General Surgery – Lymphadenopathy: What You Need to Know Whiteboard Animation Transcript with Claire Harrison, MB BCh BAO BMedSci MCRSI FRACGP

Lymph nodes are integral components of the immune system. Lymphatic vessels bring fluid, which is filtered for harmful substances such as infection and cancer. When a lymph node meets these things, it often enlarges either because it is mobilizing cells to fight infection or inflammation, or cancer cells which it has filtered out, are growing inside.

There are hundreds of lymph nodes throughout the body. The main lymph node groups, which you can access on physical examination are:

- Cervical
- Axillary
- Epitrochlear
- Inguinal
- Popliteal

Don't forget the tonsils and spleen! These can also be examined, are part of the lymphatic system and can be involved in the response to infections, inflammation and cancer.

The clues which point to the lump being a lymph node are:

- The lump is in a **typical area** i.e. neck/ axilla/ epitrochlear area/ groin or behind the knee.
- It is not typical for another cause such as an **epidermal cyst**, **fibroepithelial polyp**, **lipoma**, **wart**, **abscess**, **skin cancer**, **aneurysm etc**.
- There is evidence of pathology which could be expected to cause a lymph node to enlarge e.g. **inflammation**, infection or neoplasia.

If you don't know what areas of the body drain into each lymph node group, you won't know where to look for pathology and may miss the underlying diagnosis – review your anatomy!!!!!

Also make a decision!

Is the lymphadenopathy **isolated to a particular lymph node** group suggesting local pathology **or is it more generalized** suggesting a process such as leukaemia, lymphoma, TB, HIV etc.

Remember to watch out for the Red Flag "B Symptoms" which can indicate a lymphoma such as:

- Night sweats
- Unexplained weight loss of >10% of body weight in the past 6 months
- Unexplained fever >38°C

If clinically indicated, you can also check the identity of the lump using radiological tests e.g. ultrasound and/or by taking a fine needle aspirate or biopsy. But be careful – **don't biopsy an aneurysm!**

So in summary if you encounter a lump decide:

- Is it a lymph node?
- If so, why is it enlarged? and
- Is the enlargement due to a local disease process or a more generalized problem?

References

Ferrer R. Evaluation of peripheral lymphadenopathy in adults. In: Post T, ed. UpToDate. Waltham, Mass.: UpToDate; 2017. www.uptodate.com. Accessed July 13, 2017.