NATIONAL LABORATORY HANDBOOK

Laboratory Testing for Full Blood Count- Anaemia

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National Clinical & Integrated Care Programmes
Person-centred, co-ordinated care

PATHOLOGY

ROYAL COLLEGE OF PHYSICIANS OF IRELAND

Contents

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Scope

The aim of this guideline is to provide guidance to GPs on when to refer patients with abnormal full blood counts (FBC). These guidelines apply to adult, non-pregnant patients.

Key recommendations

- The finding of abnormalities in more than one lineage may be more significant than in a single lineage and may suggest a bone marrow cause.
- It is often appropriate to monitor the FBC for progression over time rather than referring a patient based on one abnormal result.
- Always consider early referral when the patient is unwell.
- Uncomplicated B12 / folate deficiency does not require routine referral to haematology.
- Iron deficiency should be referred to gastroenterology or gynaecology as appropriate.

Background

A full blood count (FBC) is commonly requested at a general check-up and when patients complain of non-specific symptoms. Abnormalities are often non-specific and may not necessarily reflect haematological disorders. Results must be interpreted with reference to the clinical picture and other pathology results.

Anaemia is defined as a haemoglobin of <13g/dL (<130 g/L) in an adult male or <11.5g/dL (<115 g/L) in an adult female. The patient's symptoms and initial FBC findings will influence both the urgency and direction of initial clinical investigation.

Referral Guidelines

When to consider referral to haematology:

- Persistent unexplained anaemia.
- Established iron deficiency showing sub-optimal response to oral iron therapy.
- Established B12 deficiency of uncertain cause requiring further investigation.

When to consider urgent referral to haematology:

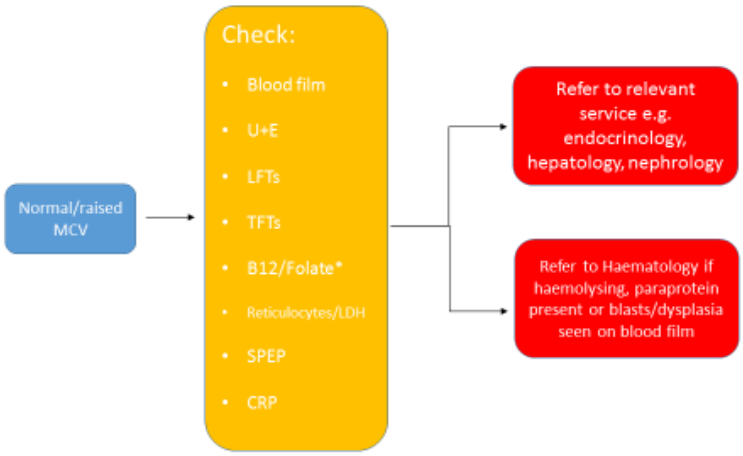
- Leucoerythroblastic anaemia (based on blood film report).
- Progressive *symptomatic* anaemia.
- Anaemia in association with: Splenomegaly or lymphadenopathy or other cytopaenias.

When to consider routine referral:

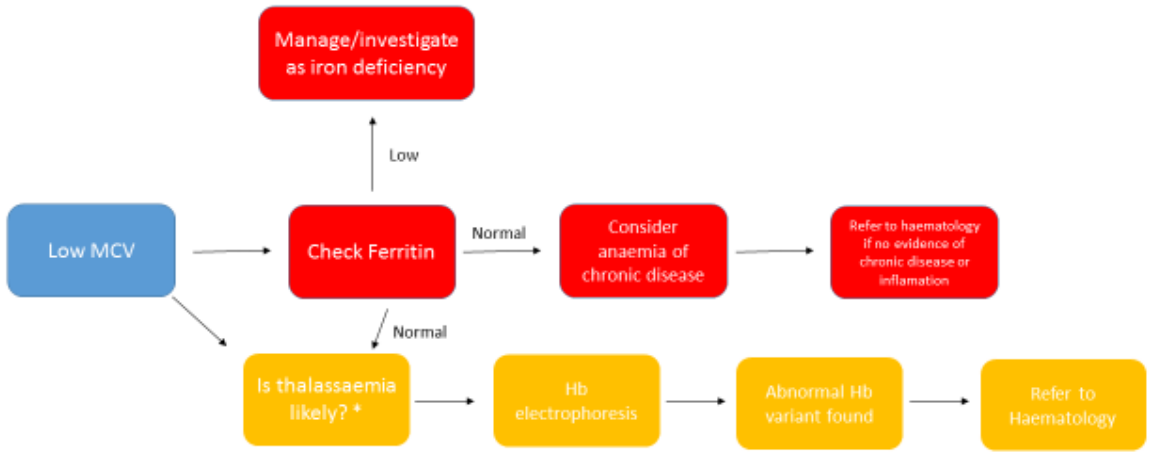
- Persistent unexplained anaemia.
- Established iron deficiency showing sub-optimal response to oral iron therapy.
- Established B12 deficiency of uncertain cause requiring further investigation.

Investigations to consider when urgent referral not deemed appropriate:

- Blood film examination and reticulocyte count.
- Ferritin, B12 and folate.
- Immunoglobulins and protein electrophoresis.
- CRP.



*Refer to Haematology if B12 and/or Folate deficiency investigations are uncertain



* Based on ethnicity

Guideline Development Methodology - Consultation Plan and History

The guideline was drafted by the author, following which expert consultation with the National Clinical Programme for Pathology (NCPP) was undertaken. Following incorporation of feedback, the guideline was submitted to the full NCPP Consultation Process.

References

1. University of Leicester Empath referral guidelines.
2. Basildon and Thurrock University Hospitals- Anaemia GP referral guidelines.