

Laboratory Testing for Full Blood Count- Thrombocytopaenia v2

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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.

Thrombocytopenia is defined as a platelet count $< 150 \times 10^9/l$. Most patients with counts of $> 50 \times 10^9/l$ are asymptomatic, with the risk of spontaneous haemorrhage increasing significantly below $20 \times 10^9/l$.

Scope

The aim of this guideline is to provide guidance to GPs on when to refer patients with low platelets. 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.

Referral guidelines

When to consider urgent referral to haematology

- Platelet count $< 50 \times 10^9/l$
- Platelet count $50 - 100 \times 10^9/l$ in association with:
other cytopenia (Hb $< 10g/dl$, Neutrophils $< 1 \times 10^9/l$), splenomegaly, lymphadenopathy, pregnancy

When to consider routine referral

- Persistent (at least on two occasions 4-6 weeks apart, no clumping noted on the blood film), unexplained thrombocytopenia $< 100 \times 10^9/l$

Investigations to consider when urgent referral not deemed appropriate

- Blood film examination and reticulocyte count
- LFTs, LDH
- Ferritin, B12 and folate
- Immunoglobulins and protein electrophoresis
- Alcohol and medication history
- HIV/Hepatitis serology
- Repeat FBC in 4-6 weeks



References

1. NHS North Central London Abnormal FBC results guideline.
2. Basildon and Thurrock University Hospitals- Thrombocytopaenia GP referral guidelines.