University Hospital Southampton NHS Foundation Trust

Hampshire, Southampton and Isle of Wight Clinical Commissioning Group

Tutorials: Top Tips for Referrals

Issue 217 - Lymphadenopathy in Children
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Background

Many children have palpable lymph nodes whose relative size could qualify for lymphadenopathy in an adult. These are most prominent in the cervical, inguinal and axillary regions and continue to increase in size until the age of 8-12 years, after which atrophy occurs.

- A study of 3592 healthy Swedish schoolchildren, 8 or 9 years old, found that 991 (28%) had palpable lymph nodes in the head and neck region.
- In 312 children, the lymph nodes were > or = 5 mm in size (ref 1*).
- A study of 334 healthy infants, 4 weeks to 12 months old, found that 190 (57%) had palpable lymph nodes and the commonest area for these nodes to be detected was the cervical region (ref 2*).

Lymphadenopathy in other regions of the body than the neck is less common and is more suspicious of serious underlying pathology.

Management

1. Lymphadenitis and lymph node abscess

Acute lymphadenitis is characterised by a painful, usually uni-lateral, swelling of lymph nodes over a few days.

This may respond to a course of oral antibiotics, such as cefalexin, co-amoxiclav or clarithromycin

Acute lymphadenitis may develop into an abscess. The features of an abscess are erythema, tenderness, warmth and fluctuance.

Referral - If an lymph node abscess is suspected, please direct patient to the Paediatric Emergency Department

2. Lymphadenopathy with B symptoms (Red Flags)

The following symptoms and signs suggest that the child may have significant underlying pathology.

- Persistent fever (> 2 weeks)
- Weight loss
- Night sweats
- Pruritis
- Unexplained difficulty in breathing
- Lymph nodes in the supraclavicular region
- Hepatomegaly
- Splenomegaly
- Anaemia
- Excessive Bruising

Referral - If a child has lymphadenopathy with B symptoms, please contact the Paediatric Consultant advice line (07825 691086)

3. Unusual infections
Typical and atypical mycobacteria usually cause large, indurated, non-tender nodes. These will continue to enlarge and are usually associated with other clinical findings and/or abnormal blood investigations.

Cat Scratch disease, caused by Bartonella henselae, usually causes a sub-acute lymphadenopathy in a patient with other systemic features of illness. The disease develops after inoculation from a kitten or cat, usually through a scratch. The lymphadenopathy is usually tender. In immunocompetent patients, recovery without specific treatment is the norm.

Referral - if Cat Scratch or Mycobacterial disease is suspected, please contact the Paediatric Consultant advice line (07825 691086)

4. Other cases – well child with persistent lymph nodes
The majority of children with palpable lymphadenopathy do not have serious underlying pathology.

Typically, the presentation is of an asymptomatic lump in the neck or groin – either presented by the child/parents/carers or found on medical examination. Typical cervical lumps are in the following anatomical regions:

- closely related to the sternocleidomastoid muscle
- below the jaw
- anterior or posterior to the ear
- around base of occiput

Lumps are usually round or oval, smooth and slightly mobile. Lumps are usually < 2cm across and are single.

Usually, the cervical lymphadenopathy will have followed a self-limiting upper respiratory tract illness, although eczema/seborrheic dermatitis/cradle cap is another common cause. The length of time an enlarged lymph node has been present in the neck is not of diagnostic significance. Most doctors are familiar with prolonged enlargement of tonsils in children – tonsils are also lymphoid tissue.

Lumps in the midline should be assessed carefully as they are probably not lymph nodes.

In the absence of features consistent with the first three categories above, the child and their families and carers, should be reassured.

A suggested management plan is to review the child in 6 weeks or sooner if there is significant enlargement of the nodes. At review, if there is no resolution of the lymphadenopathy, the following blood investigations may be indicated – Full Blood Count, ESR and LDH. If the results of these tests are normal, then the family can be reassured further.

Ultrasound or other imaging of the node is not indicated

Referral – These children should <u>not</u> be referred to Secondary care unless there are other medical concerns. General Paediatric advice and guidance is available.

References

- Larsson LO, Bentzon MW, et al. Palpable lymph nodes of the neck in Swedish schoolchildren. Acta Paediatr 1994; 83: 1091–4.
- Bamji M, Stone RK et al. Palpable lymph nodes in healthy newborns and infants. Pediatrics 1986; 78: 573-5.