

Lymphocytopenia

Definition

Peripheral blood lymphocyte $< 1.5 \times 10^9/L$.

Causes

1. Reactive & post acute infections
2. Trauma, surgery, stress
3. Renal failure
4. Bacterial & viral infection e.g. tuberculosis, HIV, hepatitis
5. Autoimmune disorders e.g. SLE, RA, Sjogren syndrome
6. Medications including steroids, chemotherapy agents/rituximab.
7. Lymphoma and other malignancies
8. Myelodysplasia
9. Sarcoidosis
10. Congenital immune disorders (rare).

Investigation

There is no agreed algorithm for initial investigation in a patient with lymphocytopenia. Request further investigations according to your differential diagnosis (see list above).

Management

Mild cases (lymphocyte count $0.5 - 1.5 \times 10^9/L$)

If patient clinically well, monitor FBC.

Many cases are due to acute viral infections or reactive to a previous infection and will improve gradually.

Severe/persistent cases (lymphocyte $< 0.5 \times 10^9/L$)

If no underlying condition, discuss with a haematologist.

Chronic severe lymphopenia is associated both with opportunistic infections and with an increased incidence of neoplasia particularly NHL and gastric carcinoma.