H.A001 - LYMPHOCYTOSIS, CHRONIC LYMPHOCYTIC LEUKAEMIA (CLL) AND LOW GRADE LYMPHOMA WITH OVERSPILL

What is lymphocytosis?

- Lymphocytosis is a relatively common finding on routine FBCs; in younger patients it is usually transient and reactive; in older patients a persistent lymphocytosis may be due to an underlying lymphoid disorder such as CLL or lymphoma.
- In normal people blood lymphocytes are made of T cells (80%) and B cells (20%); most cases of CLL and NHL with overspill will have too many B cells in the peripheral blood.

What causes a lymphocytosis?

- Non-malignant causes include viral infections such as EBV, CMV, HIV and hepatitis; chronic infection with brucellosis; tuberculosis; syphilis and patients who have had a splenectomy.
- Chronic lymphoproliferative disorders will cause a persistent (>3 months) lymphocytosis which is usually >10 x 10^9/L.

What investigations are required for a persistent lymphocytosis?

Lymphocyte count	**Investigations**
<10 x 10^9/L with no other symptoms or signs	Repeat FBC and Blood film in 3-6 months • **If lymphocytes lower or the same level:** no further tests required • **If lymphocytes are > 10 x10^9/L:** request FBC and blood film and chronic lymphocytosis screen*
>10 x 10^9/L for >3 months and no other cause e.g. hyposplenism, found	FBC and blood film and chronic lymphocytosis screen*
Lymphocytosis **and** unexplained anaemia **or** thrombocytopenia **or** lymphadenopathy **or** splenomegaly	Discuss with/refer to Haematology

***immunophenotyping**

What will the results of immunophenotyping tell me?

The immunophenotyping report will usually give you a diagnosis e.g. CLL, low grade lymphoma with overspill, other lymphoproliferative disorder or reactive lymphocytosis (where no clonal population is identified). Further information on CLL and low grade lymphoma with overspill is given on this sheet.

What are CLL and low grade lymphoma with overspill?

- These are low grade B cell lymphoproliferative disorders that behave and are treated in a similar way.
- They are incurable indolent diseases that are often asymptomatic.
- Many patients will remain stable for several years without treatment.
- Treatment in these disorders is reserved for patients with symptomatic or progressive disease.

How do patients with CLL/ low grade lymphoma with overspill present?

- Incidental finding of lymphocytosis on a routine FBC.
- Lymphadenopathy usually with an associated lymphocytosis.
- Splenomegaly usually with an associated lymphocytosis.
- Anaemia +/- thrombocytopenia with lymphocytosis.
- Patients may or may not have constitutional symptoms such as weight loss and night sweats.

How do I monitor a patient with CLL/ low grade lymphoma with overspill?

Not all patients require specialist haematology review and may be adequately monitored in the primary care setting with 6-monthly review or sooner if clinically unwell:

- Clinically look for the development of splenomegaly and lymphadenopathy.
- FBC - looking at the trend in the white cell count (doubling in 6 months) and its effect on Hb and platelets which are more important than the absolute white cell number.
- Patients with a stable lymphocytosis < 10 x 10^9/L could have less frequent monitoring as their risk of significant lymphoproliferative disease is rare.

When should I seek further advice or refer patients with CLL/low grade lymphoma with overspill?

The haematology consultants will be happy to discuss any patient with lymphoproliferative disorders, but recommend referral of patients who present with or develop any of the following:

1. Disease-related symptoms e.g. sweating, weight loss or recurrent infections.
2. Bulky lymphadenopathy.
3. Hepatosplenomegaly.
4. Anaemia, Hb <100 g/L or thrombocytopenia, platelets < 100 x 10^9/l or wbc doubling in <6 months. **N.B**. the lymphocyte count may increase with an infection. Repeat FBC is recommended when infection has settled if isolated increase in lymphocytes.

What other precautions do I need to take in patients with CLL/low grade lymphoma with overspill?

Patients with low grade lymphoproliferative disorders are immunosuppressed and at risk of infection. They should:

- Be offered vaccination against pneumococcus and HiB and annual influenza vaccine.
- Have bacterial infections treated promptly.
- Have shingles treated with antiviral drugs (they should NOT receive the shingles vaccine).

There is also a risk of developing a second malignancy – smoking cessation and care in the sun is recommended.

Information for patients

CLL information http://www.macmillan.org.uk/information-and-support/leukaemia/chronic-lymphocytic.
CLL support association website **www.cllsupport.org.uk**

References

BSCH Guidelines on the diagnosis and management of chronic lymphocytic leukaemia.
BCSH Guideline: Guidelines on the investigation and management of Chronic Lymphocytic Leukaemia published 2012.
Diagnostic criteria for monoclonal B-cell lymphocytosis. *BJ Haem 2005 130(3):325-32*

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