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Lymphocytosis

Presentation

Definition

Lymphocyte count >4.5 x 10^9/L

Clinical Findings

Types

- Reactive: secondary to another cause. The lymphocyte count often less than 10 x 10^9/L. If associated medical condition resolves the lymphocyte count should normalise within 2 months.
- Clonal lymphocytosis: secondary to an acute or chronic lymphoproliferative disorder / leukaemia.

Causes

Reactive Causes	Clonal Causes
Viral Infections EBV, CMV, mumps, VZV, influenza, rubella, hepatitis, roseola	Lymphoproliferative disorders Chronic lymphocytic leukaemia (CLL), non-Hodgkin's lymphoma (NHL).
Other infections Bacterial infections, toxoplasma Gondii, rickettsial infection, pertussis, tubercullosis	Benign Haematological abnormalities Monoclonal B-cell lymphocytosis (MBL) = precursor stage of CLL
Others Stress e.g. myocardial infarction / seizure, vigorous exercise, trauma, rheumatoid disease, post-splenectomy	Leukaemias Lymphocytic leukaemia e.g. ALL / PLL Large granular lymphocyte (LGL) leukaemia

History

Important Features include:

- Any recent infections
- PMHx: rheumatoid disease, splenectomy
- Travel history

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Symptoms and Signs

- Are there constitutional symptoms suggestive of malignancy (fever, weight loss, night sweats)
- Assess for lymphadenopathy and hepatosplenomegaly

Investigations

- For reactive lymphocytosis addressing the primary cause is key. Repeating the FBC in 2-8 weeks is reasonable as most cases of reactive lymphocytosis gradually settle down.
- In the early stages when the lymphocytes are <10 x10^9/L it can be difficult to distinguish between a malignant and reactive lymphocytosis. Serial blood counts may be necessary e.g. monitoring the FBC every 3-6 months.

Initial investigations	Other further investigations
FBC	Lactate dehydrogenase
Film	Immunoglobulins
CRP	Monospot / CMV serology (if suspected viral cause)
	Immunophenotyping (if advised by haematology)

Referral

Indications for referral

Advice regarding management is often given in the film comments by one of the haematology team.

Urgent referral is advised:

- B symptoms (drenching night sweats, weight loss >10% fevers >38)
- Bone marrow suppression (Hb<10g/dL, Platelets <100 x 10^9/L, neutrophils <1 x 10^9/L)
- Progressive lymphadenopathy or splenomegaly
- Presence of blast forms on the blood film

Routine Referral:

- Isolated lymphocytosis >30 x10^9 in a patient without the above signs or symptoms.

References

1) Incidental finding of lymphocytosis in an asymptomatic patient. BMJ 2009; 338: b2119.
2) Royal United Hospital Bath clinical haematology guidelines: lymphocytosis.