

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 $\approx 100 - 200$ 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).



- ❑ **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 www.bsg.org.uk/clinical-guidelines/small-bowel-nutrition/management-of-iron-deficiency-anaemia.html
- ◆ Heavy menstrual bleeding: ACSQHC Clinical Care Standard and resources at <https://www.safetyandquality.gov.au/our-work/clinical-care-standards/heavy-menstrual-bleeding/> and UK NICE Guideline summary at www.guidelines.co.uk/nice/menorrhagia 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

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