

Neck lumps and bumps

Lumps in the neck are common and the cause is usually benign. In general practice, inflammatory lymph nodes are the most common cause^[1]. However, the lump may be the presentation of more serious disease (eg, malignancy or chronic infection) and so thorough assessment and diagnosis are essential. If there is any doubt as to the cause then the patient should be reviewed and/or referred for specialist assessment. Inflammatory, congenital and traumatic causes are more common in younger patients but cancers should still be borne in mind. Patients over the age of 40 are more likely to have a neoplastic cause.

Assessment^[1] ^[2]

Clinical assessment will be guided to some extent by the location and nature of the lump(s) and the likely diagnosis. Points in the history and examination which should be considered are listed below.

History

- How long has the lump been present?
- Is it painful?
- Has it changed? If so, over what time frame?
- Are there symptoms of recent infection of nearby structures (cough, cold, sore throat, earache, toothache, skin problems, head lice, bites)?
- Has there been a fever?
- Does eating affect the lump?
- Is there pain on swallowing?
- Is there any effect on voice?
- Does the person smoke?

- Is there a history of travel?
- Is there a past history of cancer?
- Are there red flag symptoms of systemic illness? For example:
 - Night sweats.
 - Weight loss.
 - Unexplained bruising or bleeding.
 - Persistent fatigue.
 - Breathlessness.

Examination

Establish:

- Location of the lump. Examine the:
 - Anterior triangle (bordered by the midline, the body of the mandible and the anterior border of sternocleidomastoid).
 - Posterior triangle (bordered by the posterior border of sternocleidomastoid, the clavicle and the trapezius).
 - Midline.
- Whether it is tender, hot, red, inflamed.
- Consistency.
- Size.
- Mobility.
- How deep the lump is: whether it is intradermal (suggesting sebaceous cyst with a central punctum, or a lipoma), subcutaneous or within deeper tissue.
- Whether it is pulsatile.
- Whether it is a solitary lump or if there is more than one.
- Whether it moves on swallowing (thyroid gland, thyroglossal cysts).

- Whether it moves when the person sticks out their tongue (thyroglossal cysts).

Further examination to help establish the cause may include:

- Examination of the skin of the head and neck for rashes, lesions or infection.
- Examination of the ears, nose and throat.
- Examination of the mouth - for malignancy, dental issues. If parotid disease is suspected, identify the orifice of parotid duct and palpate with the patient's head tilted backwards.
- Examination of the chest.
- Examination for lymphadenopathy or organomegaly elsewhere.
- Checking for compression of the airway or vasculature.
- Taking note of general clues of systemic illness, such as jaundice, pallor, petechiae, bruising, excoriation.

Differential diagnosis^[1] ^[2] ^[3]

There are numerous possible causes of lumps in the neck.

The most common cause is reactive lymph nodes:

- Bacterial causes, such as beta-haemolytic streptococci, *Staphylococcus aureus*, tuberculosis and secondary syphilis.
- Viral causes, such as common viruses causing upper respiratory tract infections, Epstein-Barr virus (EBV), cytomegalovirus, HIV, herpes simplex virus.
- Parasitic causes, such as head lice, fungal infections, toxoplasmosis.
- Non-infective causes, such as sarcoidosis and connective tissue disease.
- In children consider cat scratch disease, Kawasaki disease (more than one lymph node must be >1.5 cm and non-fluctuant - look for associated conjunctivitis, fever and desquamation).

Other causes include:

- Malignant lymph nodes: leukaemia, lymphoma, metastases.
- Infections of the skin: abscess, infected [sebaceous cyst](#).
- [Lipomas](#) and other benign tumours: such as fibromas, chondromas, neuromas and vascular tumours.
- [Thyroid swellings](#): [diffuse enlargement](#), [nodules](#) and [cancers](#) [4].
- [Salivary gland problems](#): [tumours](#), blocked ducts, infection and inflammation.
- Congenital swellings: [thyroglossal cyst](#), dermoid cyst, cystic hygroma, lymphangioma.
- Developmental abnormalities: branchial cyst, laryngocele, [pharyngeal pouch](#), [cervical rib](#) [5].
- Carotid body aneurysm or tumour.
- Malignant tumours: sarcoma, chondrosarcoma, skin malignancy.

Making the diagnosis

Working toward the diagnosis will involve clues from:

Age

Neck lumps are more likely to be inflammatory than malignant in children and young people. Congenital and developmental lumps are also more likely in children and young people. Large cystic hygromas present at birth and may be huge and disfiguring. In older children, smaller lesions can present as a painless lump just below the angle of the mandible, soft, fluctuant and transilluminable. Branchial cysts are rare but usually present in late teens with a solitary painless swelling on the side of the neck, which varies in size and may be painful and red in some patients.

Onset

Inflammatory lumps usually arise suddenly and resolve within 2-6 weeks. Progressive enlargement over a short time is more likely to be malignant. A transient nature to the swelling and an association with eating suggest salivary gland blockage. Associated symptoms often give the clue to the cause of reactive lymph nodes or indeed malignant nodes.

Consistency and mobility

A hard mass is more likely to be malignant. Congenital masses are usually smooth and mobile. Reactive lymph nodes are mobile. Thyroid gland swellings and thyroglossal cysts move on swallowing, and a thyroglossal cyst moves when the tongue is moved outwards^[4]. A fluctuant mass suggests a cystic nature. Tenderness suggests infection. A laryngocele enlarges with blowing or the Valsalva manoeuvre.

Location

Midline lumps are likely to be thyroid in origin or thyroglossal/dermoid cysts. Posterior triangle lumps are most commonly lymph nodes, although lymph nodes are a common cause of swellings in all areas of the neck. Bilateral swellings (tender) crossing the mandibular angle are likely to be parotid infection (**mumps**). Submandibular swellings may be related to the submandibular gland. A lump in the left supraclavicular fossa (a Virchow's node) may indicate an infraclavicular metastatic malignancy such as lung or upper gastrointestinal tumours.

Associated symptoms

Red flags suggestive of haematological malignancy include night sweats, weight loss, pruritus, fever, bruising, breathlessness, fatigue, etc.

Investigations

Investigations will be guided by clinical assessment but may include:

- FBC and ESR (within 48 hours if generalised lymphadenopathy to exclude leukaemia).
- TFTs.
- Viral serology - eg, EBV, cytomegalovirus, toxoplasmosis.
- Throat swab.
- CXR (within two weeks for supraclavicular lymph node swelling or persistent cervical node in a person over 40 years old)^[6].
- Ultrasound scan - for thyroid swellings and as a first-line imaging option where diagnosis is unclear, with or without a view to ultrasound-guided fine-needle aspiration biopsy.

- Radionucleotide scanning (if masses of parathyroid or thyroid glands).
- CT or MRI scan.

Referral^[1] ^[6]

Referral is usually to an ear, nose and throat (ENT) specialist but findings may dictate referral to a dermatologist, an oral surgeon, or a chest physician. Any new neck mass persisting beyond six weeks should be referred^[7]. Referral more immediately may be appropriate in some cases.

Make an urgent two-week wait referral through the suspected cancer pathway if:

- The person has lost weight.
- There is associated **hoarseness**, difficulty swallowing (**dysphagia**), or breathlessness (**dyspnoea**) for three weeks or more.
- There has been **haemoptysis**.
- There are associated symptoms suggestive of lymphoma (weight loss, night sweats, fever, breathlessness, pruritus or bleeding) – two-week wait referral for adults but 48-hour referral for children and young people up to the age of 24 years.
- An unexplained enlarged lymph node is persistent.
- There are suspicious clinical features.
- Diagnosis is unclear.

Management

This will depend on the cause. Benign reactive lymph nodes usually settle on their own within six weeks, needing no treatment. One-stop assessment clinics (with access to ultrasound and fine-needle biopsy) can be useful^[8]^[9].

Further reading

- [Reynolds S, Yap D, Marikar D, et al](#); Fifteen-minute consultation: The infant with a neck lump. Arch Dis Child Educ Pract Ed. 2020 Oct;105(5):258-261. doi: 10.1136/archdischild-2019-316827. Epub 2019 Nov 28.
- [Pynnonen MA, Gillespie MB, Roman B, et al](#); Clinical Practice Guideline: Evaluation of the Neck Mass in Adults. Otolaryngol Head Neck Surg. 2017 Sep;157(2_suppl):S1-S30. doi: 10.1177/0194599817722550.

Disclaimer: This article is for information only and should not be used for the diagnosis or treatment of medical conditions. Egton Medical Information Systems Limited has used all reasonable care in compiling the information but makes no warranty as to its accuracy. Consult a doctor or other healthcare professional for diagnosis and treatment of medical conditions. For details see our [conditions](#).

Authored by:	Peer Reviewed by: Dr Colin Tidy, MRCP	
Originally Published: 20/11/2023	Next review date: 30/04/2021	Document ID: doc_2494

View this article online at: patient.info/doctor/neck-lumps-and-bumps

Discuss Neck lumps and bumps and find more trusted resources at [Patient](#).



To find out more visit www.patientaccess.com
or download the app



Follow us

