



Approach to neck masses

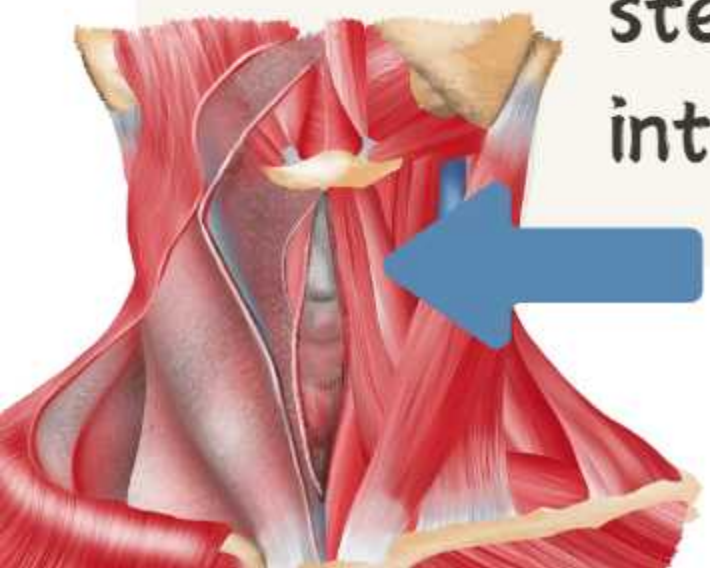


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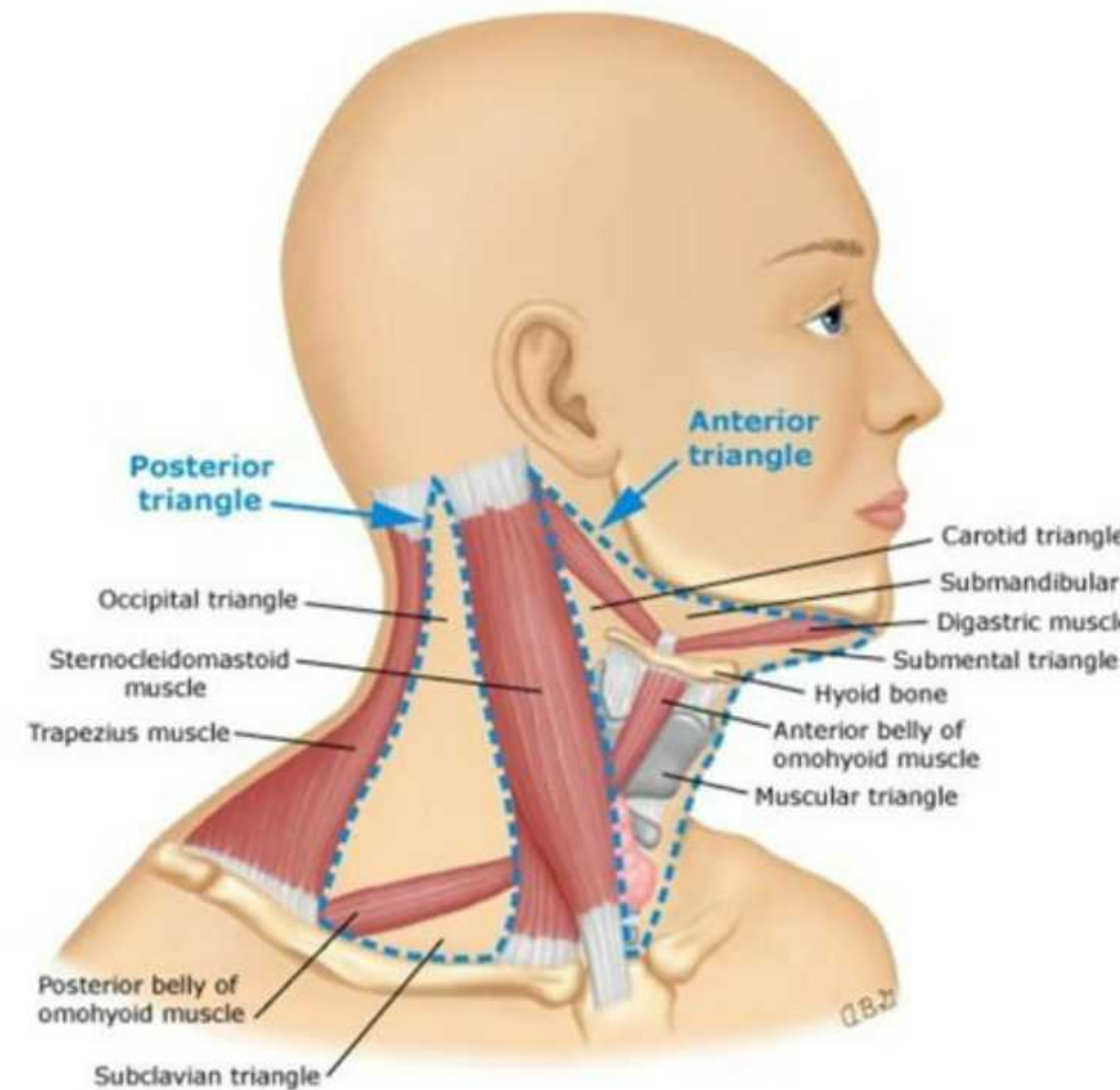


Anatomy of the neck

- Familiarity with neck anatomy is critical for diagnosis and management of disease processes affecting this region
The location of the mass can focus the differential diagnosis
- The neck is traditionally divided into the central and the lateral neck
 - The lateral neck is divided by the sternocleidomastoid muscle (SCM) into an anterior triangle and posterior triangle



Anatomical regions of the neck



✦ The border of each one ✦

» Anterior triangle = midline, anterior border of sternocleidomastoid, inferior border of mandible

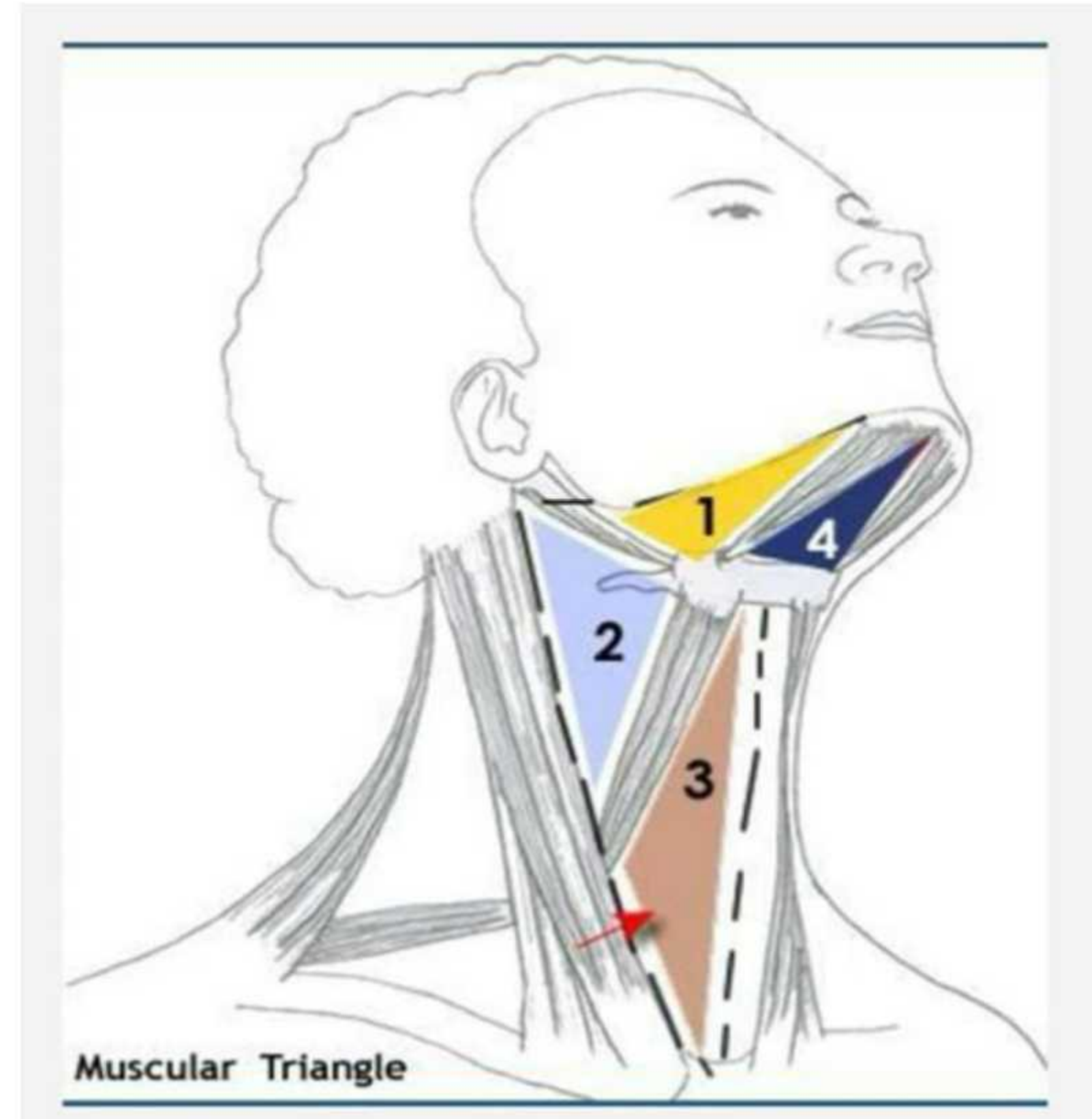
Posterior triangle = middle third of clavicle,
,posterior border of sternocleidomastoid
anterior border of trapezius

This anterior triangle is subdivided into four smaller triangles by the digastric above, and the superior belly of the omohyoid.

These smaller triangles are named:

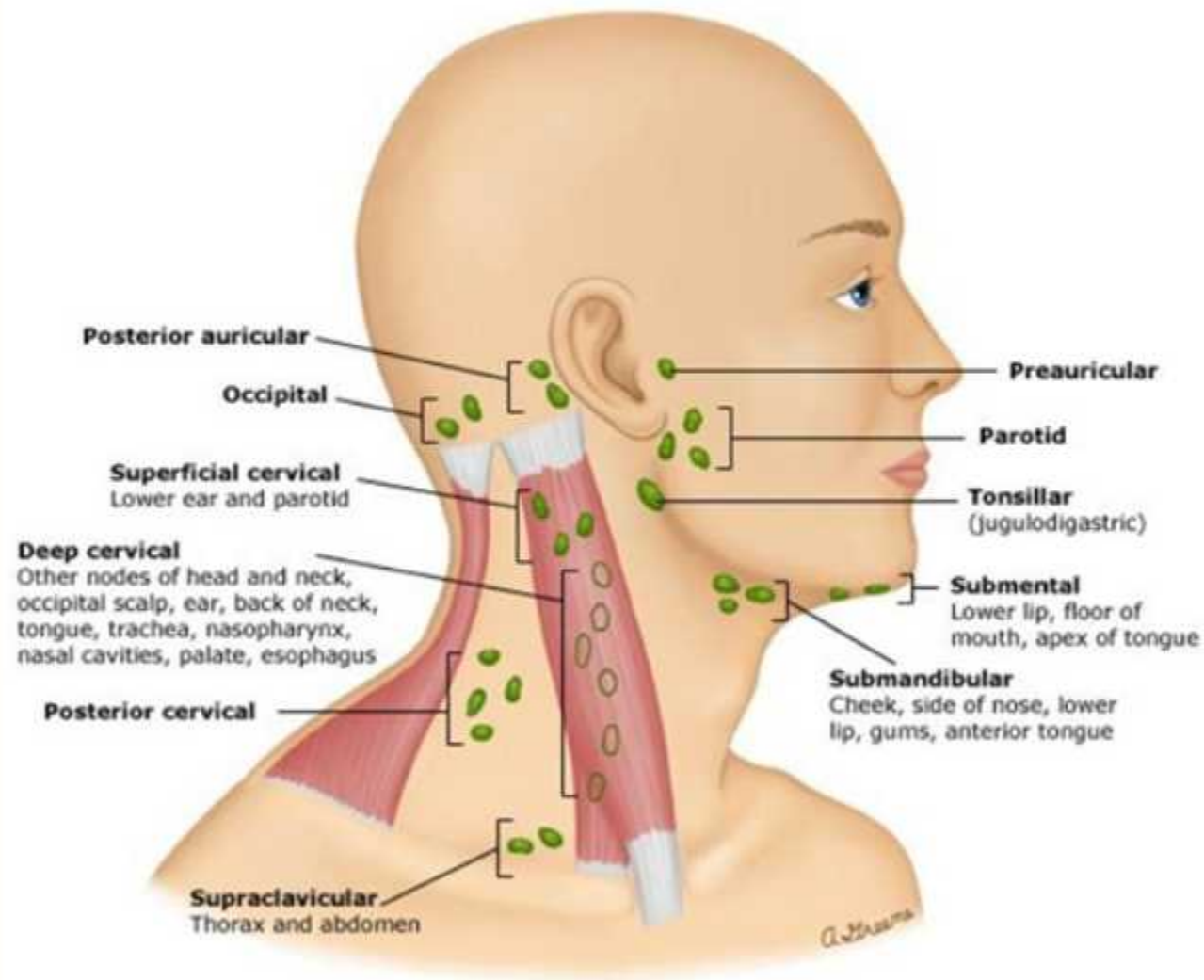
- The submandibular triangle.
- The carotid triangle.
- The muscular triangle.
- The submental triangle.

The inferior carotid triangle (or muscular triangle), is bounded, in front, by the median line of the neck from the hyoid bone to the sternum behind, by the anterior margin of the sternocleidomastoid above, by the superior belly of the omohyoid



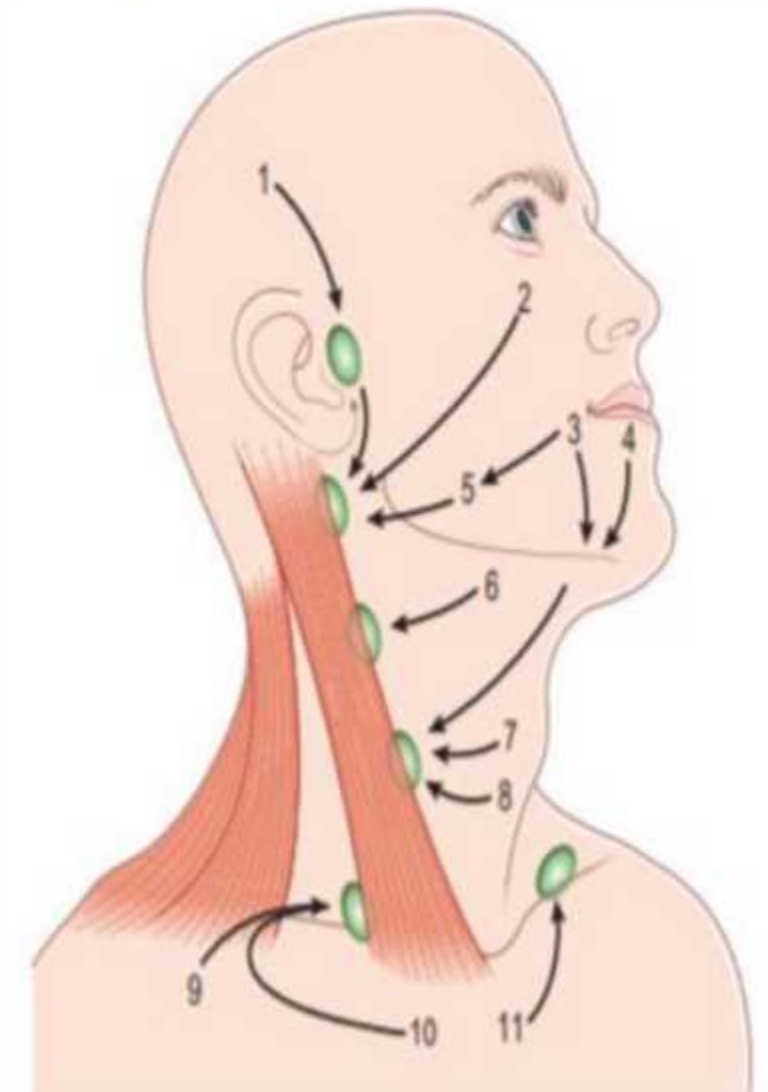
Lymph nodes of the head and neck

Lymph nodes of the head and neck



Lymphatic drainage of the head and neck

Lymph node group	Anatomic areas drained
Occipital	Posterior scalp
Postauricular	Temporal and parietal scalp
Preauricular	Anterior and temporal scalp, midface, nose, anterior ear canal and pinna, lateral conjunctivae
Parotid	Forehead and temporal scalp, midface, nose, external ear canal, middle ear, gums, parotid gland
Submandibular (submaxillary)	Cheek, nose, lips, anterior tongue, submandibular gland, buccal mucosa
Submental	Central lower lip, floor of mouth, tongue
Superficial cervical	Skin, lower larynx, lower ear canal, parotid
Superior deep cervical	Tonsil, adenoid, posterior scalp and neck, tongue, larynx, hypopharynx, thyroid, palate, nose, esophagus, paranasal sinuses, nasopharynx, other cervicofacial nodes
Inferior deep cervical	Dorsal scalp and neck, nasopharynx, superficial pectoral region of the arm, superior deep cervical



Lumps in neck

Mid -line lump

- Thyroid gland - located below the thyroid cartilage
- Thyroid nodule - can be single or multiple - adenomas/cysts/malignancy
 - Thyroglossal cysts - painless/smooth /cystic - rises on tongue protrusion
- Lymph nodes - often multiple, may suggest infection or malignancy
 - Lipoma - painless/smooth mass
- Dermoid cyst - cysts formed along the lines of embryological fusion, painless swellings that do not move with tongue protrusion (more common in children and young adults)
 - Sebaceous cyst - typically have an associated punctum
- Laryngocele - reducible tense mass - mass returns on sneezing or nose blowing

Anterior triangle lump:

- Lymph nodes
- Lipoma - painless/smooth mass
- Sebaceous cyst
- Salivary gland swelling - doesn't move on swallowing
- Branchial cyst - present from birth - noticed in early adulthood when it manifests as an infected neck lump
- Carotid artery aneurysm - pulsatile mass - bruit present on auscultation

Posterior triangle lump :

- Lymph nodes - often multiple - can be rubbery or hard depending on etiology
 - Lipoma - painless/smooth mass
 - Sebaceous cyst
- Subclavian artery aneurysm - pulsatile mass
 - Pharyngeal pouch - may present as a reducible mass
- Cystic hygroma - most commonly on the left side - fluctuant mass - transilluminates
 - Branchial cyst - less common site
- Mass in the tail of the parotid gland - could be a pleomorphic adenoma or malignancy



History and physical examination

The majority of surgical conditions that arise in the neck present as neck swelling.

Taking the history and performing the physical examination should follow the standard pattern, but there are some important features that deserve special attention.



History

Age: the risk of malignancy is greater with increasing age

Gender: most of the head and neck cancers, other than those in the thyroid, are more common in men.

- Specific questions about history of lump:

When did you notice it?

What was the size of the lump when it was first noticed?

Has the lump changed since it was first noticed?

Does the lump disappear?

Have you ever had similar lumps before?



- Specific questions about the lump itself:

How big is the lump? (Size)

Where do you feel it? (Site)

Can you identify its shape?

Can you tell me if it's mobile or not?

Is there any other lumps?

Do you feel pain in it? (SOCRATES)

Any skin changes over it? Any ulceration?

- Symptoms:

Dysphasia, odynophagia

Dyspnea

Hoarseness of the voice

Limitations of the neck movement

Lymph node enlargement

Ask about any:
Recent Hx of URTI
Hemoptysis
Fever
Cough
Sore throat

Malignancy

Fever
Weight loss
Night sweats
Fatigue
Anorexia
Radiation exposure

Pharyngeal pouch

Increase lump size after eating
Choking when lying down
Halitosis (bad breath)
Recurrent sore throat

Infectious

Insect bites
Exposure to pets
Sick contact
Recent travel
Immunization (BCG)

Trauma

Hematoma

Thyroid

Symptoms of Hypo and
Hyperthyroidism
Residency (Iodine deficient
areas)

Salivary gland

Painful mass after eating
Painful during mastication

Others

Drugs
Smoking
Alcohol

NECK SWELLING

General inspection

Inspect for clinical signs suggestive of underlying pathology (e.g. cachexia, scars, hoarse voice, dyspnoea, exophthalmos).

Neck inspection

From the front and sides noting it's location (midline, anterior or posterior triangle of the neck)
Ask the patient to swallow and protrude their tongue if a midline lump is noted
thyroid masses will move on swallowing, thyroglossal cyst moves up while protruding the tongue.

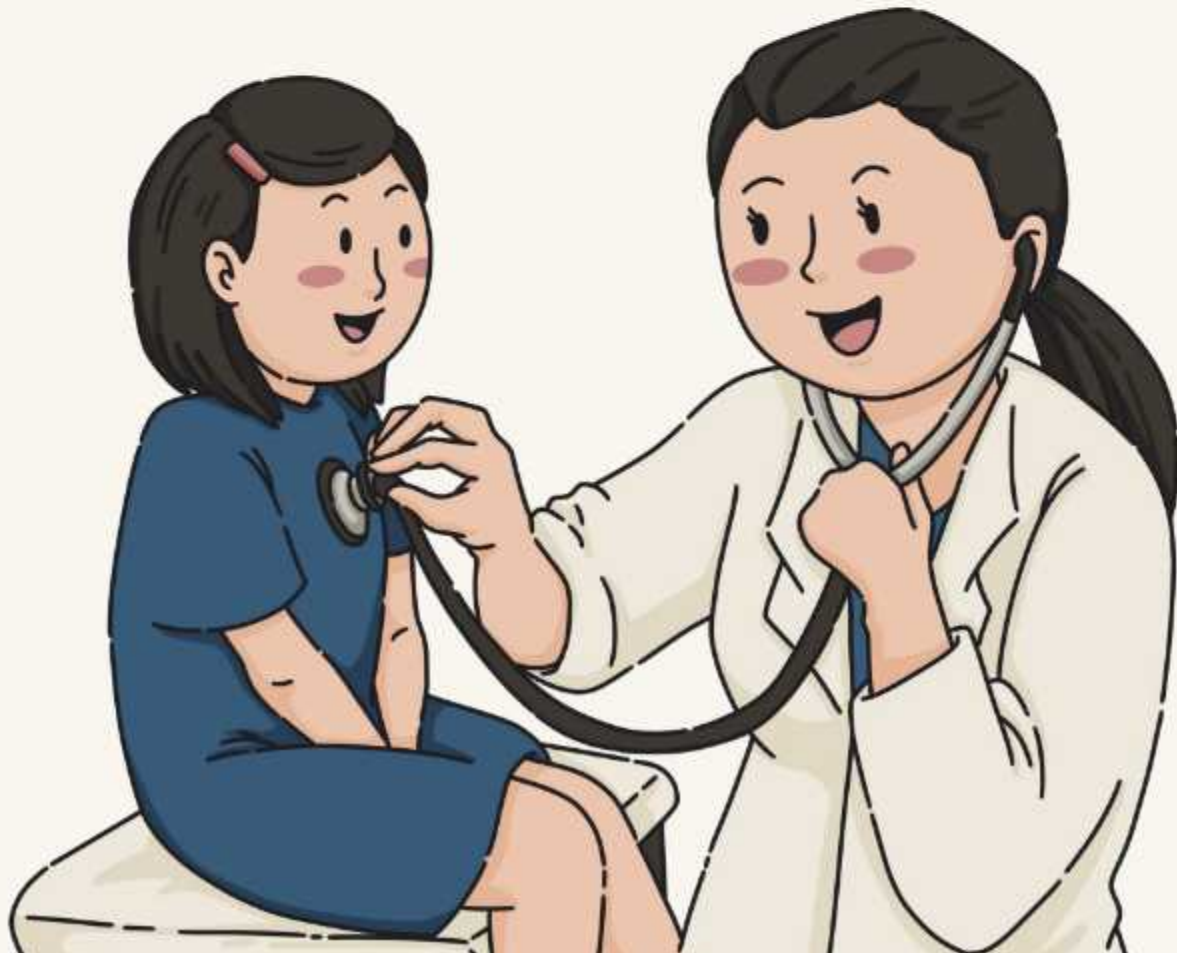
Palpate the neck lump

assessing site, size, shape, consistency, mobility, fluctuance
temperature, overlying skin changes, pulsatility and tenderness.
Apply a light source to the lump to assess for transillumination

Auscultate

Auscultate the lump to listen for a vascular bruit

Physical Examination



Palpate the neck lump

Submental



Submandibular



Tonsillar



Parotid



Pre-auricular



Post-auricular



Superficial cervical



Deep cervical



Posterior cervical



Occipital



Supraclavicular



(a) Look at the eyes and the neck and ask the patient to swallow.



(b) Palpate the neck from behind, with the thumbs pushing the head forwards to flex the neck slightly.



(c) Palpate both lobes and the isthmus with the fingers flat.



(d) If one lobe is difficult to feel, make it more prominent by pressing firmly on the opposite side.



(e) Feel the trachea.



(f) Percuss the lower limit of the gland.



(g) Listen over the gland for a systolic bruit.

Infectious

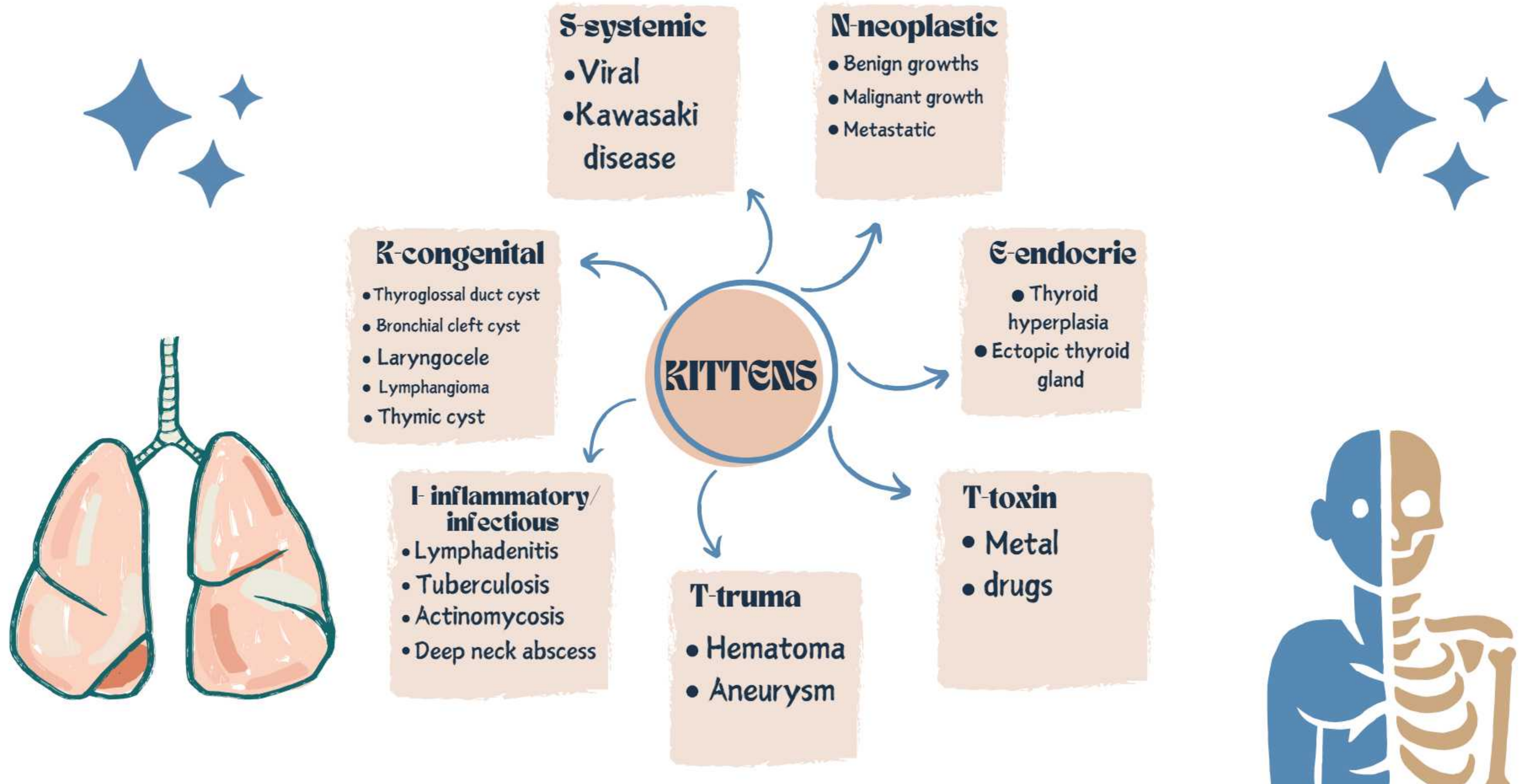
- Warmth or erythema of the overlying skin
- Tenderness on palpitations
- Systemic signs of infection e.g. fever, tachycardia

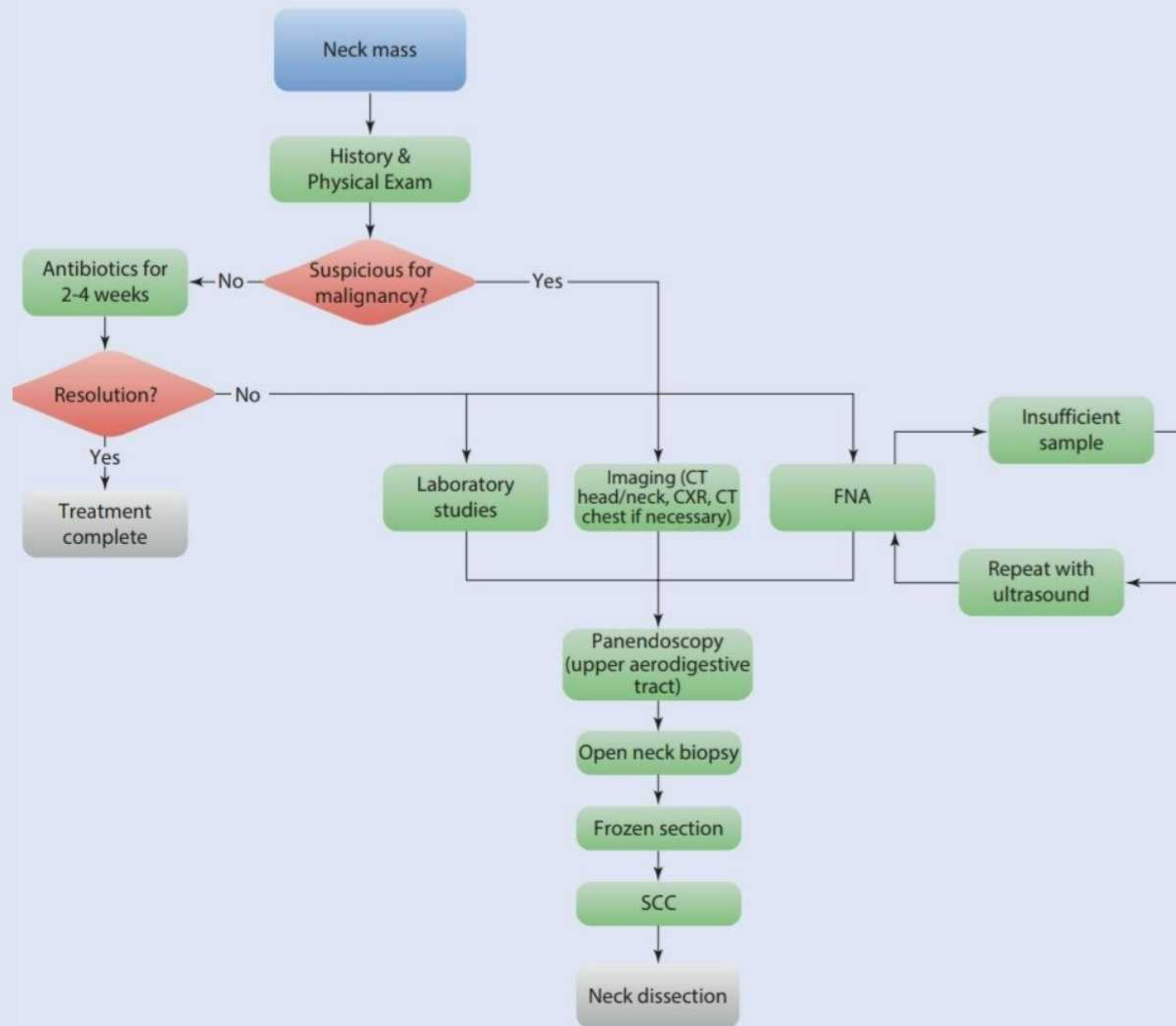
V.S

Malignancy

- Firm on palpitation
- Fixed or reduced mobility
- Ulceration of the skin
- Lack of infectious etiology

Causes of neck swelling





k-congenital



1- Thyroglossal duct cysts

Embryology

The thyroid gland descends early in fetal life from the base of the tongue towards its position in the lower neck

At the time of its descent, the hyoid bone has not been formed and the track of the descent of the thyroid gland is variable, passing in front, through OR behind the eventual position of the hyoid body.

Thyroglossal duct cysts represent a persistence of this track. Rarely, a thyroglossal cyst may contain the only functioning thyroid tissue in the body.

Clinical presentation

The cysts almost always arise in the midline but, when they are adjacent to the thyroid cartilage they may lie slightly to one side of the midline. Classically, the cyst moves upwards on swallowing and with tongue protrusion

Thyroglossal cysts may become infected and rupture onto the skin of the neck presenting as a discharging sinus.



Figure 47.54 A patient with a thyroglossal fistula from a cyst in the midline of the neck.

Treatment

This operation is known as Sistrunk's operation and prevents recurrence, most notably from small side branches of the thyroglossal tract.

treatment must include excision of the whole thyroglossal tract, which involves removal of the body of the hyoid bone and the suprahyoid tract through the tongue base to the vallecula at the site of the primitive foramen caecum, together with a core of tissue on either side.

lymphangioma cystic hygromas

Cystic
hygromas are
the most
common
subtype of
lymphangiomas



47.53 Cystic hygroma.

Definitive treatment involving complete excision of the cyst at an early stage is best if possible.

Usually present in the neonate or in early infancy, and occasionally may present at birth and be so large as to obstruct labour.

The cysts are filled with clear lymph and lined by a single layer of epithelium with a mosaic appearance. Swelling usually occurs in the neck and may involve the parotid, submandibular, tongue

The swelling may be bilateral and is soft and partially compressible, visibly increasing in size when the child coughs or cries.

The characteristic that distinguishes it from all other neck swellings is that it is brilliantly translucent.

Sometimes the cyst expands rapidly and occasionally respiratory difficulty ensues, requiring immediate aspiration and even occasionally a tracheostomy

Bronchial cyst



Ultrasound and fine-needle aspiration both aid diagnosis and treatment is by complete excision,

A branchial cyst develops from the vestigial remnants of the second branchial cleft, is lined by squamous epithelium and contains thick, turbid fluid.

The cyst usually presents in the upper neck in early or middle adulthood and is found at the junction of the upper third and middle third of the sternocleidomastoid muscle at its anterior border.

It is a fluctuant swelling that may transilluminate and is often soft in its early stages so that it may be difficult to palpate.

If the cyst becomes infected, it becomes erythematous and tender and the differential diagnosis is broadened.

Laryngocele

Is an abnormal cystic dilatation of the saccule of the laryngeal ventricle
, filled with air and communicating with the lumen of the larynx

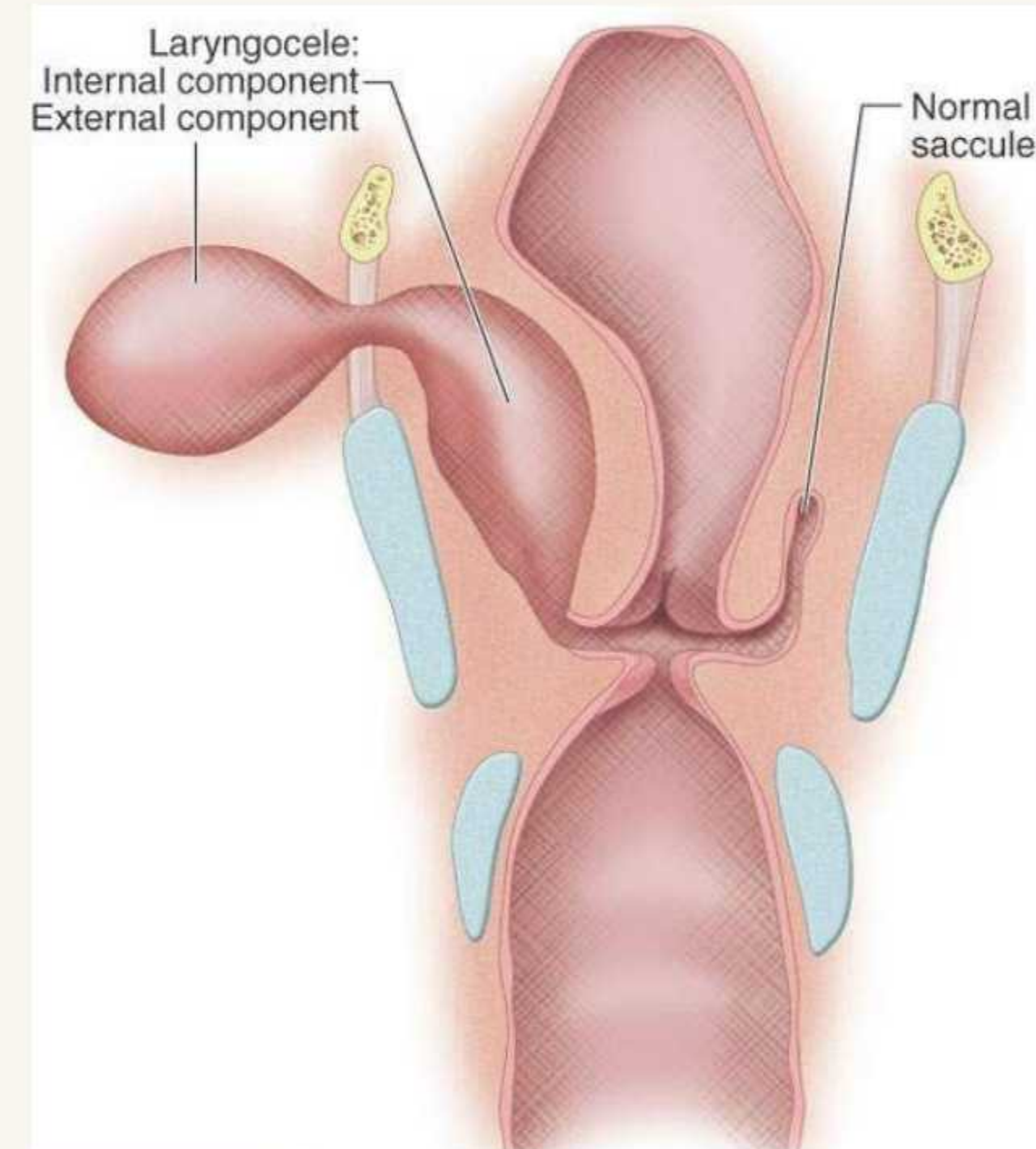
In a majority of cases a Laryngocele is asymptomatic and produces symptoms only as it enlarges or when it become infected .

Based on location

Internal

External

Combined or mixed



Laryngocele

The internal Laryngocele often present as a soft spherical sac of mucosa arising from the ventricle or extending into the supraglottic region and gives rise to symptoms such as dysphasia , dyspnea, sore throat and discomfort in the neck . It can cause airway obstruction which requires emergency treatment

Normally , the external Laryngocele is asymptomatic but present as neck mass

Mixed Laryngocele presents symptoms and signs of both entities

A CT scan of the neck is the most important examination for correct diagnosis

A detailed illustration of a medical syringe, oriented diagonally. The syringe has a clear barrel with black markings, a blue plunger, and a thin needle. It is set against a light beige background with a subtle gradient.



Inflammatory / infectious

BASIC PRINCIPLES

A-Cervical lymphadenitis

Cervical lymphadenitis is common due to infection or inflammation in the oral and nasal cavities, pharynx, larynx, ear, scalp and face.

1-Acute lymphadenitis

The affected lymph nodes are enlarged and tender, and there may be varying degrees of general constitutional disturbance such as pyrexia, anorexia and general malaise. The treatment in the first instance is directed to the primary focus of infection, for example tonsillitis or a dental abscess.

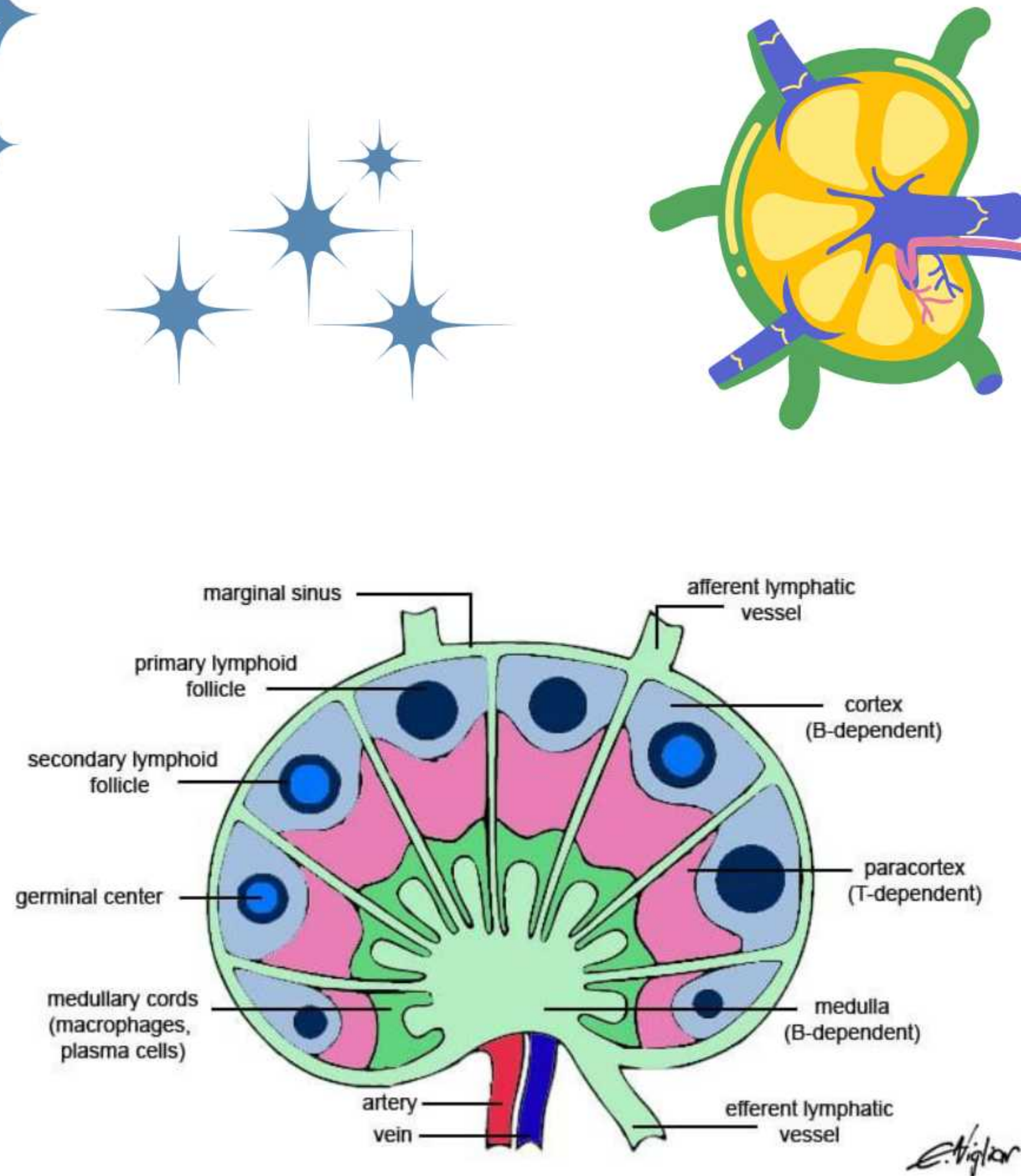
1. LYMPHADENOPATHY (LAD)

2-Chronic lymphadenitis

Chronic, painless lymphadenopathy may be caused by tuberculosis in young children or adults, or be secondary to malignant disease, most commonly from a squamous cell carcinoma in older individuals. Lymphoma and/or HIV infection may also present in the cervical nodes.

B. In inflammation, lymph node enlargement is due to hyperplasia of particular regions of the lymph node :

1. Follicular hyperplasia (B-cell region) is seen with rheumatoid arthritis and early stages of HIV infection, for example.
2. Paracortex hyperplasia (T-cell region) is seen with viral infections (e.g., infectious mononucleosis).
3. Hyperplasia of sinus histiocytes is seen in lymph nodes that are draining a tissue with cancer.



2. Tuberculous lymphadenitis

1. Affected Groups & Areas:

- Common in children and young adults, though it can occur at any age.
- Affects deep upper cervical lymph nodes; often presents as a swollen neck.



2. Infection Route:

- Tubercular bacilli typically enter through the ipsilateral tonsil.
- Around 80% of cases are limited to affected lymph nodes, but pulmonary tuberculosis should always be suspected.

3. Complications:

- Untreated nodes may liquefy, forming a cold abscess, which can lead to a collar-stud abscess and a discharging sinus if not managed.
- Calcification of nodes may occur, detectable on X-rays after treatment or natural resistance.



Tuberculous lymphadeniti (Cont..)

5. Treatment:

- Primarily with anti-tuberculous chemotherapy.
- Surgery is only considered if abscesses persist despite treatment, but can be complex due to fibrosis and potential damage to nearby structures.
- Surgical specimens should be sent for histology and microbiology.

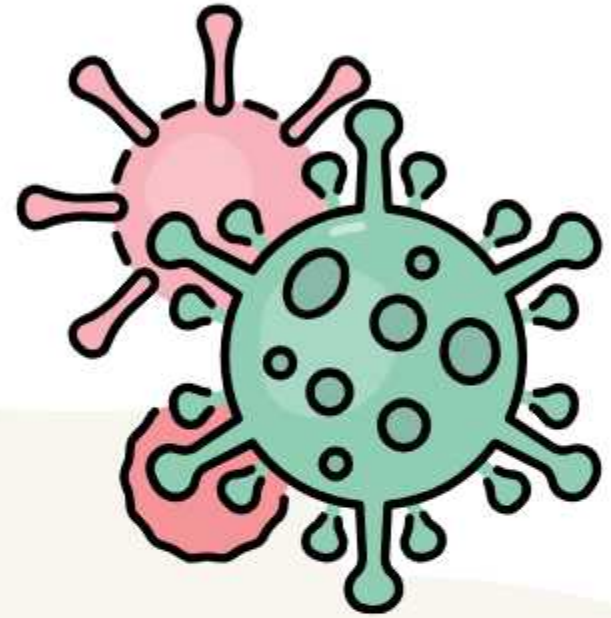
4. Diagnosis:

- Fine-needle aspiration of lymph nodes to detect acid-fast bacilli.
- Chest X-ray and Mantoux test are important first-line investigations.
- Screen for co-existing diseases such as HIV and malaria, especially in high-risk areas.

Mumps

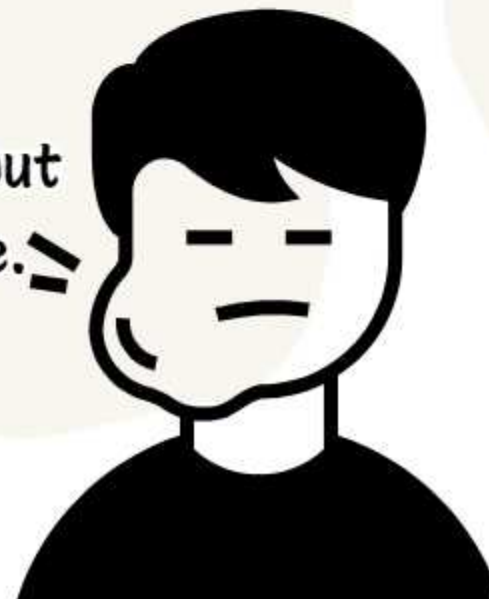
1. Definition:

- Mumps is a contagious viral infection caused by the mumps virus, primarily affecting the parotid glands (salivary glands located near the ears), leading to swelling and discomfort



2. Transmission:

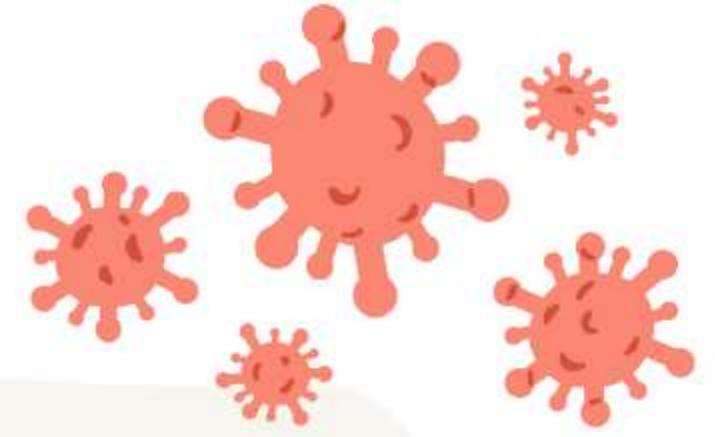
- Spread through respiratory droplets (coughing, sneezing) or by direct contact with an infected person's saliva.
- The incubation period is usually 16-18 days, but symptoms can appear 12-25 days after exposure.



3. Symptoms:

- Swelling of the parotid glands (unilateral or bilateral), giving a puffy cheek appearance.
- Fever, headache, muscle aches, fatigue, and loss of appetite.
- Some patients may experience ear pain or difficulty swallowing.

Mumps (Cont..)



4. Complications:

- Orchitis (inflammation of the testicles) in post-pubertal males.
- Oophoritis (inflammation of the ovaries) in females, though less common.
- Meningitis or encephalitis (inflammation of the brain or its covering), though rare.
- Hearing loss (usually temporary).

6. Prevention:

- MMR vaccine (measles, mumps, rubella) is the most effective way to prevent mumps. Two doses are typically given in childhood, providing long-term immunity.
- Avoid contact with infected individuals and maintain good hygiene practices

5. Diagnosis:

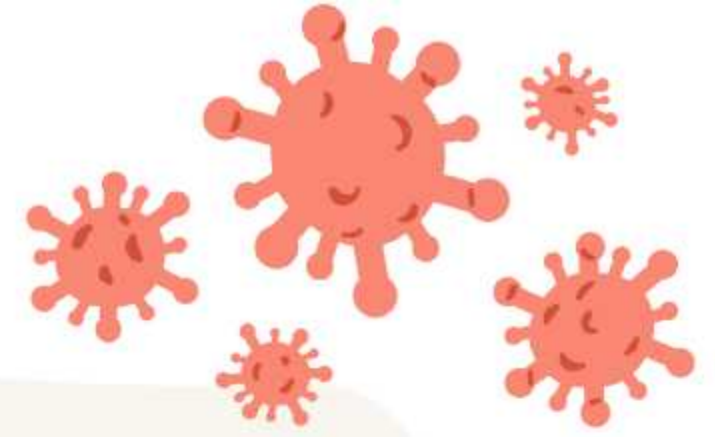
- Clinical diagnosis is often based on symptoms, especially parotid swelling.
- Confirmatory tests can include detection of mumps virus in saliva, urine, or blood, or serological testing for mumps-specific antibodies.

7. Treatment:

- There is no specific antiviral treatment for mumps. Supportive care includes rest, hydration, and pain relief (e.g., ibuprofen or acetaminophen).
- Isolate infected individuals for at least 5 days after the onset of symptoms to prevent spreading the virus.



Mumps (Cont..)



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T-toxin



Exposure to industrial fumes, nickel, cigarette smoke, and wood dust has been associated with head and neck cancers, which can metastasize to lymph nodes and present as a neck mass

T-truma

Hematoma

Neck hematoma occurs more frequently following surgery for thyroid disorder or ruptured thyroid cyst or thyroid vessels

Aneurysm

Pseudoaneurysms are false aneurysms occurring at the site of arterial injury from trauma or infection. Unlike true aneurysms in which the blood vessel wall balloons, a pseudoaneurysm does not involve the vascular wall.

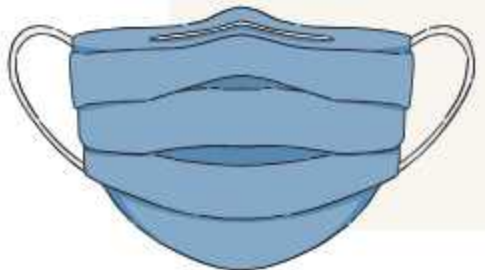
Instead, blood leaks from the injury site and is contained by a wall developed with the products of the clotting cascade

E-endocrine



Thyroid gland

The thyroid gland is a small, butterfly-shaped organ located at the base of the neck, just in front of the trachea (windpipe). Despite its modest size, the thyroid plays a critical role in regulating various essential bodily functions. It produces two main hormones, thyroxine (T4) and triiodothyronine (T3), which are vital for controlling the body's metabolism, energy production, and temperature regulation. These hormones influence nearly every cell and organ in the body, affecting heart rate, digestion, muscle control, and brain development.

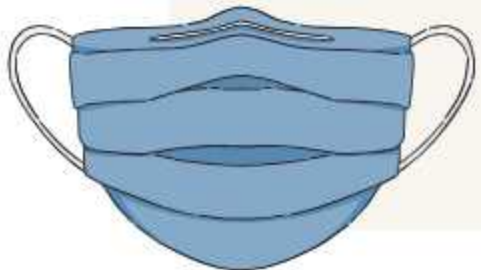


E-endocrine



what are the common symptoms of a patient with a thyroid nodule

Patients often appreciate a lump in the anterior neck. Some may complain of shortness of breath, sensation of neck tight-
Describe the Different Types of Thyroid Cancer, voice changes, and/or dysphagia. It is important to also assess for symptoms of hyperthyroidism or hypothyroidism

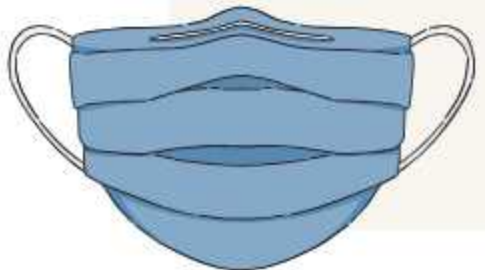


E-endocrine



What is the significant of the mass moving up and down with swallowing ?

- The ligament of Berry attaches the thyroid gland to the trachea, causing it to move cranially when a patient swallows. A mass that moves with swallowing is more likely to originate within the thyroid gland as opposed to some other part of the anatomy (lymph nodes, for instance). In rare circumstances, an aggressive thyroid cancer will become fixed due to local invasion of surrounding structures



Thyroid problems that cause neck swelling

Diagnosis	Description	Characteristics
Multinodular goiter	Multiple nodules distributed throughout the thyroid, can be toxic or nontoxic	Usually benign, may arise from iodine deficiency in childhood
Graves' Disease	Autoantibodies that stimulate TSH receptor causing hyperthyroidism, diffuse enlargement, and hypervascularity of the thyroid	Ophthalmopathy (lid retraction, exophthalmos, extraocular muscle restriction, optic neuropathy) is present in half of patient
Hashimoto's thyroiditis	Chronic lymphocytic infiltration and autoimmune destruction of the thyroid; usually painless; thyroid may be shrunken and fibrotic at the end stage	Positive serum TPO antibodies; patient euthyroid in early stage, progressing to hypothyroid over years
Ectopic thyroid gland	May be found anywhere along the thyroglossal duct; beware of lateral ectopic thyroid tissue as this may be metastatic spread of malignancy	

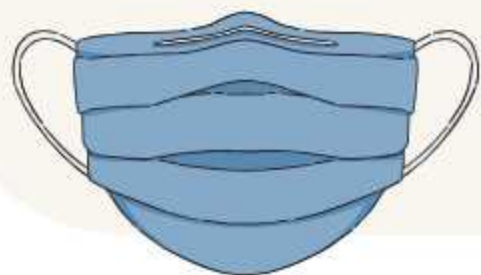
E-endocrine



Goiter



Goiter



E-endocrine

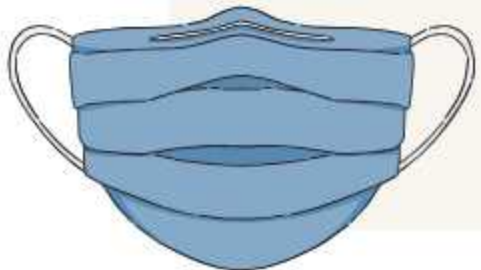


• What Is the Appearance of a Patient with Severe or Long-Standing Hyperthyroidism?

- Flushed face
- Warm skin
- Tremor
- Weight loss
- Tachycardia
- Widened pulse pressure
- Hyperactive reflexes

• What Is the Appearance of a Patient with Severe or Long-Standing Hypothyroidism?

- Periorbital swelling with puffy face and extremities,
- fine hair, loss of the outer aspects of the eyebrows
- waxy or clammy skin
- weight gain



HASHIMOTO'S DISEASE

Hashimoto's is an autoimmune disease that is the most common cause of hypothyroidism. It effects women 10-15 times more than men.



Enlarged and Inflamed Underactive Thyroid (Goiter)

Hashimoto's Disease, is an Autoimmune Disease in Which the Thyroid Gland is Gradually Destroyed

HEALTHY THYROID



HASHIMOTO'S DISEASE



Fatigue and Sluggishness



Unexplained Weight Gain



Increased Sensitivity to Cold

 Constipation	 Excessive or Prolonged Menstrual Bleeding
 Pale, Dry Skin	 Enlargement of the Tongue
 Muscle Aches, Weakness, Tenderness and Stiffness	 Memory Lapses, Depression
 Goiter, A Puffy Face, Brittle Nails and Hair Loss	 Joint Pain and Stiffness

 **DRJOCKERS**
SUPERCHARGE YOUR HEALTH!

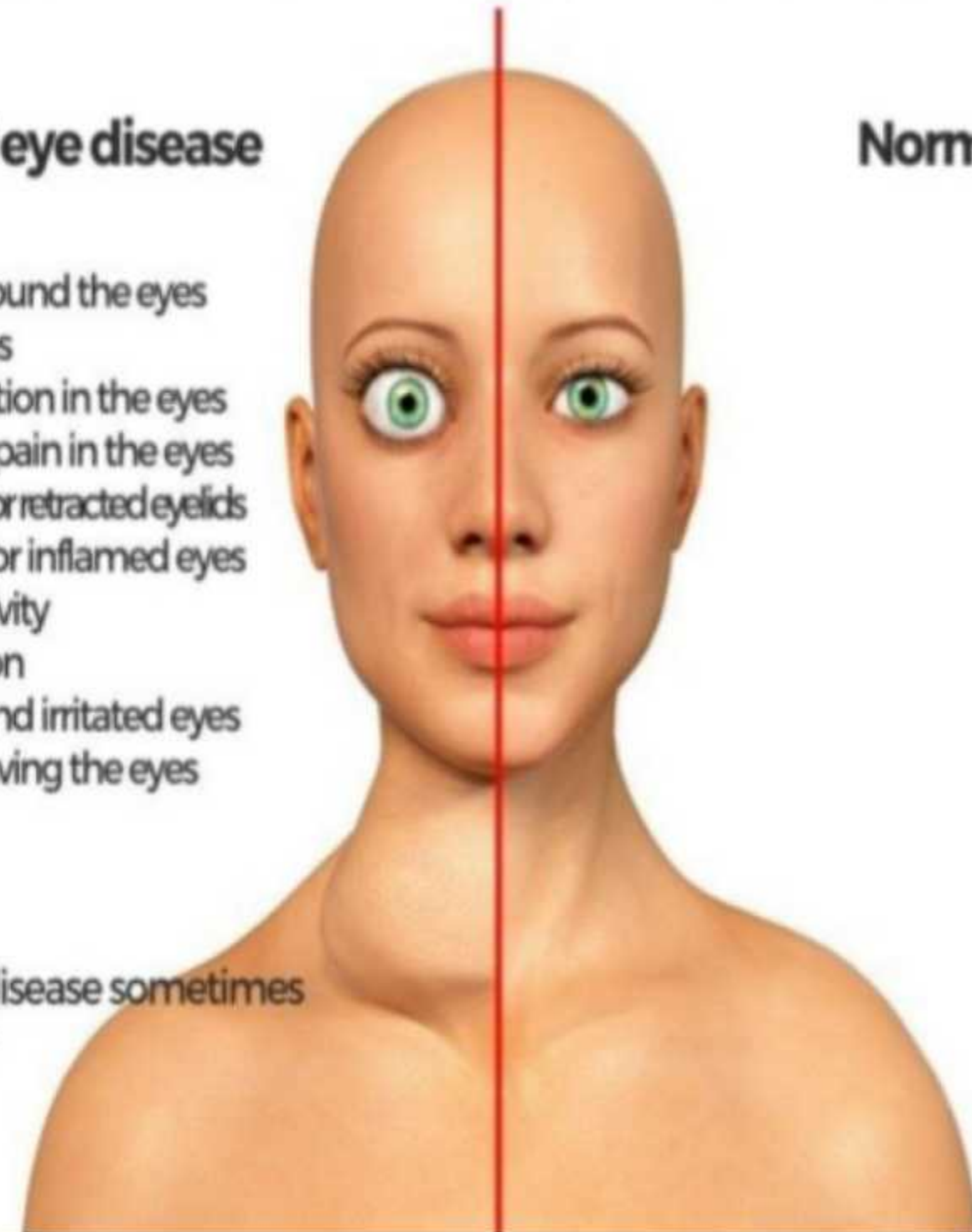
GRAVES' EYE DISEASE SYMPTOMS

GRAVES' OPHTHALMOPATHY OR GRAVES' ORBITOPATHY (GO)

Graves' eye disease

- Swelling around the eyes
 - Bulging eyes
 - Gritty sensation in the eyes
 - Pressure or pain in the eyes
 - Puffy eyelids or retracted eyelids
 - Reddened or inflamed eyes
 - Light sensitivity
 - Double vision
 - Dry, gritty, and irritated eyes
 - Trouble moving the eyes
 - Vision loss
- In graves disease sometimes also goiter

Normal



E-endocrine



Risk factor

Goiter:

A lack of dietary iodine

Being female

Pregnancy and menopause

Age. Goiters are more common after age 40.

Family medical history.

Graves disease:

family history

Sex. Women are much more likely to get Graves' disease than are men.

Age. Graves' disease mostly happens between the ages of 30 and 60.

**Another autoimmune condition
smoking**

Hashimoto's disease:

Sex. Women are much more likely to get Hashimoto's disease.

Age. Hashimoto's disease can occur at any age but more commonly occurs during middle age.

Other autoimmune disease

Genetics and family history

Pregnancy

Excessive iodine intake

Radiation exposure



E-endocrine



What laboratory tests are recommended for a thyroid mass

The first test is a TSH level. This is the most sensitive measure of thyroid dysfunction and the only test indicated for screen-ing or in the absence of symptoms of hyper- or hypothyroid-ism. T4 and T3 testing may be indicated if the TSH is abnormal.



Treatment



Goiter

Thyroid hormone replacement pills if the goiter is due to an underactive thyroid

Small doses of Lugol's iodine or potassium iodine solution if the goiter is due to a lack of iodine
Radioactive iodine to shrink the gland if the thyroid is producing too much thyroid hormone

Surgery (Thyroidectomy) to remove all or part of the gland

Graves disease

Beta blockers

Anti-thyroid medication

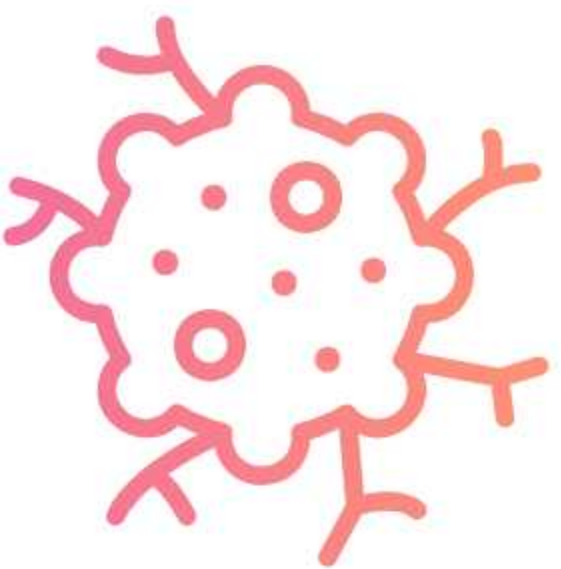
Radioactive iodine treatments

Surgery

Hashimoto's disease

Most people with Hashimoto's disease take medication to treat hypothyroidism. If you have mild hypothyroidism, you may have no treatment but get regular TSH tests to monitor thyroid hormone levels.



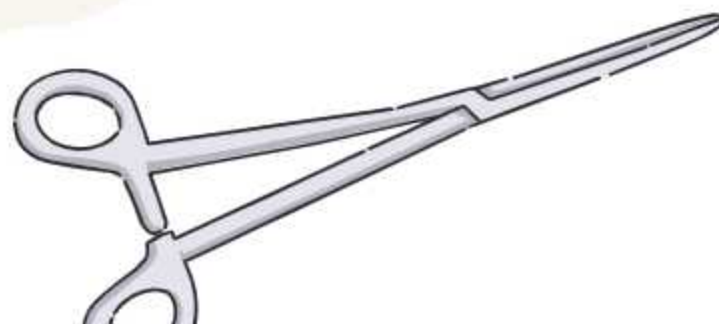


N-Neoplastic swelling of the neck



Primary or metastatic cancer may cause neck swelling . Cervical metastasis often presents as a neck mass. Although a primary tumor may not be found immediately when a neck mass is being evaluated, one is often discovered later.

For neck masses caused by neoplasms, fine-needle aspiration cytology or biopsy is performed. Depending on the diagnosis, treatment consists of dissection, radiation therapy, and/or chemotherapy.



Causes

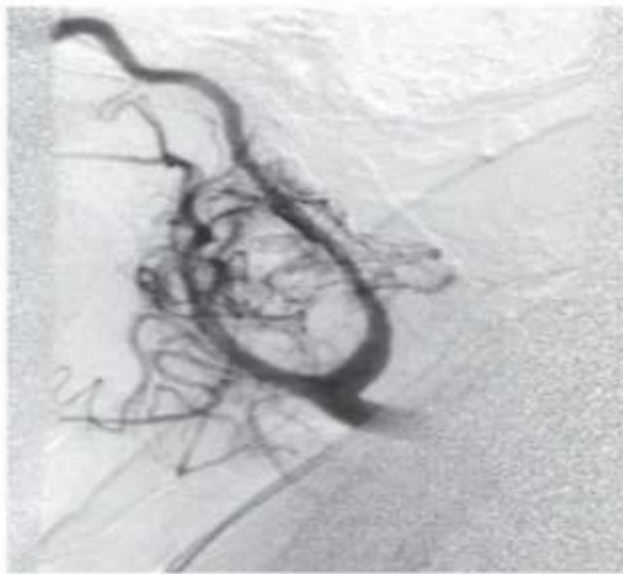


FIGURE 15.5 (A) A carotid body paraganglioma (CBP) in the left side of the neck of a 70-year-old man had been operated on years earlier, but the tumor was not successfully resected. (B) Carotid body paraganglioma from a different case is present in early arterial phase of carotid arteriography and causes a widening of carotid bifurcation with "lyre-like" splaying of both branches. Lateral view of carotid angiography.



1)benign :

A) paragangliomas:

A Sometimes found when a lump forms in the neck or procedure done for another reason

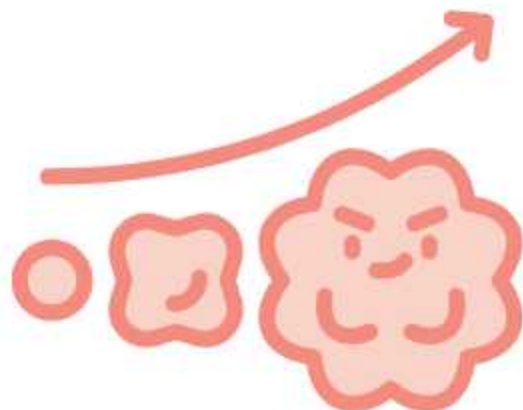
sign and symptoms : high Bp and headache.

Paragangliomas are vascular tumors arising from paraganglionic cells of the autonomic nervous system. These are classified as jugulotympanic, vagal, sinonasal, laryngeal, and carotid body (most common) tumors. Catecholamine production, more commonly associated with multiple or familial presentation, is rare (3%).

A Prognosis: 5 year survival rate of about 95%.

A Treatment is surgical excision with preoperative embolization.

B) Other benign tumors include lipomas, schwannomas, infiltrative fibromatosis, neurofibromas (associated with neurofibromatosis type I), and salivary gland neoplasms



Causes

2) Malignant:

The most common malignant neck mass in adults is metastatic SCC, and in children, lymphoma.

A) SCC of aerodigestive mucosa metastasizes to the neck at significant rates in oral cavity, nasopharynx, oropharynx, and supraglottic larynx primaries.

Prognosis: 5 year survival rate drops to less than 50%

The nasopharynx, tonsil, tongue, piriform fossa and supraglottic larynx must be carefully examined by panendoscopy for the primary growth before considering biopsy or any surgery on the neck. Investigation is further assisted by ultrasound and fine needle aspirate of the neck node.

management

Management

The management of malignant cervical lymph nodes depends on the overall treatment regime:

- if surgery is being used to treat the primary disease and the cervical nodes are palpable and >3cm, they may be excised with the primary lesion as part of a neck dissection;
- if radiotherapy or chemoradiotherapy is used initially with resolution of the primary tumour, but there is subsequent residual or recurrent nodal disease, then this situation will require cervical lymph node dissection.

Thyroid carcinoma

Incidental diagnosis on imaging can approach 30%.
Most patients are asymptomatic, but some may have dysphagia, difficulty breathing, and hoarseness

- Risk of malignancy is associated with older age, male sex, history of radiation exposure, and family history.



Ninety percent of thyroid carcinomas are differentiated; 85% of these are papillary carcinoma, 10% follicular, and 3% Hurthle cell. Tumor extent, completeness of resection, age, and metastases are important variables affecting prognosis



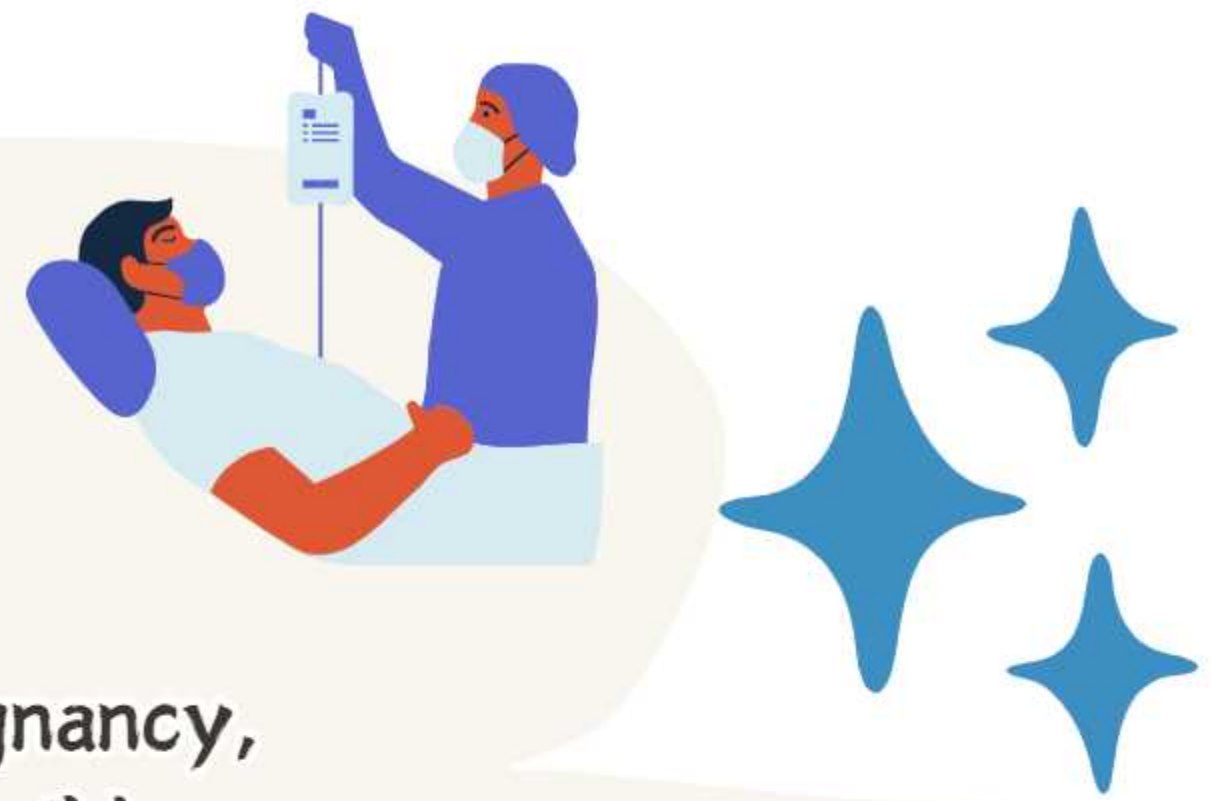
Multiple neck dissection methods and terms according to the case:



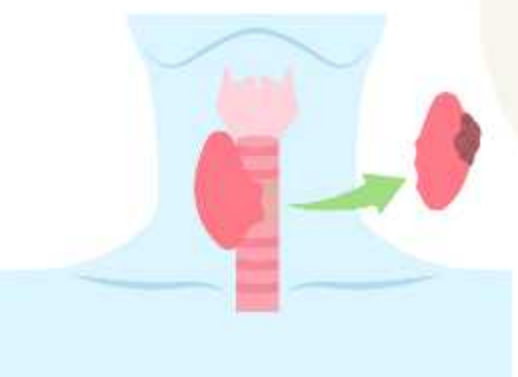
- Neck dissections are termed therapeutic for clinically palpable metastases or elective in the absence of clinical lymphadenopathy.
- Radical neck dissection includes resection of all lymph nodes, the sternocleido- mastoid muscle, internal jugular vein, and spinal accessory nerve.
- Modified radical neck dissection reduces morbidity by sparing one or more of these structures
- Selective neck dissection removes only nodal groups at greatest probability for containing metastases for a particular primary site.



Treatment

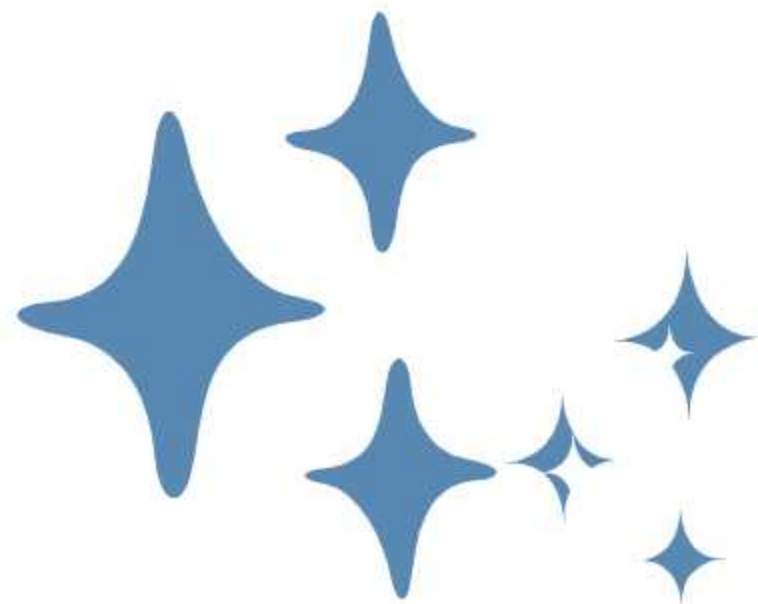
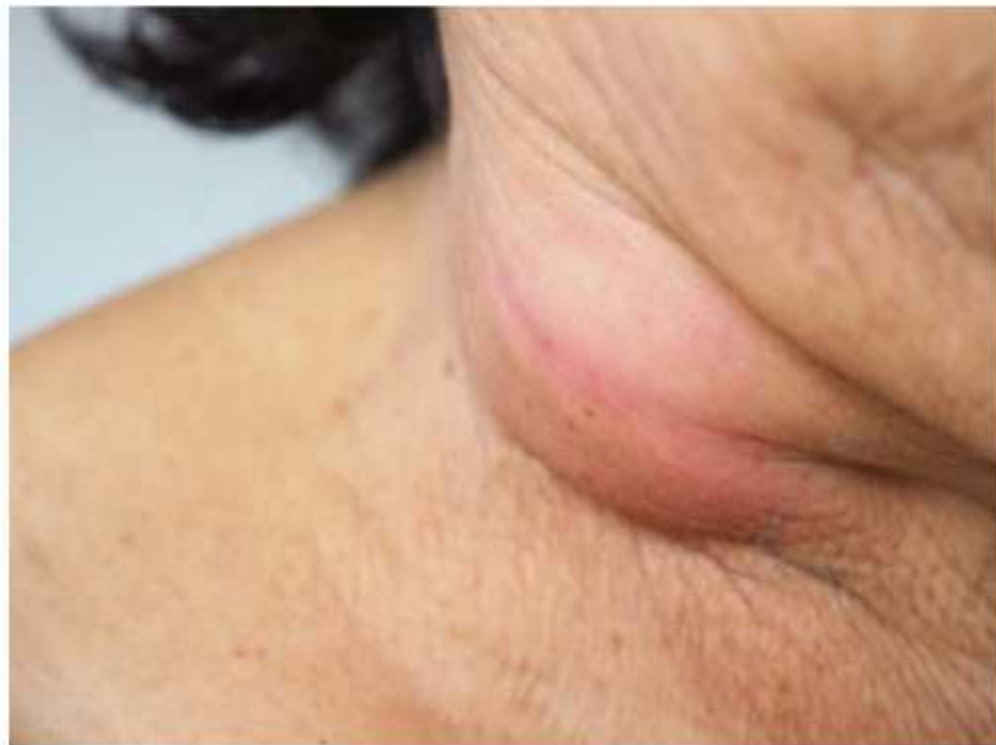


- Total thyroidectomy is indicated for FNAB diagnostic of malignancy, or in cases of suspected malignancy (suggestive FNAB or possibly high-risk patients)
- or biopsy-positive lateral neck nodes, initial comprehensive en-bloc neck dissection is preferred to node-plucking.
- Postoperative radioactive iodine (in tumors able to take it up) is indicated for gross extrathyroidal extension, metastases, and large (>4 cm) tumors
- Unresectable or anaplastic disease may undergo external beam radiation therapy. Chemotherapy is not routinely indicated.



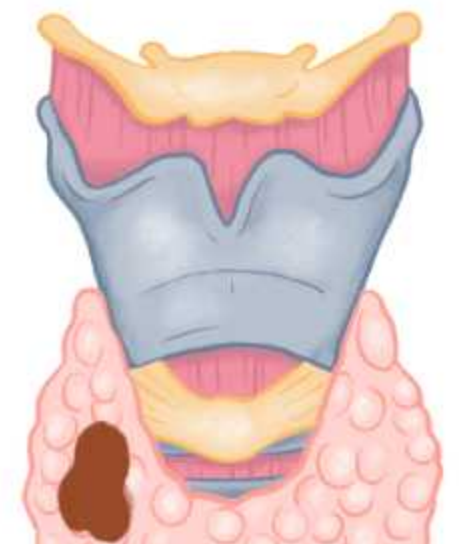
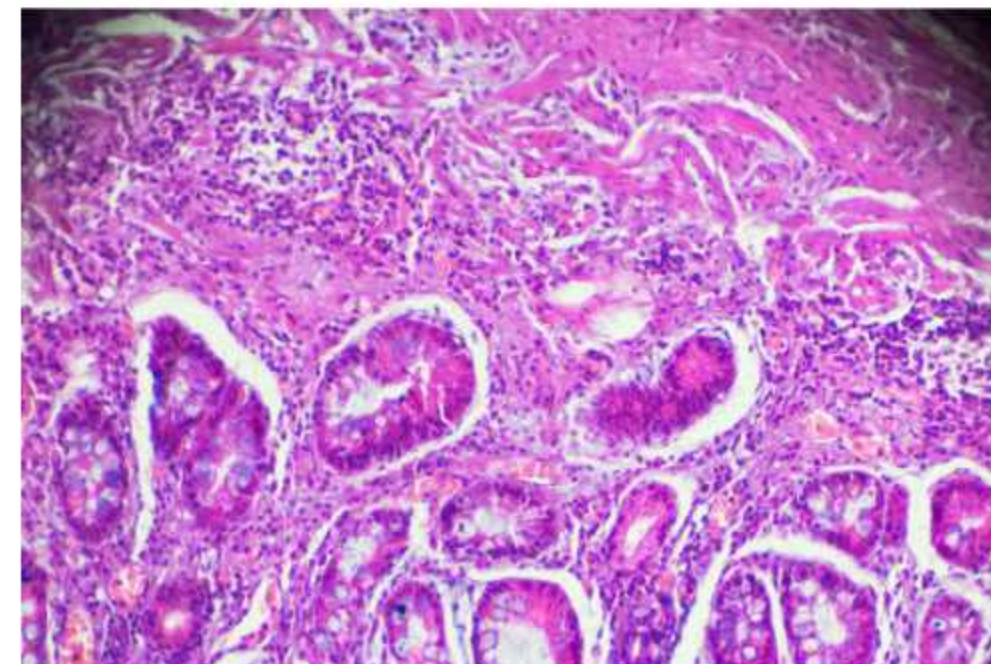
Lymphoma

- Up to 85% of Hodgkin's lymphoma presents as painless cervical lymphadenopathy, often with bulky, matted nodes
- Patients are commonly pruritic, and may have "B symptoms" (fevers, night sweats, weight loss)
 - surgery aids in diagnosis and is not curative
Treatment is chemotherapy and radiation.



Adenocarcinoma

- may be a primary salivary gland neoplasm or metastasis from the sinonasal airway, nasopharynx, salivary glands, and lungs



Case -scenario

A 58-year-old man presents with a right-sided neck mass that has been increasing in size over the past 3 months. He denies fever, chills, or recent weight loss. He also denies sore throat, difficulty swallowing, changes in his voice, or difficulty breathing. Past medical history is significant for hypertension and gastroesophageal reflux disease (GERD). Social history is significant for 20 pack-years of smoking. He averages two alcoholic drinks every day. Physical exam of the oral cavity/oropharynx including close visualization of the tongue, tonsils, and floor of the mouth reveals no obvious lesions that are suspicious for malignancy. Examination of the neck reveals a 2 x 3-cm firm right-sided neck mass that is poorly mobile, non-erythematous, and not tender to palpation.



Thank you for your attention

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