

Iron Deficiency Anaemia

Introduction

Iron deficiency anaemia (IDA) is a common clinical condition affecting a significant portion of the population worldwide. While IDA is often managed with iron supplementation, there are situations where a more thorough investigation is warranted.

Understanding Iron Deficiency Anaemia

IDA can result from a variety of causes, including inadequate dietary intake, impaired absorption, and increased iron loss.

Common causes of IDA include:

- **Dietary deficiency:** Insufficient intake of iron-rich foods, particularly heme iron (from animal sources), is a leading cause.
- **Increased demand:** Pregnancy, growth spurts in children, and heavy menstrual periods increase the body's need for iron.
- **Blood loss:** Chronic blood loss, often from the gastrointestinal (GI) tract, is a common cause in adults, particularly in those over 50 years of age.
- **Malabsorption:** Conditions such as celiac disease, Crohn's disease, and post-bariatric surgery can reduce the body's ability to absorb iron.

Diagnosis

The diagnosis of IDA is typically made through a combination of clinical evaluation and laboratory tests (FBC, Iron Study +/- Peripheral blood smear).

NSW Health referral criteria with IDA:

Emergency

If melaena or haematochezia, haematemesis or vomiting in large volume or with haemodynamic compromise is present or suspected, please refer the patient to the emergency department (via ambulance if necessary) or seek emergency medical advice via phone to on-call consultant/registrar.

When public outpatient services are not routinely provided

Normochromic, normocytic anaemia with normal iron studies or isolated low serum iron.

Clinical monitoring within primary care for anaemia secondary to gynaecological, haematological or other causes. Consider faecal occult blood test. Refer to outpatient services if anaemia is progressive, faecal occult blood test is positive or if gastrointestinal symptoms emerge.

Criteria to access public outpatient services

Category 1: Recommended to be seen within 30 calendar days

- **Aged ≥ 40 years** with a positive Faecal Occult Blood Test (FOBT).
- **Aged ≥ 50 years** with a negative FOBT but any of the following symptoms:
 - Rectal bleeding.
 - Change in bowel habit or any lower gastrointestinal symptoms.
 - Unexplained iron deficiency with or without anaemia (Hb < Lower Limit of Normal).
- $\geq 5\%$ unexplained weight loss in the past 1 month or $\geq 10\%$ unexplained weight loss in the past 6 months.

Category 2: Recommended to be seen within 90 calendar days

- **Aged ≥ 40 years** with all of the following present:
 - Negative FOBT.
 - Negative coeliac serology.
 - Gastrointestinal symptoms.
 - Unexplained iron deficiency with or without anaemia.
- **Aged < 39 years** with recurrent, unexplained iron deficiency or positive FOBT (with or without gastrointestinal symptoms).
- Serology suggestive of coeliac disease (new or uncontrolled).
- Category 3: Recommended to be seen within 365 calendar days
- **Aged < 39 years** with unexplained iron deficiency with or without anaemia.

Information to include within a referral

Required

- Reason for referral.
- Details of the presenting condition, including symptoms and their duration.
- Provisional diagnosis.
- Patient health summary including specifically:
 - non-steroidal anti-inflammatory use
 - weight loss (amount and timeframe)
 - any previously received iron therapy (duration and timing)
 - family history of gastrointestinal cancer or coeliac disease
 - dietary history, including red meat intake
 - menstrual history, familial haemoglobinopathies, blood donations
 - full blood count
 - haematinics (iron studies, red blood cell count, folate, vitamin B12)
 - coeliac serology (total immunoglobulin A (IgA), tissue transglutaminase (tTG) with or without anti-endomysial antibody (EMA)).

If available

- Faecal Occult Blood Test (FOBT) result.
- Previous endoscopy or histology reports.
- Electrolytes, urea and creatinine (EUC).
- Liver function test result.
- If the patient identifies as Aboriginal and/or Torres Strait Islander.
- If the patient is considered 'at risk' or among a vulnerable, disadvantaged or priority population.
- If the patient is willing to have surgery (where clinically relevant).
- If the patient is suitable for virtual care or telehealth.
- If the patient has special needs or requires reasonable adjustments to be made.
- If the patient requires an interpreter (if so, list preferred language).

Important information for referring health professionals

If there is a change to a patient's condition while waiting for their appointment, referring health professionals may further investigate and manage the situation, or send an updated referral to the outpatient service.

Conclusion

Iron deficiency anaemia is a common condition that is often manageable through dietary changes and iron supplementation. However, in cases where there is unexplained anaemia, significant blood loss, or a failure to respond to treatment, it is important to consider underlying causes that may require further investigation, including referral to a surgeon/ gastroenterologist for endoscopic evaluation.



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