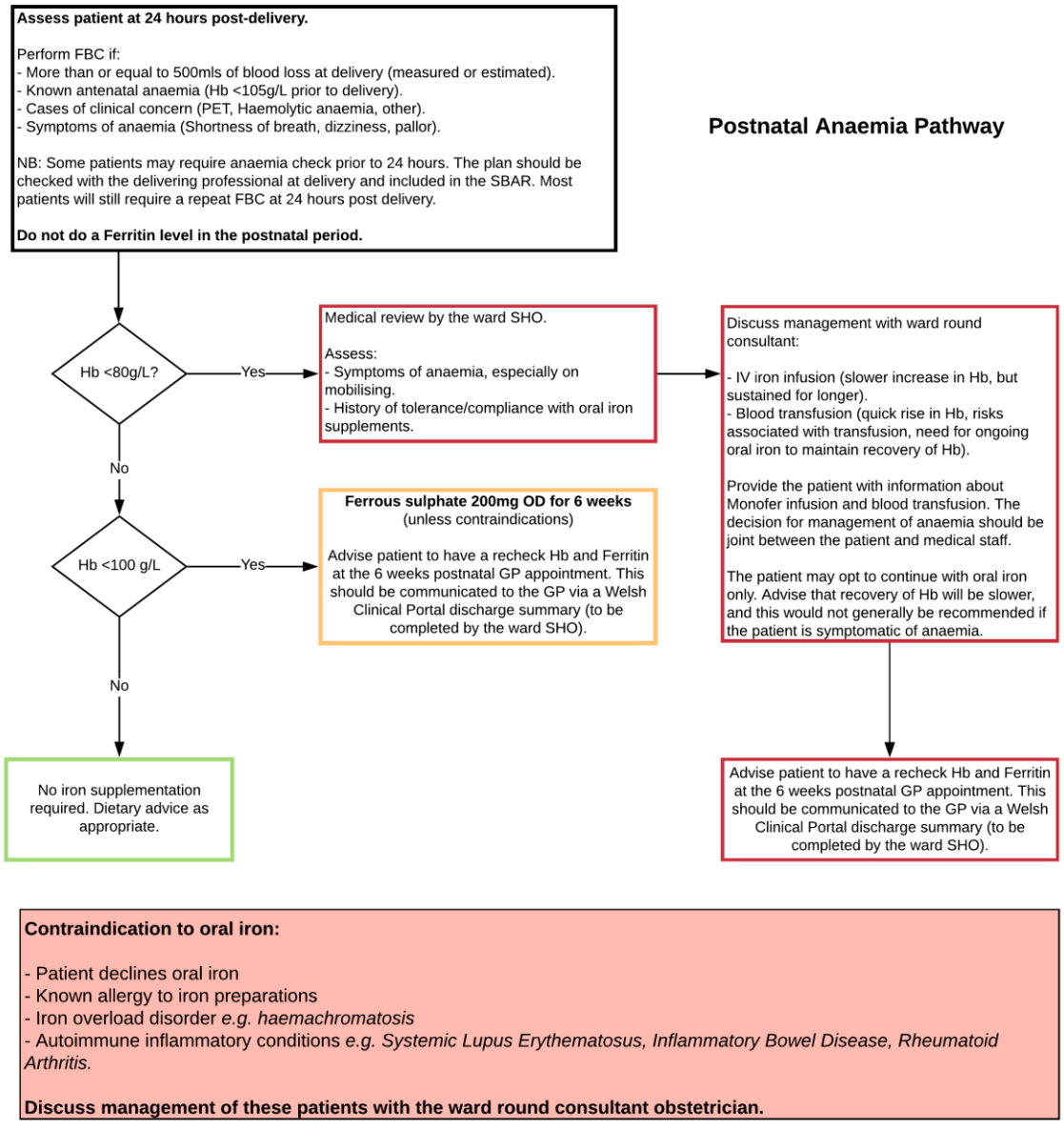
4.2 Postnatal Anaemia Pathway



Contraindication to oral iron:

- Patient declines oral iron
- Known allergy to iron preparations
- Iron overload disorder *e.g. haemachromatosis*
- Autoimmune inflammatory conditions *e.g. Systemic Lupus Erythematosus, Inflammatory Bowel Disease, Rheumatoid Arthritis.*

Discuss management of these patients with the ward round consultant obstetrician.

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5 Administration of Intravenous (IV) Iron – Iron Isomaltoside (Monofer)

5.1 Background

IV iron is a fast and effective way of treating IDA. IV Iron is an alternative to oral iron therapy. It will usually achieve Hb targets faster than oral iron with no gastrointestinal side effects[1]. Some IV iron preparations have been associated with a risk of severe hypersensitivity reactions (1/100-1/1000), anaphylaxis (1/1000-1/10,000) and iron extravasation (1/10-1/100)[10]. Within CAVUHB, Monofer is the preferred IV iron solution. Its pharmacological properties show it to have an improved safety profile and, fully replenishing the iron stores. IV iron therapy has been shown to be safe for babies of breastfeeding mothers[1].

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5.2 Decision for IV Iron Therapy

The decision to implement IV iron therapy should be directed under the care of a consultant obstetrician or obstetric pharmacist.

5.2.1 Indications for IV Iron Therapy

- IDA
  - Antenatal: Ferritin <30 mcg/L with Hb < 80g/L before 28 weeks after consultant medical review (severe iron deficiency anaemia or iron deficiency anaemia unresponsive to oral iron).
  - Antenatal: Ferritin <30mcg/L with Hb <110g/L after 28 weeks' gestation with contraindication to oral iron, or Hb <120g/L with no improvement with PO iron therapy, after consultant medical review (severe iron deficiency anaemia or iron deficiency anaemia unresponsive to oral iron).
  - Postnatal: Hb < 100g/L at 24 hours post delivery with contraindication to or no improvement with PO iron therapy, or Hb <80g/L at 24 hours post delivery.
- Failure of PO iron therapy (Malabsorption syndromes, poor compliance, significant side-effects).
- Clinical scenarios when there is requirement to increase Hb rapidly (e.g. IDA with placenta accreta, 36 weeks' gestation pregnancy with IDA).

5.2.2 Contraindications to IV Iron Therapy[10]

- Previous allergy to IV iron
- First trimester of pregnancy
- Non-IDA (Sickle cell disease/ thalassaemia)
- Iron overload states (e.g. haemochromatosis)
- Decompensated liver failure
- Ongoing bacteraemia

5.2.3 Cautions with IV Iron Therapy[10]

- History of anaphylaxis (any trigger)

- History of atopy (asthma, eczema, any allergy)
- Known autoimmune/inflammatory conditions (Systemic lupus erythematosus, inflammatory bowel disease, rheumatoid arthritis)
- Evidence of current infection
- Compensated chronic liver disease

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5.3 Prescription of IV Iron

The decision to implement IV iron is to be made by the responsible Obstetric Consultant or Obstetric pharmacist. An IV iron patient information leaflet (Section 5.3.1) should be offered to the patient.

The patient should be advised to stop oral iron 24 hours before the iron infusion, and not to restart oral iron for at least 5 days after the completion of Monofer infusion, if required.

On the day of therapy, IV Iron is prescribed by the obstetric team or obstetric pharmacist and the appropriate does pre-calculated. Monofer IV iron is to be prescribed on dedicated CAV UHB IV iron prescription charts (Section 5.3.2). The patient is to have a follow up clinic appointment arranged for 4 weeks post IV iron infusion to check Hb.

Verbal consent is to be taken by the prescriber. This consent should be documented fully in the medical notes. This should include specific mention of:

- Risk of hypersensitivity reactions/anaphylaxis (1/1000-1/10,000)[10]
- Risk of extravasation causing permanent skin staining (1/10-1/100)[10]

5.3.1 IV Iron CAV CHB Prescription Chart

Prescription Chart for Monofer (iron (III) isomaltoside 1000) For Obstetric patients with low Ferritin

Allergies	Please circle as appropriate NONE KNOWN YES Signature..... Date Name..... Drug/allergen..... Description of reaction

NHS WALES GIG CYMRU

Place Addressograph Here

Gestation _____weeks (Do not prescribe IV iron in first trimester)

Prescriber to complete all boxes shaded in grey

Monofer IV Iron to be prescribed if ferritin <30 mcg/L and failure of oral iron therapy.
Aim for Hb > 110g/L before 28/40, Hb> 120g/L after 28/40 and > 100g/L postnatally.

Step 1 Justify need for parenteral iron therapy

Hb (<110g/L before 28/40) (<120g/L after 28/40) (<100g/L postnatally)	Ferritin (<30mcg/L) (Antenatal only)	EDD/Date of LSCS	Booking Weight (kg) If BMI>30 use IBW [(Height (cm) – 154) x 0.9] + 45

Step 2 Dose = 20mg/kg – tick dose as appropriate (calculate if weight <50kg)

Weight	<50 kg		50-59 kg		60-69 kg		70-79 kg		80-89 kg		90-99kg		≥ 100kg	
Dose	20mg/kg		1g		1.2g		1.4g		1.6g		1.8g		2g	

Step 3 Complete the Monofer Prescription Schedule

DATE	Drug name and infusion	DOSE	ROUTE	Prescriber signature	TIME GIVEN	GIVEN BY	CHECKED BY
	Sodium Chloride 0.9% for flushing cannula	5ml	IV				
	Iron (III) Isomaltoside (Monofer®) in 500ml Sodium Chloride 0.9% over 60 minutes		IV infusion				
	Sodium Chloride 0.9% for flushing cannula	5ml	IV				

Step 4 Prescriber's signature

P R I N T name	Designation	Signature	Date

Step 5 Clinical Check by Pharmacist, dispensing and accuracy check

Clinical check		Dispensing		Final check	

Pre-administration questionnaire and monitoring

Place Addressograph Here

Past medical history	Liver disease		Rheumatoid arthritis/SLE	
	Asthma		Previous sensitivity to iron	
	Eczema		Other drug allergies	

If any of the above apply, the patient will be at a greater risk of hypersensitivity reactions. Please be aware that the infusion may need to be slowed down or stopped (see Reaction Management Algorithm).

Monitoring

	Time	Temperature	Respiratory rate/SpO_2	Blood pressure	Pulse
Before Infusion					
After 30 minutes		n/a			
After 60 minutes		n/a			
30 minutes after completion of infusion		n/a			

Extravasation

Please monitor within the first few minutes of the infusion for signs of irritation or obvious extravasation of infusion.

Anaphylaxis

Acute severe anaphylactic reactions may occur with parenteral iron administration.
They usually occur within the first few minutes of administration and are characterised by sudden onset respiratory failure and/or cardiovascular collapse.
Urticaria, rashes, itching, nausea and shivering may also occur.
Administration must be stopped immediately if signs of an anaphylactic reaction are observed.
Appropriate resuscitation medication must be available including hydrocortisone IV and adrenaline. See IV Iron Reaction Management Flowsheet.

Follow Up

Please ensure the patient has an Obstetric follow up with a re-check FBC at 4 weeks post infusion.

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5.4 Administration of IV Iron (Monofer)

5.4.1 Equipment/Personnel

- IV iron is to be administered in the presence of staff trained in recognising and treating hypersensitivity reactions
- An anaphylaxis box must be readily available
- Patient monitoring must include SpO2 probe, BP cuff and thermometer
- A patient dedicated midwife must be available for the duration of the infusion
- CTG is not required for a patient who reports normal foetal movements prior to IV iron therapy

5.4.2 Preparation

- IV iron is to be individually prescribed for each patient based upon their weight on the CAV IV iron prescription sheet
- The maximum dose of Monofer IV Iron is 20mg/kg
- Each patient prescription will be individually checked by pharmacist and the Monofer solution will then be dispensed to be given to the patient

5.4.3 Infusion

- Establish IV access as per CAV UHB guidance
- Attach patient monitoring
- Establish and record baseline physiological parameters (BP, HR, RR, temperature and SpO2) before administration of IV iron
- Infuse Monofer solution over 1 hour (NB: a test dose is unnecessary)
- Encourage patient to stay relatively still during infusion to minimise risk of extravasation
- Within first 10 minutes, ensure infusion is running freely and monitor for signs of extravasation of solution
- Monitor for signs of rash, urticarial, itch and shivering
- Monitor and record physiological parameters (RR, BP, Sp02 and HR at 30 and 60 minutes, and at 30 minutes post completion of infusion
- Counsel the patient for signs of post infusion side effects and ensure an obstetric follow up appointment is made (with FBC check) in 4 weeks' time for all antenatal patients

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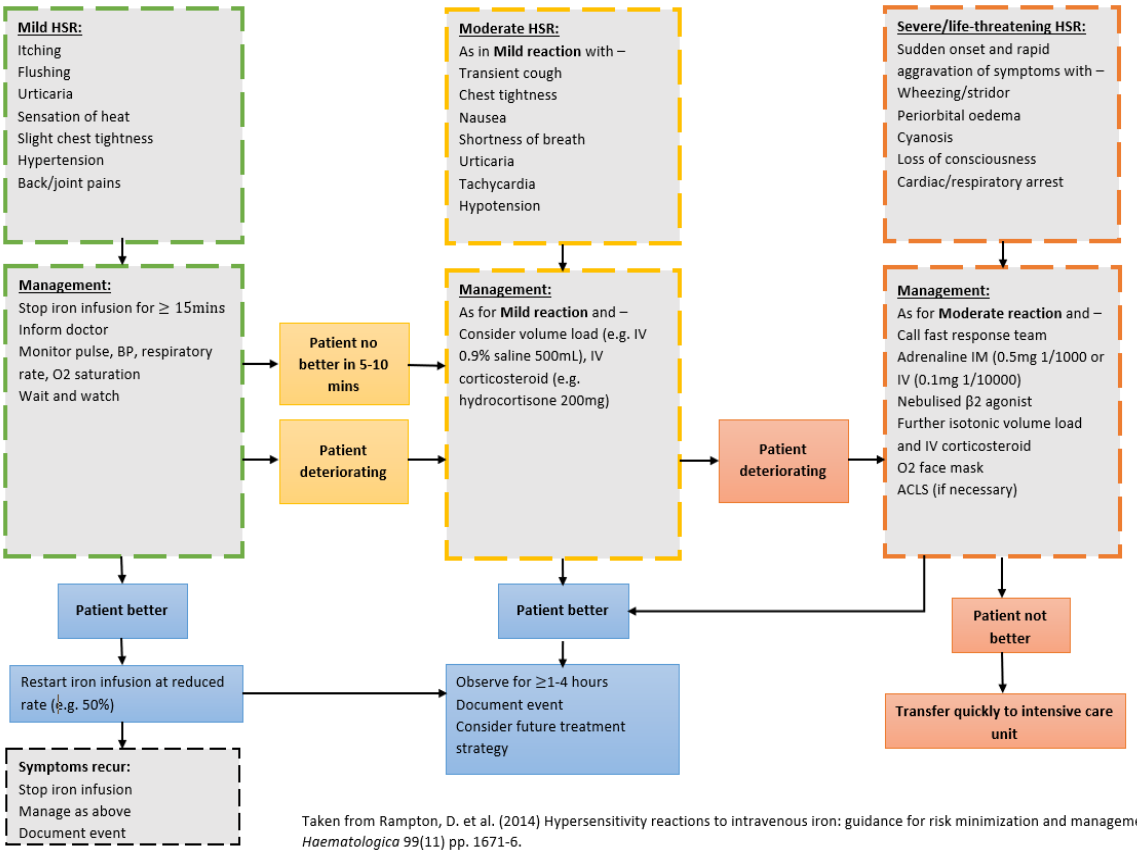
5.5 Hypersensitivity Reactions to IV Iron

5.5.1 Side Effects

- Anaphylaxis/Hypersensitivity reactions (HSR) – please follow the Hypersensitivity Reaction Algorithm included in this guideline
- Watch for extravasation of the IV solution-if present stop infusion immediately, aspirate the cannula, elevate the arm and call for review by a doctor
- Delayed reactions may occur. These can include arthralgia, myalgia and fever. The patient is encouraged to report any of these side effects to their midwife

- Any adverse events are to be reported via Yellow Card Scheme; www.mhra.gov.uk/yellowcard

5.5.2 Management of Hypersensitivity Reactions to IV Iron



Taken from Rampton, D. et al. (2014) Hypersensitivity reactions to intravenous iron: guidance for risk minimization and management. *Haematologica* 99(11) pp. 1671-6.

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6 Patient Information

6.1 Diet In Pregnancy: Iron rich foods

6.2 Patient Information Leaflet: Anaemia in Pregnancy

Anaemia and pregnancy

Anaemia can be common in pregnancy. Anaemia is a blood condition that develops when you don't have enough red blood cells. Red blood cells contain haemoglobin, a protein that carries oxygen around your body and to your baby.

Signs and symptoms of anaemia in pregnancy

Symptoms of anaemia can include:

- tiredness and lack of energy
- shortness of breath
- feelings of having a fast-beating, fluttering or pounding heart (heart palpitations)
- pale skin.

There are different types of anaemia and each has a different cause. The most common type for pregnant women is iron-deficiency anaemia.

What causes iron deficiency anaemia?

Pregnancy is often the cause of iron-deficiency anaemia. You and your baby need a lot more iron to make red blood cells while you're pregnant. Iron-deficiency anaemia can happen when you are not eating enough food with iron.
You are also more likely to have anaemia if you:

- are a vegetarian or vegan
- have had anaemia before
- have a history of heavy periods
- are carrying more than one baby
- were younger than 20 when you got pregnant
- you are pregnant again after having a baby within the last year.

Will I be checked for anaemia during my pregnancy?
Yes. You should have a blood test to check for any conditions that may affect your baby, including anaemia at your booking appointment and when you are 28 weeks pregnant.
If you're carrying more than one baby you should have an extra blood test at 20-24 weeks. This will give you enough time to get treatment if you need it.
You can call your midwife at any time if you think you have anaemia symptoms and you can be tested for anaemia at any point in your pregnancy. You don't have to wait for your antenatal appointments or for routine tests

Will iron deficiency anaemia harm me or the baby?
Most people with anaemia in pregnancy go on to have a healthy pregnancy and baby. However, anaemia has been linked to pregnancy complications before and after birth if it isn't treated. These can include:

- premature birth
- low birthweight
- placental abruption
- your body being less able to cope with blood loss during labour
- iron deficiency in your baby in their first 3 months of life
- problems with the baby's mental development.

It can be difficult to read these but try not to worry too much as the risk is low. If you are diagnosed with anaemia and it is treated properly it is very likely you will still have a healthy pregnancy and baby.

How is iron deficiency anaemia treated?
If you have anaemia you'll probably be prescribed iron supplements (tablets) or as a liquid to take every day. Vitamin C can help the body absorb iron, so you could try taking the tablets with a drink containing vitamin C such as orange juice. The supplements may also give you some stomach pain, constipation and your poo may be black. This is normal but call your midwife if you're worried.
You may find it easier to cope with side effects if you take the supplements with or soon after food.
Your symptoms should get better after taking iron supplements. If it doesn't, or if your anaemia is severe, you'll probably be referred to a haematologist (a doctor expert in blood disorders).

You may be given iron through intravenous therapy (IV). This means giving you iron in liquid form through a needle directly into the vein (usually in your arm). You may also be offered a blood transfusion.

Best foods to treat anaemia

Most people should be able to get all the iron they need by eating a healthy, balanced diet. Eating well will help you either prevent anaemia or manage your symptoms if you have it. Some food has more iron than others. For example, animal-based foods are particularly rich in iron and are most easily absorbed.

Iron-rich food list

Most people should be able to get all the iron they need by eating a healthy, balanced diet. Eating well will help you either prevent anaemia or manage your symptoms if you have it. Good sources of iron include:

- meat (red meat such as beef, lamb and pork is best. Make sure it is cooked thoroughly)
- pulses (beans, peas and lentils)
- fresh green leafy vegetables, such as cabbage, spinach, watercress, parsley, spring onions
- seeds, such as sunflower or sesame seeds
- dried prunes, raisins, figs and unsulphured apricots (dried apricots without sulfur dioxide)
- fish such as grilled mackerel or canned tuna (no more than 4 medium-sized cans a week)
- wholegrains, such as brown rice
- nuts, such as almonds, hazelnuts and brazil nuts.

To make sure you get an iron-rich diet you can:

- add green leafy vegetables to main meals, such as cabbage, spinach, watercress, parsley, spring onions or chives
- add dried fruit to desserts and have fruit (or nuts) as snacks between meals
- try iron-fortified foods, such as breakfast cereals or wholemeal toast.

Foods to help the body absorb iron

Some fruits and vegetables containing vitamin C can help the body absorb iron. These include:

- kiwi fruit
- oranges
- potatoes
- cauliflower
- broccoli
- brussels sprouts
- parsley.

Try to avoid drinking tea and coffee (including decaf versions), especially with a meal, because this can stop iron being absorbed into your body. It will be helpful to cut down on your caffeine intake in pregnancy anyway.

6.3 IV Iron (Monofer) Patient Information Leaflet

Intravenous Iron-Monofer

An intravenous therapy to treat your iron deficiency anaemia

Good for you

Good for your baby

GIG CYMRU NHS WALES
Bwrdd Iechyd Prifysgol Caerdydd a'r Fro
Cardiff and Vale University Health Board

What is intravenous (IV) Monofer©? Monofer© is a dark brown liquid containing iron and is used to treat iron deficiency anaemia.
Why do I need to have IV iron? Your doctor will have chosen Monofer© because you need to correct the iron levels in your body. Monofer© is used for treating iron deficiency anaemia when oral iron preparations are ineffective or cannot be used or when there is a need to deliver iron rapidly.
How is IV Monofer© administered? Monofer© is an intravenous iron treatment that is given directly into a vein. The infusion will run into your vein from a drip, and you will be monitored by a midwife throughout the procedure. The procedure should take 60-90 minutes.
Is it safe for me? Iv iron is considered to be a safe drug, however there are known side-effects. Your obstetrician or obstetric pharmacist will discuss these with you when deciding to treat you with IV iron.
What are the common side-effects? The most common side-effect at the time of infusion is nausea. Your midwife will monitor you during your infusion for signs of reactions at the injection site – these include redness, soreness or discolouration (1/10-1/100). Extravasation (leakage of the solution into the tissues) has been shown to cause long-term staining of the skin, therefore you will be monitored very closely for any of these signs during the treatment. If you notice any pain or redness around the drip, please let your midwife know immediately. Rare side-effects (1/100-1/1000) include fast heart rate, low blood pressure, rash and joint pains. Severe allergic reactions, such as anaphylaxis, are rare (1/1000-1/10,000).
Is it safe for my baby? Monofer© is not licensed for administration within the first trimester. Your obstetrician or pharmacist will discuss the risks and benefits of undergoing IV iron therapy for you and your baby.
Can I take my medication whilst having IV Monofer© treatment? Please continue to take your regular medication. We advise you stop taking your oral iron whilst having IV Monofer©.have been shown to be safe with minimal transfer of iron into the breastmilk.
Can I breastfeed my baby? If you are found to be anaemic after the delivery of your baby, having an IV iron infusion could be a treatment option. For mothers who have decided to breastfeed their babies, therapeutic doses of IV Monofer© have been shown to be safe with minimal transfer of iron into the breastmilk.
What if I'm unwell during or after my treatment? IV iron will be administered in a hospital setting, with trained staff present to look out for any side effects. IV iron can cause flu-like symptoms. If this occurs, we would ask you to call your midwife for advice. Alternatively, you could call the obstetric assessment unit at UHW on 02920 744658.
What happens after my treatment? After your infusion of IV Monofer©, a follow-up appointment will be made for you. This would typically be within 4 weeks of your treatment. Your blood haemoglobin level will also be re-checked at this time.

7 References

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