Isolated Thrombocytopenia

It would be unusual to get any bleeding symptoms with a platelet count above 50 × 109 /L. Spontaneous bleeding is more common when the platelet count is below 30 × 109 /L.

• **If the platelet count is <20 x 109/L or if there are blasts or fragments on the blood film or altered consciousness or confusion discuss/refer urgently (same day)**

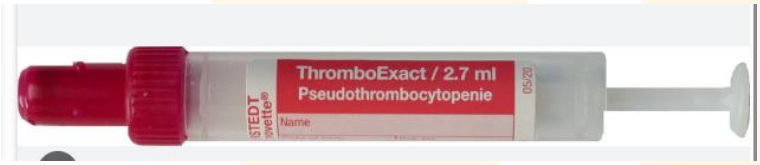
• If the platelet count is below 50 × 109 /L or there are bleeding concerns arrange urgent repeat and urgent referral.

• Please refer to haematology if the platelet count is persistently under 80 × 109 /L for over four months or if the platelet count is under 80 × 109 /L and the patient is awaiting surgery.

Further Actions for Primary Care

• Repeat the full blood count in case of artefact (unless symptomatic in which case refer to hospital for urgent evaluation) Some patients have antibodies which cause clumping of platelets in normal EDTA tubes.

- This can be corrected by sending sample in **a Thromboexact** tube which can be requested by calling the Lab on 01904725620 where possible.
- The tubes will arrive the day after the request.
- Thromboexact tubes will only report a platelet count so a separate EDTA tube will be needed if a full blood count is required.



• Asymptomatic patients with a stable platelet count above 80 × 109 /L should be evaluated for the below conditions and have routine investigations but do not generally need to be seen by a haematologist. Discuss with Advice and Guidance if further information or help required in first instance.

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•Consider repeating the blood count in four to six weeks and if stable monitor every four months for 12 months and then annually.

• Patients with a stable platelet count over 80 × 109 /L for over a year and who are not on an anticoagulant do not generally require routine monitoring but should be advised to report any bleeding symptoms and get a full blood count prior to any invasive procedure.

• If there is another cytopenia or blood film abnormality or concern about haematological malignancy then please discuss or refer.

• Anticoagulation or antiplatelet drugs **should be stopped** when the platelet count is below 50 × 109 /L

• If the platelet count is low due to liver disease suggest discuss with hepatology in first instance.

Causes of Thrombocytopenia

• Artefact e.g. platelet clumping

• Medications – check BNF

• Infections including HIV and hepatitis, Helicobacter pylori and other viral infections

• Liver disease and alcohol

• Hypersplenism

• Vitamin B12 or folate deficiency

• Autoimmune diseases

• Pregnancy

• Thyroid dysfunction

• Sepsis

- Major haemorrhage
- Disseminated intravascular coagulation
- Immune thrombocytopenia (ITP)
- Anti-phospholipid syndrome
- Inherited bleeding disorders
- Thrombotic thrombocytopenic purpura (TTP) – very rare but an emergency
- Bone marrow failure e.g. myelodysplasia or aplastic anaemia
- Bone marrow infiltration e.g. acute leukaemia
- Post-transfusion purpura

History and examination

Think about asking questions to rule out above causes. Ask about bleeding symptoms, alcohol and a family history. Examine for hepatosplenomegaly, signs of liver disease, signs of autoimmune disease and any bruises. Review older blood tests and take a medication history.

Suggested investigations

First line in all asymptomatic patients with no clear cause identified on history/medication list.

- Blood film
- Vitamin B12 and folate
- Liver function tests including GGT
- HIV, hepatitis B and C
- Coagulation screen

Consider in specific situations only

- TSH
- Pregnancy test

Antiphospholipid screen

- Consider autoimmune screen if history or examination suggestive
- Abdominal ultrasound if concerned about liver disease or palpable splenomegaly

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