Iron deficiency management checklist for adults

This checklist is intended for use by General Practitioners.

☐ **Assess cause of iron deficiency (& if anaemic, for other co-existing causes of anaemia):**

- History & examination (H & E), review current & past FBEs, retics, MCH / MCV / RDW & film comments.
- Request additional tests such as: iron studies if not yet done (or ferritin on existing non fasting specimen) & CRP. Consider vitamin B12, folate, renal, liver, thyroid function & others as per clinical context.

☐ **Confirm iron deficiency:**

- Seek advice with interpretation of laboratory tests if iron status / cause of anaemia is unclear especially in presence of chronic disease or inflammation or if there are other blood film abnormalities.
- Revisit H & E (symptoms of low Hb / iron deficiency, possible underlying pathology & sources of overt / occult bleeding; GI symptoms; diet; family / personal Hx of colorectal ca, coeliac disease, bleeding disorder).

☐ **Initiate iron therapy *while* determining & managing the underlying cause:**

- Screen for coeliac disease (can be added to an existing blood sample) & test urine for blood. If coeliac serology +ve: patient should stay on gluten until Dx confirmed with small bowel Bx; use IV iron for iron deficiency.
- **Refer for consideration of endoscopic procedures** (ensuring sufficient info on referral for triaging) in:
  - **Men & non-menstruating women**
  - **Selected menstruating women** (eg. if ≥ 50 years or GI symptoms or FHx colorectal cancer or IDA is refractory, recurrent or unexplained – see guidelines below under 'Resources').
- Investigate / manage other causes / sources of bleeding (e.g. assessment / management of menorrhagia).
- **Oral iron** is 1st line therapy in most patients. Dose is ≈ 100 - 200 mg elemental iron daily in 2 – 3 divided doses (dosing 2 - 3 x per week or 30 – 60 mg daily is an option when rapid rise in Hb not essential), record name for patient to take to pharmacy, give patient leaflet (translations available) & advise timing in relation to other meds.
- **IV iron** is indicated in selected pts - see 'IV iron prescribing checklist' below for indications, contraindications & precautions. Indications include: demonstrated intolerance, noncompliance or lack of efficacy with oral iron; malabsorption; rapid iron repletion is clinically important to avoid decompensation / transfusion. See checklist for more info & seek specialist advice if in doubt. Provide IV iron patient leaflet (translations available).
- Prior to IV iron inform patient of risks including potential for permanent brown staining of skin with extravasation.
- Provide patient counselling regarding importance of assessing underlying cause (e.g. keeping appointment for gastroenterologist / scopes), compliance with iron therapy & follow-up GP visits / blood tests.
- Refer to other specialists as required e.g. gynaecologist, nephrologist, haematologist (e.g. other significant blood film abnormalities or personal / family history suggestive of underlying bleeding disorder).

Government of South Australia
SA Health

☐ **Follow-up & monitor:** Differentiation of whether a patient is ***still*** iron deficient or has a ***recurrence*** is important**.**

- Document response: in clinically stable patients without significant ongoing blood loss, initial response to iron is usually checked by repeat Hb & retics at ≈ 2 – 4 wks. Hb should rise 1 – 2 g/L daily or 20 g/L over 3 – 4 wks.
- If Hb has risen as expected & there is no significant ongoing blood loss, recheck Hb & iron studies at 2 – 3 mths: Hb should be normal. If on oral iron, ensure continued compliance to replete stores (e.g. 3 to 6 months after Hb normal). Nb: initially after IV iron, iron studies may be misleadingly elevated: wait 4 - 6 wks to check.
- Once iron stores are replenished (confirm with ferritin) & assuming no significant ongoing blood losses, iron therapy can be stopped & iron status monitored: see below. Ensure patients do not remain on oral iron long term unless necessary (eg. when recommended by a specialist for ongoing iron losses that can't be prevented).
- Ensure specialist appointments have been made & attended with cause of iron deficiency found / addressed.
- Provide dietary advice & consider dietician review if low dietary iron intake was a contributing factor.
- Plan future monitoring for recurrence of iron deficiency. If patient has responded as expected & underlying cause addressed, monitoring FBE & iron studies every 3 mths for 1 year & rechecking after a further 6 – 12 mths may be a reasonable approach. Specialist(s) reviewing patient may have provided specific advice in this regard.
- Reassess cause / refer back to specialist if recurrent iron deficiency (or as per specialist advice / letters).
- Educate patient regarding symptoms of iron deficiency / anaemia & when to seek earlier review than scheduled.

Resources:

- Iron deficiency anaemia (IDA) app at www.bloodsafelearning.org.au or MJA clinical update on IDA at www.mja.com.au
- Oral iron preparations in Australia dosing chart & interaction table at www.sahealth.sa.gov.au/bloodmanagement *(Anaemia management, then Iron deficiency anaemia)*
- IV iron prescribing checklist at www.sahealth.sa.gov.au/bloodmanagement *(Anaemia management, then Iron deficiency anaemia)*
- Oral & IV iron patient information leaflet including translations at www.sahealth.sa.gov.au/bloodorgantissue *(Iron disorders and iron therapy)*
- Gastroenterological Society of Australia: Iron Deficiency Clinical Update & Consumer Fact Sheet at www.gesa.org.au
- British Society for Gastroenterology: Guidelines for Management of IDA at https://gut.bmj.com/content/gutjnl/70/11/2030.full.pdf
- Heavy menstrual bleeding: ACSQHC Clinical Care Standard and resources at https://www.safetyandquality.gov.au/standards/clinical-care-standards/heavy-menstrual-bleeding-clinical-care-standard and UK NICE Guideline summary at https://www.nice.org.uk/guidance/ng88 and Cancer Australia's Abnormal Vaginal Bleeding flowcharts at www.canceraustralia.gov.au/sites/default/files/publications/ncgc-vaginal-bleeding-flowcharts-march-20111_504af02038614.pdf