Adult Iron Deficiency Anaemia (IDA) Pathway

NICE definition of Anaemia

Hb <120g/L women, Hb <130g/L men, Hb< 110g/L pregnancy

Check Iron profile (ferritin, transferrin saturation) and CRP

- Abnormal
  - Ferritin<30µg/l → Iron deficiency anaemia
    Low/falling MCV/MCH
  - Ferritin30-100µg/l + transferrin saturation <20% or CRP >5mg/l → Anaemia of chronic inflammation WITH Iron deficiency
  - Ferritin >100µg/l + transferrin saturation <20% or CRP >5mg/l → Anaemia of chronic inflammation
- Normal → Check Vitamin B12 , folate
  - Low → Megaloblastic anaemia
  - Normal → Other anaemias
    Renal
    Endocrine
    Drugs
    Malignancy

Initial other Investigations

Coeliac Screen (TTG/Immunoglobins)
Urine dip (red cells- exclude renal Ca)
Reticulocytes

Additional Investigations if appropriate:
LFT, TFT, U+E
Faecocalprotectin (if IBD suspected)
CEA, CA125
Pelvic US, abdominal US.
if chronic low MCV/MCH then - Haemoglobin electrophoresis (sickle cell/ thalassaemia)

Exclude other causes for anaemia ie epistaxis, menorrhagia, blood donation, haematuria, bruising, alcohol, medication, family hx, travel. {A diagnostic trial of iron tr treatment should be considered in ALL patients while awaiting investigations (unless colonoscopy imminent) } This includes patients with low Hb, normal ferritin and a high CRP .

Frank blood loss – refer urgent admission

All patients with IDA who are **Coeliac Screen positive** - refer to OPA gastro clinic

men and post-menopausal women-
if IDA and GI symptoms – refer as below

2WW Upper GI- Surgeons if

Weight loss, abdominal pain, dyspepsia, altered bowel habit, reduced appetite, nausea/vomiting, Fhx upper GI cancer

2WW Lower GI surgeons if

abdominal pain, abdominal mass, altered bowel habit, painless rectal bleeding /FIT test +ve, raised faecal calprotectin, blood in stools, Fhx lower GI cancer

Men - post menopausal women
If IDA and **NO** upper / Lower GI symptoms
Or Premenopausal women with upper GI symptoms

Please refer to IDA Clinic Iron deficiency anaemia

All men and post-menopausal women will have gastroscopy/ D2 biopsies and colonoscopy then 3 months of oral iron
Premenopausal women will have TTG screen/ gastroscopy and D2 biopsies

Then assessment for small bowel capsule

Then review by gastro consultant or haematology

IDA patients **should not** be referred to open access (non-urgent) endoscopy **clinic**

Treatment of Iron Deficiency Anaemia

Iron deficiency anaemia → **Treat cause if possible**

A diagnostic trial of iron treatment should be considered in **ALL** patients while awaiting investigations (unless colonoscopy imminent) } This includes patients with low Hb, normal ferritin and a high CRP .

Oral Iron

50mg to 100mg daily elemental iron –give patient information leaflet:
ideally take on empty stomach
First line: Ferrous fumarate 305mg caps (Galfer®) OD (1 caps = 100mg elemental iron)
Second line: Ferrous fumarate 210mg OD (1 tab = 68mg elemental iron)
Oral suspension 140mg/5ml (10ml OD)
Third line: Ferrous sulphate 200mg OD (1 tab = 65mg elemental iron)
NB Sodium feredetate oral solution 190mg/5ml - low iron content (5 ml = 27.5 mg elemental iron)

Severe symptomatic Anaemia OR Hb < 80g/l discuss with **AMAC** for consideration of blood/ iron transfusion (eg if angina, respiratory disease etc)
OOH- Right Care /AMU will need oral IRT post transfusion

Check FBC monthly

Yes ← **Is oral iron tolerated ?** → No

No → 1st line:
Check compliance: Consider preparation with lower iron content OR alternate day dosing

Is FBC Normal at 3 months?

No → 2nd line:
if **intolerance** to two iron preparations
OR **insufficient** response after 3 months of iron medications
Prescribe Feraccru 30 mg BD (Ferric Maltol) for 3 months

Yes

Is full blood count normal at 3 months ?

Yes → Continue iron for further 3 months after FBC returns to normal. **Recheck FBC every 3 months for 1 year then repeat bloods again in 1 year.** Giving further iron if necessary. **Stay alert for dropping Hb or new symptoms.**

Normal FBC maintained ?

Yes → No further action unless symptoms develops in which case re consider diagnosis

No → **Iron Infusion (Ferinject) Pathway** – Direct Referral to Gastro(If iron tablets not absorbed/ tolerated OR Hb<80g/l)
Before referral ensure the following considered
Exclude allergy/ skin pigmentation/anaphylaxis to previous iron Tx
Gastro- intestinal cause of anaemia has been ruled out. (Been investigated in last 12 month and not developed any new GI symptoms)
Gynae/ Urology source of anaemia has been investigated/ ruled out
Haematology- if IDA with raised HCT, consider polycythaemia vera – await film report before infusion
-if chronic low MCV/MCH- then Hb electrophoresis – (exclude thalassaemia/ sickle cell)

Iron infusion Clinic
Referrals will be vetted to ensure iv iron infusion appropriate
Patient will be contacted – given date and time to attend clinic
Following iv iron infusion – bloods monitored 3 monthly in primary care including PO4 if repeated iron infusions.

Consider referral to Haematology.
- **refractory to previous iron infusion**
- if high MCV but normal haematinics / retics
- Abnormal clotting profile/ or bleeding
- If haemolysis suspected (low haptoglobin, increase reticulocytes and LDH)

OR

seek written/ e advice
- if other cytopenia/ macrocytosis present (but NOT lymphopenia)

-NOTE: hospital has a separate policy for preop anaemia and treatment of Jehovah's' witnesses – contact- preop clinic

Queries re Iron infusion clinic
Contact Stacey Ward OR PIU via switchboard

Taking Iron Supplements

Patient Information

Barnsley Clinical Commissioning Group

Hillder House, 49 – 51 Gawber Road, Barnsley, S75 2PY

Why are iron supplements needed?

Iron supplements are prescribed to treat and prevent **iron deficiency anaemia.**

Iron helps the body to make healthy red blood cells which carry oxygen around the body. Some things such as blood loss, pregnancy or too little iron in your diet can make your iron supply drop too low, leading to anaemia.

Symptoms of anaemia can include feeling breathless, tired, pale skin or palpitations (noticeable heartbeats).

How to take iron supplements?

Iron can be prescribed as tablets, capsules or as a liquid that you swallow.

More iron is absorbed if taken on an empty stomach, so its best to take iron one hour before a meal.

Some medications may affect the absorption of iron so its always best to check with your GP or pharmacist if any new medications or supplements are suitable to take at the same time.

DO NOT TAKE IRON AT THE SAME TIME AS MILK OR HIGH CALCIUM CONTAINING PRODUCTS AS THESE CAN ALSO REDUCE HOW WELL IRON IS ABSORBED. SEPARATE THESE BY 2 HOURS.

What are the side effects?

Common side effects of iron include:

- Stomach upset
- Nausea (feeling sick)
- Diarrhoea
- Constipation

These symptoms can improve as your body gets used to the iron supplements, however contact your GP or pharmacist if these symptoms persist as your dose or iron preparation can be adjusted to help with these symptoms.

What happens next?

Most people begin to feel better after taking iron for 2 weeks, but it may take up to 4 weeks to take full effect.

Your GP will request further blood tests monthly to check if the iron is improving on your blood results.

Once your blood results return to normal, the iron supplements will continue for another 3months. Your GP will inform you when it is safe to stop iron. We will recheck your blood results every 3 months for 1 year to make sure your iron levels stay in range.

References:

NHS.co.uk
https://www.nhs.uk/conditions/iron-deficiency-anaemia/
https://www.nhs.uk/medicines/ferrous-fumarate/
Oxford University Hospitals Patient Guide
https://www.ouh.nhs.uk/patient-guide/leaflets/files/11903Piron.pdf