

# Lymphadenopathy Primary Care Pathway

## Clinical Assessment/Management Tool for children with Lymphadenopathy



- Lymphadenopathy (LAN) is common in childhood
  - ~50% of otherwise healthy children may have palpable lymph nodes (LNs) at any time
  - Normal cervical LNs may be palpable due to relatively less subcutaneous fat, especially if overlying muscle/ bone
- Key features on history:** Age of child, site, duration, overlying skin changes, pain, localised or generalised. Recent URTI, local infection (incl. gum or teeth), mouth ulcers, or skin infection. Respiratory symptoms. Constitutional symptoms: fatigue, weight loss, night sweats, fever, pruritus, joint pain/ swelling, or rash. Foreign travel, TB exposure. Exposure to cats, other pets or wild animals. Recent vaccination.

**Key features on examination:** Well or ill, plot height and weight. Lymph node: age, size, location, consistency, tenderness, fixation, skin changes. Examination of other LNs. Rash e.g. eczema, impetigo, scalp infection, conjunctivitis, ENT and oral examination. Petechiae, purpura. Abdomen: liver, spleen, masses.

|             | Green – low risk<br>Likely benign, reactive          | Amber – intermediate risk<br>Likely infection                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Red – high risk<br>Possible malignancy                                                      |
|-------------|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Size        | Less than 2cm (cervical)<br>Less than 1cm (inguinal) | <b>Lymphadenitis / lymph node abscess</b> – painful, tender, significant unilateral swelling of LN +/- surrounding tissue. Overlying skin may be red/hot. May be systemically unwell with fever.<br><br><b>EBV</b> – cervical or generalised LAN, exudative pharyngitis, fatigue, headache +/- hepatosplenomegaly.<br><br><b>Non-tuberculous mycobacterial infection</b> – non-tender, unilateral LN enlargement, systemically well. Most common between 1-5 years of age. Progresses to include overlying skin discolouration.<br><br><b>Cat-scratch disease</b> – usually axillary nodes following scratch to hands in previous 2 weeks. Highest risk with kittens.<br><br>Consider <b>mycobacterium tuberculosis</b> – any risk factors**? | Larger than 2cm (cervical)<br>Larger than 1cm (inguinal)<br>Enlarging for more than 2 weeks |
| Site        | Cervical, inguinal                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Supraclavicular / popliteal / axillary / epitrochlear LNs                                   |
| History     | Recent viral infection or immunisation               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Prolonged fever, weight loss, night sweats, unusual pain, pruritis                          |
| Examination | Viral URTI, Eczema                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Hepatosplenomegaly, pallor, unexplained bruising, petechiae                                 |

| Reactive LAN                                                                                                                                                                                                                                                                                                                                                                                                                                            | LAN due to poorly controlled eczema                                                                                                                                                                                                                                              | Actions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Differential includes malignancy (leukaemia / lymphoma) and rheumatological conditions (JIA/ SLE / Kawasaki disease) |
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| <ul style="list-style-type: none"><li>Reassure parents that this is normal – improves over 2-4 weeks but small LNs (e.g. 1-2cm) may persist for years</li><li>Treat local infection if required e.g. dental, scalp, throat</li><li>No tests required</li><li>Ultrasound <b>not</b> required*</li><li>Share <a href="#">parent advice webpage</a></li><li>Schedule further review if becomes systemically unwell or not improving in 4-6 weeks</li></ul> | <ul style="list-style-type: none"><li>Generalised LAN extremely common</li><li>Optimise eczema treatment</li><li>If persists, check full blood count and blood film and/or refer to general paediatric outpatients</li><li>Share <a href="#">parent advice webpage</a></li></ul> | <ul style="list-style-type: none"><li>If systematically unwell or suspected LN abscess, phone paediatrician on-call (01865 227533)</li><li>If lymphadenitis, treat with 7 days of Cefalexin (see <a href="#">SCAN antimicrobial guidelines</a>). Review progress after 48 hours. If remains febrile, discuss with paediatrician on-call</li><li>If suspected <i>non-tuberculous</i> mycobacterial infection, discuss with paediatrician on-call</li><li>Consider blood tests, such as full blood count, blood film, EBV serology. An USS neck organised in primary care is <b>not</b> required*</li><li>Consider TB testing if known contact / risk factors or refer to local TB service</li><li>Share <a href="#">parent advice webpage</a></li></ul> | <ul style="list-style-type: none"><li>Phone paediatrician on-call (01865 227533)</li></ul>                           |

- Information to include in referral letter:**
- History** – duration + characteristics of LN (size, location, duration, pain, skin changes), comorbidities and concurrent illness, constitutional symptoms (weight loss/night sweats/bleeding/bruising), travel and immunisations, pets.
  - Clinical examination** – lymph node size, feel, location, mobility, skin changes. Child’s general appearance, growth, organomegaly, ENT, and skin examination.

- \*Why no ultrasound?**

Ultrasound of LNs is not usually helpful to guide decision making in primary care, with low diagnostic yield. Consider discussion with paediatrics or radiology first.
- \*\*Also think about ... TB**

Is there a history of TB exposure, travel to a high-risk area - discuss concern with the Paediatric ID team via JR Hospital Switchboard.

| Consider Paediatric Urgent Care Pathway                                                                                                                                                                                                                                                                                                                                                                                     |
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| Alternatives to hospital admission when GPs are considering referral: <ul style="list-style-type: none"><li>Oxford Paediatric Advice/Referral Line Tel: 01865 227533, Option 1 for HGH and Option 2 for JRH.</li><li>If no response Tel: 01865 741166, Bleep 9403 for HGH or 1711/4734 for JRH Paediatrician on call</li><li>Children’s Community Nursing (CCN) Team via single point of access Tel: 01865 902700</li></ul> |

| Useful numbers for clinicians in the community                                                                                                                                                                                                                                                         |
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| <b>John Radcliffe Hospital</b> Tel: <b>01865 741166</b><br><b>Horton General Hospital</b> Tel: <b>01295 275500</b><br><b>Royal Berkshire Hospital</b> Tel: <b>0118 322 5111</b><br><b>Great Western Hospital</b> Tel: <b>01793 604020</b><br><b>Stoke Mandeville Hospital</b> Tel: <b>01296 315000</b> |

- [NICE CKS: Management of Lymphadenopathy](#)
- [Paddock M, et al. Do otherwise well, healthy children with palpable cervical lymph nodes require investigation with neck ultrasound? ADC 2020](#)