6. LYMPHOCYTOSIS

6.1 SCOPE

Lymphocytosis is a common finding.

Transient increases in the lymphocyte count (lymphocytosis) are usually due to acute infections e.g., viral infections, pertussis.

6.2 ASSESSMENT

6.2.1 Viral

Usually causes a modest and temporary (< 2 months) rise in lymphocytes.

If the patient is unwell, request a blood film and consider testing for EBV, CMV, HIV.

NB. The EBV screen (Monospot or Paul Bunnell) gives both false positive and false negative results and requesting serology for IgG and IgM antibody is preferable and specific.

6.2.2 Other causes

Smoking is a common cause of low level and persistent lymphocytosis.

Some bacterial (e.g. pertussis) and protozoal (e.g. toxoplasmosis) infections also cause a lymphocytosis.

Less common causes of lymphocytosis include auto-immune disease, medication and stress (extreme exercise, cardiac or trauma, previous splenectomy and obesity)

6.2.3 Malignant

Lymphocytes may rise most commonly with chronic lymphocytic leukaemia (CLL) and similar low-grade lymphoproliferative disorders (LPD).

A variety of lymphomas may also 'spill' into the peripheral blood, but this is rare.

Acute lymphoblastic leukaemia (ALL) is rare and the patient would likely be unwell with other blood abnormalities – usually with bone marrow failure (anaemia, thrombocytopenia and neutropenia. The blood film would show blast cells.

Refer acute lymphoblastic leukaemia immediately via medical admissions for impatient care.

6.2.3 CLL

The most common cause of malignant lymphocytosis.

Asymptomatic CLL does **not** benefit from early treatment. Lymphocytosis **without symptoms** can reasonably be monitored in the community with a second FBC after 2 months and then annually.

6.3 INVESTIGATIONS

Repeat FBC in 2-3 months if first time lymphocytosis detected.

If persistent lymphocytosis, examine for lymphadenopathy and splenomegaly
Seek reactive causes

6.4 REFERRAL CRITERIA

Refer to routine Haematology if lymphocytosis &:

- Significant and persistent (> 4 weeks) lymphadenopathy in the absence of a secondary cause
- Splenomegaly
- Systemic symptoms
- Unexplained anaemia (Hb <100g/L) or thrombocytopenia (Platelets < 100)
- Progressive lymphocytosis with an increase of ≥50% over a 3-month period or lymphocyte doubling time of <6 months (patients with a lymphocyte count < 30 may require a longer observation period to determine doubling time).

CLL is not usually an indication for an urgent suspected cancer referral but seek haematology advice is the patient is significantly unwell.

If known CLL being monitored in the community already then referral or discussion with haematology is indicated if:

- the lymphocyte count is rising rapidly (e.g. An increase of ≥50% over a 2-month period or lymphocyte doubling time of <6 months (NB. patients with a lymphocyte count < 30 may require a longer observation period to determine doubling time).
- the patient is systemically unwell (involuntary weight loss, night sweats)
- clinically significant and persistent lymphadenopathy
- clinically palpable splenomegaly
- other components of the blood count are abnormal (anaemia, thrombocytopenia)

6.5 PATIENT RESOURCES

http://bloodwise.org.uk/info-support/chronic-lymphocytic-leukaemia/
http://www.macmillan.org.uk/information-and-support/leukaemia/chronic-lymphocytic