Thrombocytosis

This is frequently a reactive transient problem relating to infection or inflammation.

If persistent it may represent a myeloproliferative neoplasm. In patients with myeloproliferative neoplasms there is an increased risk of thrombosis but also bleeding if the platelet count is very high e.g. over 1500 × 109/L.

Management

• **Refer urgently to haematology if platelets >1000, recent arterial or venous thrombosis, neurological symptoms, or bleeding (this may need same day discussion)**

• Refer to haematology if platelet count over 800 × 10^9 /L with no reactive cause.

• If platelet count 450-800 × 10^9 /L then suggest repeat the blood count in four to six weeks in first instance or **discuss with the Advice and Guidance team if clinical concerns, high thrombosis risk, aged over 60 or constitutional symptoms/splenomegaly. Please ensure normal CRP and Ferritin.**

• If the platelet count is persistently above 450 × 10^9 /L with normal CRP and Ferritin, and no secondary cause for over four months then suggest referral to haematology.

• The GP may consider sending blood for JAK2 mutation on patient that they need to refer to Haematology with suspected myeloprolferative neoplasm.

Causes

• Infection

• Inflammation e.g. autoimmune disease, malignancy (particularly LEGO cancers- Lung, Endometrium, Gastric and Oesophageal), trauma

• Bleeding

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Date published: September 24

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- Iron deficiency
- Hyposplenism
- Medications e.g. rebound post chemotherapy and thrombopoietin agonists
- Spurious e.g. bacteria, fragments, cryoglobulin
- Myeloproliferative neoplasms e.g. essential thrombocythaemia, chronic myeloid leukaemia, polycythaemia vera, myelofibrosis.

History and examination

This should focus on ruling out the above causes. Look for splenomegaly which can be seen in myeloproliferative neoplasms and look for features of autoimmune disease. Ask about itch, rashes, sweats and weight loss. Ensure that there has been no prior splenectomy and that there is no bleeding or risk factors for iron deficiency or other malignancy. Review older blood tests.

Suggested investigations

- Liver function tests
- Calcium
- Inflammatory markers
- Ferritin
- Blood film

References

- Harrison CN, Butt N, Campbell P, et al. Diagnostic pathway for the investigation of thrombocytosis. Br J Haematol 2013; 161: 604-606. https://bs-h.org.uk/guidelines/guidelines/diagnostic-pathway-for-the-investigation-ofthrombocytosis/

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