

Head, Face, and Neck including Regional Lymphatics



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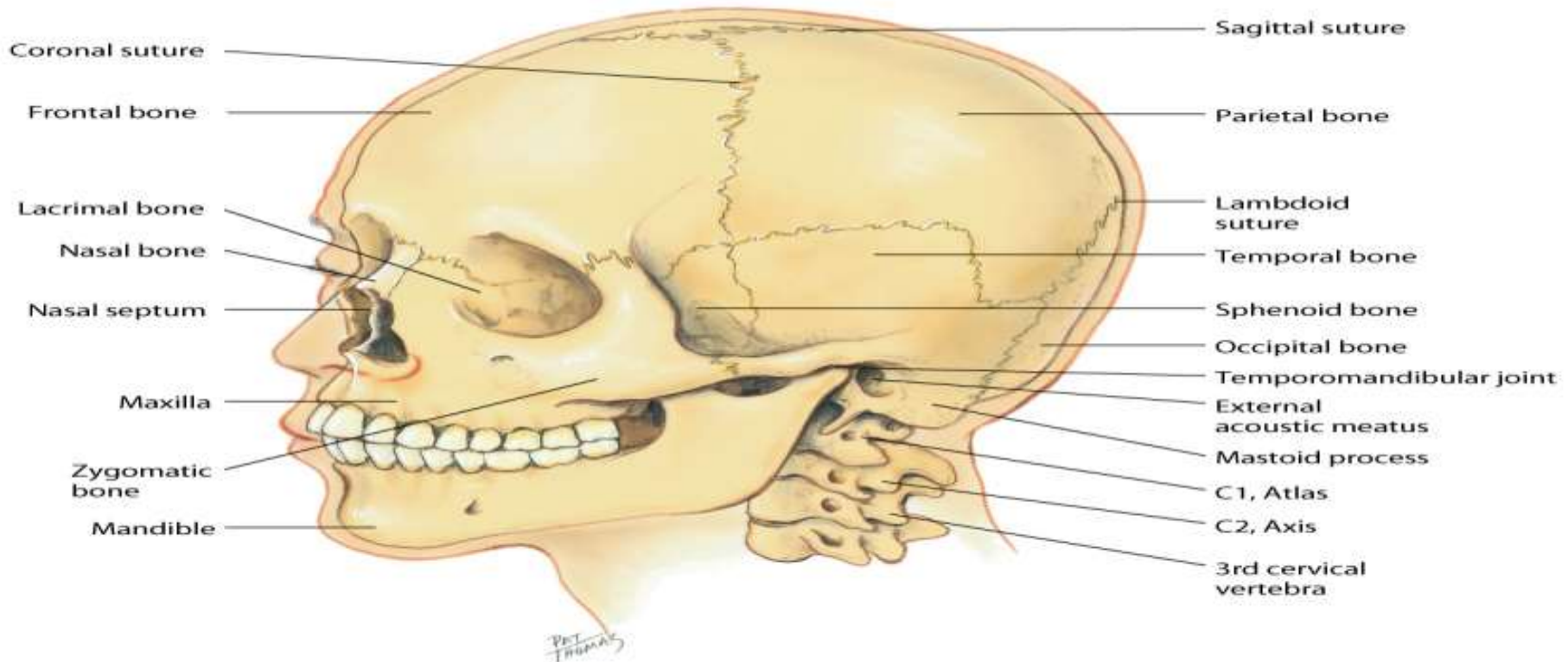
Structure and function

Cranial bones

- frontal
- parietal
- occipital
- Temporal

Facial bones

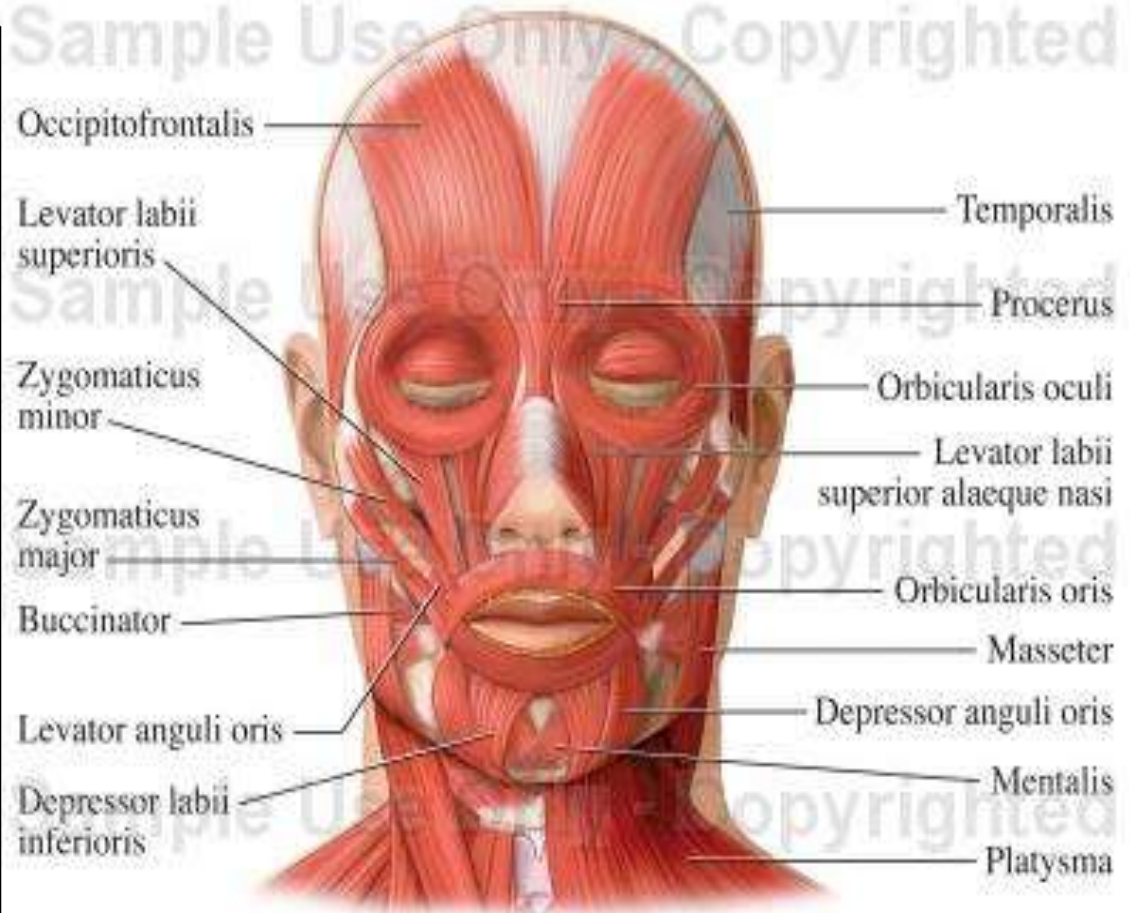
- Nasal bone
- Zygomatic bone
- Maxilla
- mandible



Structure and function

□ **Facial Muscles**

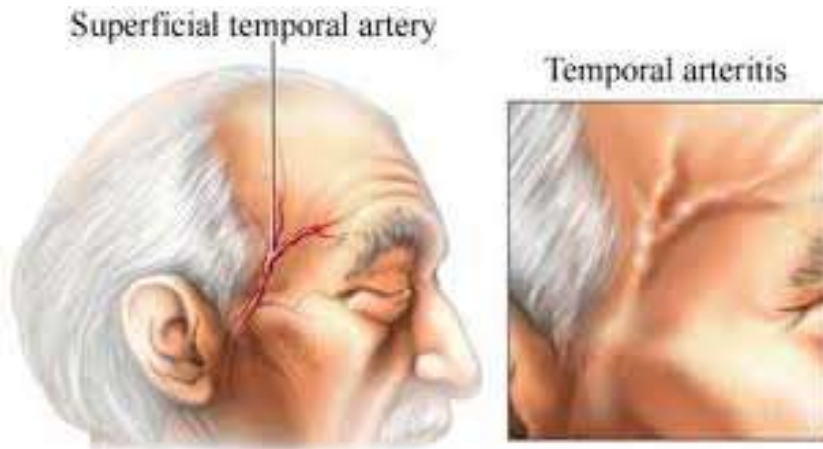
- Frontalis
- Temporalis
- Orbicularis oculi
- Nasolabial fold
- Orbicularis oris
- Zygomaticus
- Masseter
- Sternomastoid
- Trapezius



Structure and function

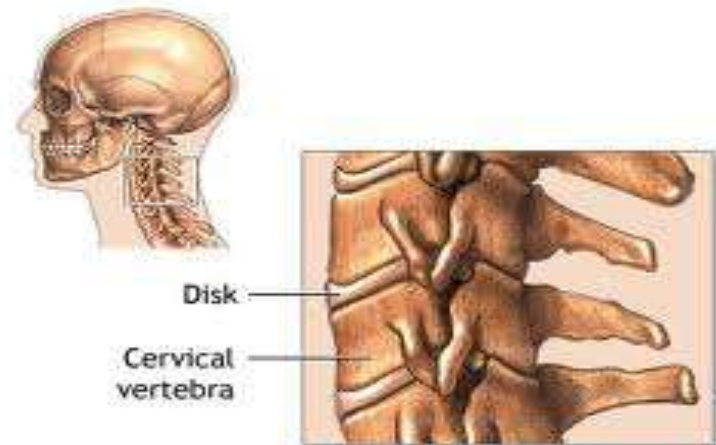
The temporal artery

lies superior to the temporalis muscle .it is pulsation is palpable anterior to the ear



The cervical vertebra

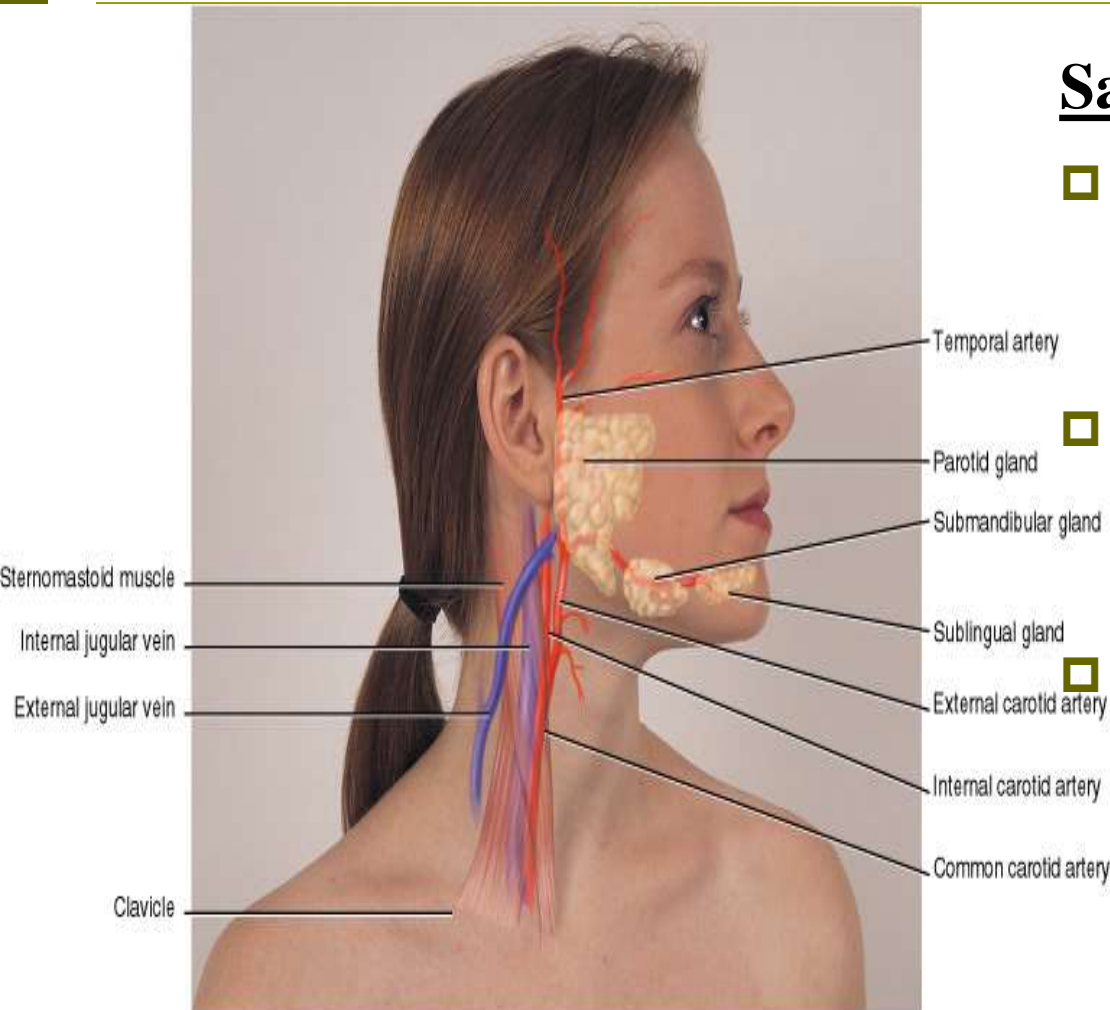
- ❑ C1 the atlas
- ❑ C2 the axis
- ❑ C7 has the long spinous process



Structure and function

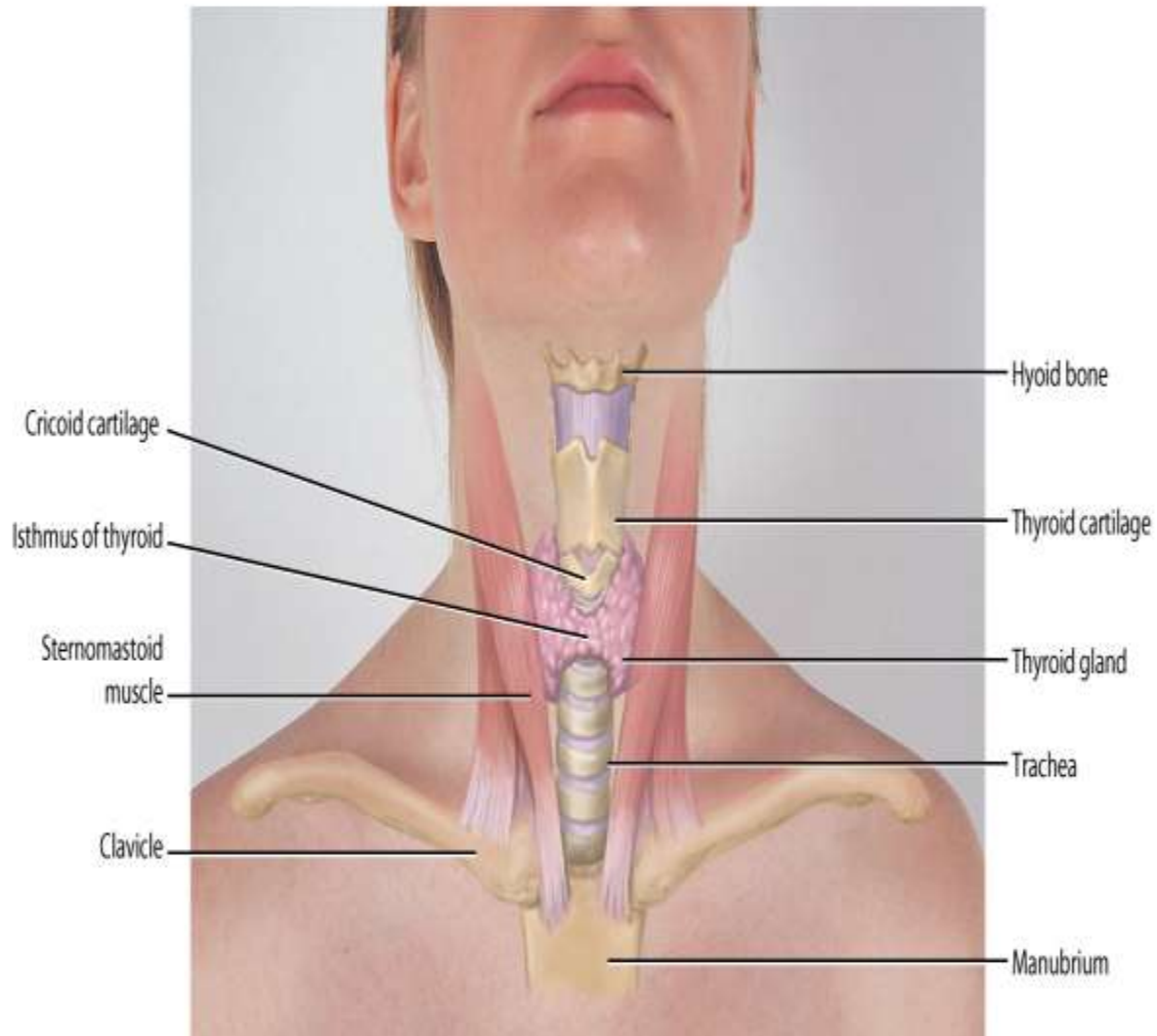
Salivary glands

- ❑ Parotid glands are in the cheeks over the mandible, anterior to and below the ear
- ❑ Submandibular glands are beneath the mandible at the angle of the jaw
- ❑ Sublingual glands are in the floor of the mouth

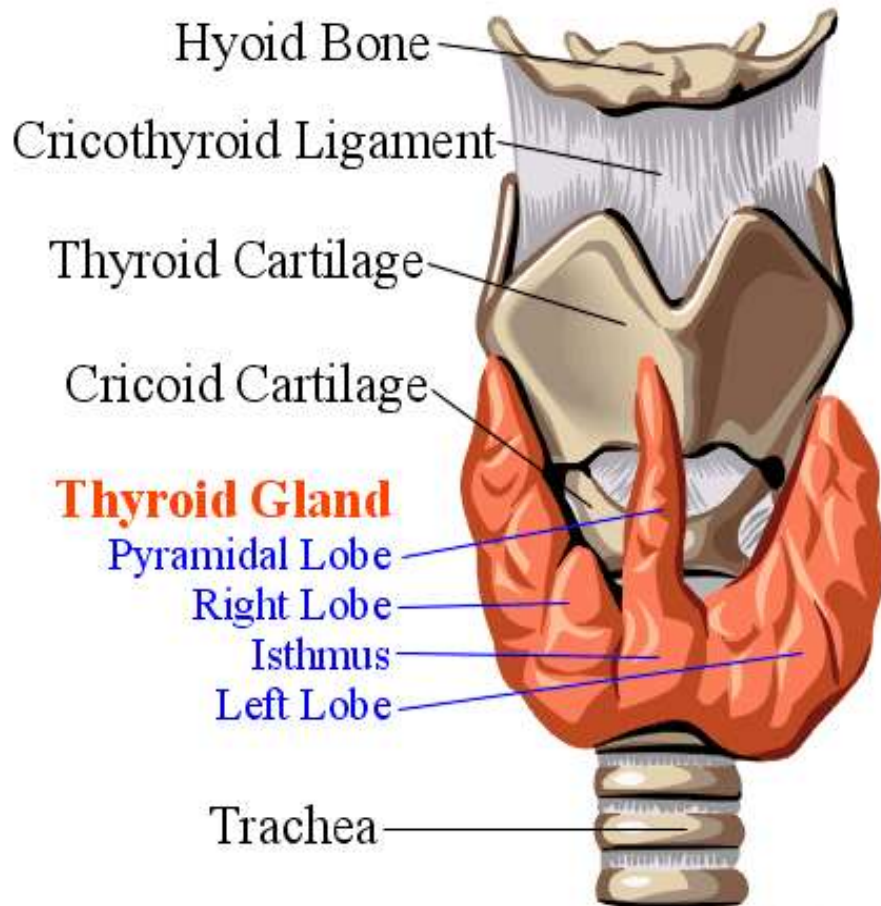


Anatomy: Neck

- ❑ Neck muscles
 - Sternomastoid
 - Trapezius
 - Anterior and posterior triangles
- ❑ Thyroid gland
- ❑ Trachea
- ❑ Cervical lymph nodes



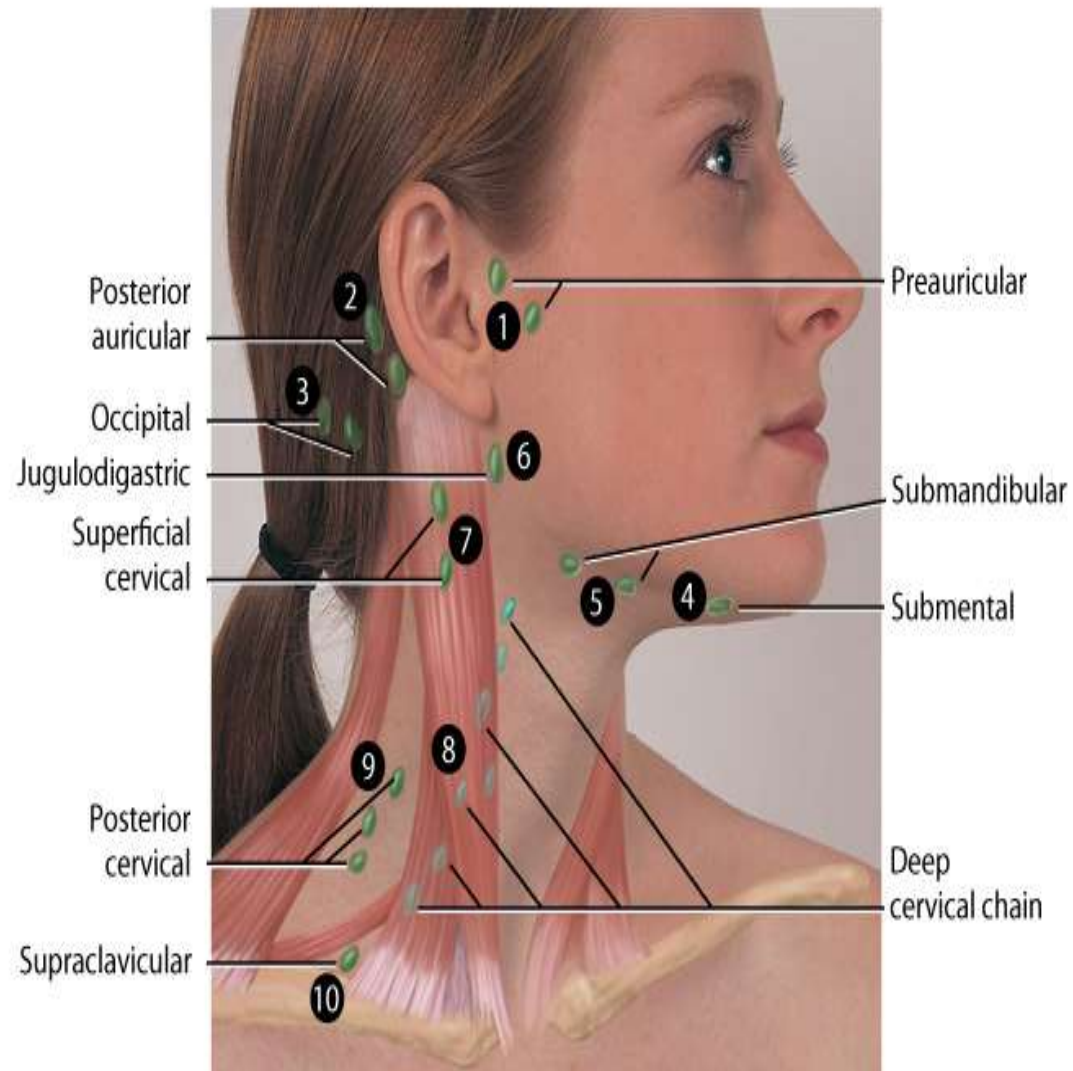
Thyroid Gland



- ❑ TG consists of two lateral lobes.
- ❑ Left lobe is frequently larger than the right.
- ❑ Primary function: control the metabolic rate with T3 and T4

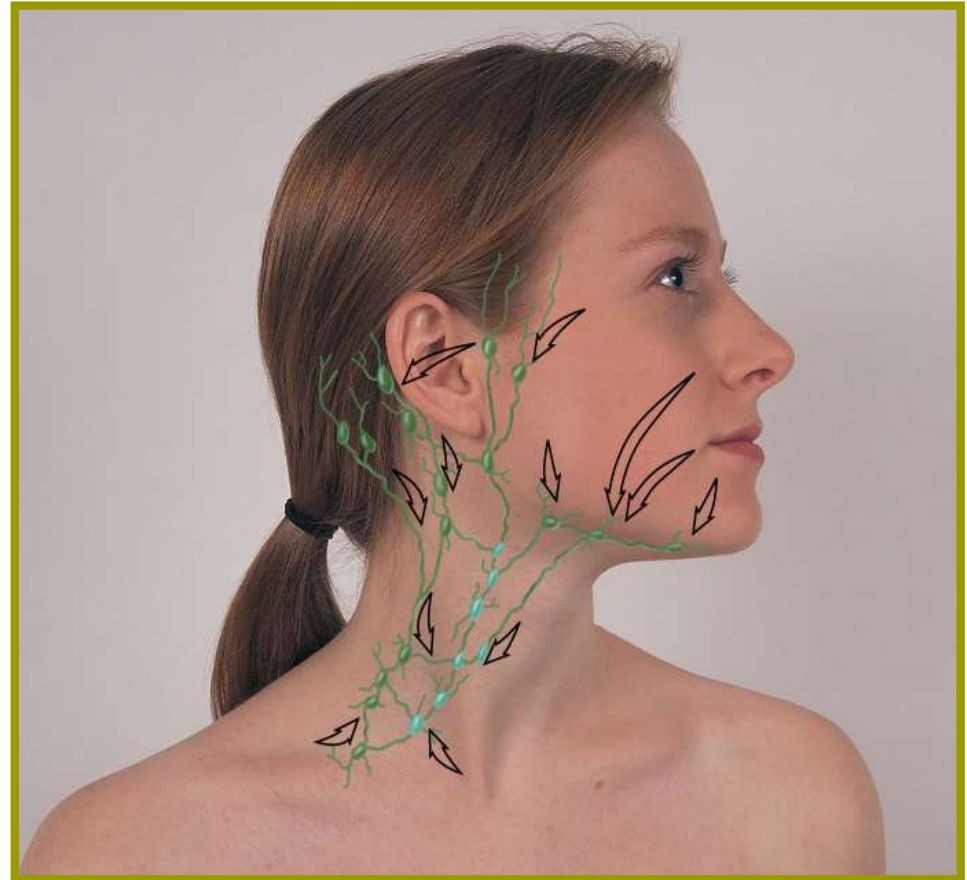
Anatomy: Lymph Nodes

- Preauricular
- Posterior auricular
- Occipital
- Submandibular
- Submental
- Jugulodigastric
- Superficial cervical / deep cervical
- Posterior cervical chain
- Supracalvicular



Anatomy: Lymph Nodes

Direction of the
drainage patterns of
the lymph nodes



Health History Questions

- ❑ Headache
- ❑ Head injury
- ❑ Dizziness
- ❑ Neck pain, limitation of motion
- ❑ Lumps or swelling
- ❑ History of head or neck surgery

Assessment: Head

□ Inspection:

- Symmetry
- Size and shape
- Any unusual movement

- Palpate and auscultate temporal arteries
 - thickening, tenderness, bruit

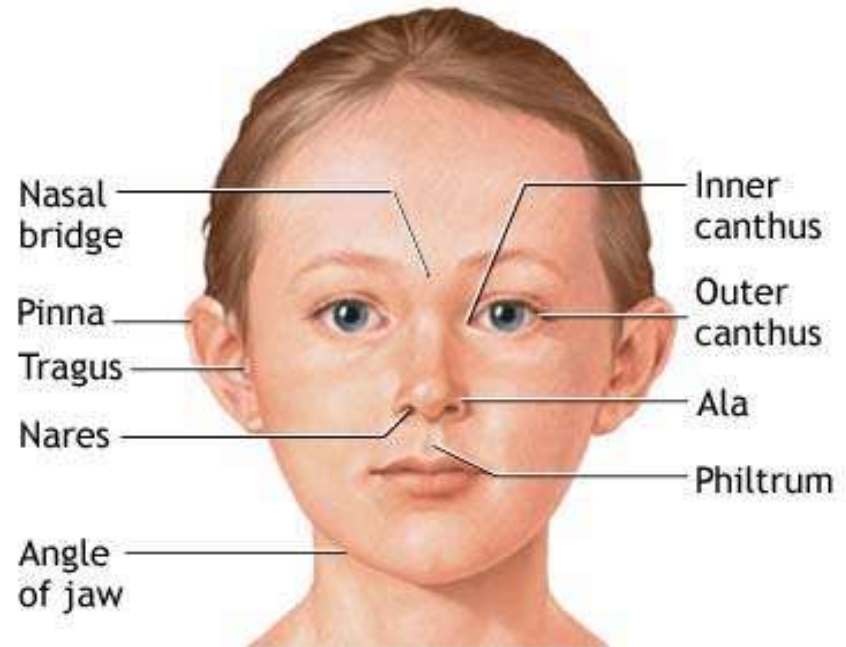
□ Palpation of scalp

- Texture and distribution of hair
- Tenderness, nodules

Assessment: Face

□ Inspection

- Symmetrical of eyebrows, sides of mouth
- Facial expression
- Color, condition of skin
- Cranial Nerve VII
- Open/close jaw: crepitus, pain



ADAM.

Sample Charting

- Subjective:

- Denies any unusually frequent or severe headache, no history of head injury, dizziness or syncope.

- Objective:

- Head: normocephalic, no lumps, no lesions, no tenderness
- Face: symmetric, no drooping, no weakness, no involuntary movement

Examples of faces abnormalities



hydrocephalus



Acromegaly



Nephritic syndrome



Parotid gland enlargement



Myxedema

Assessment: Neck

- ❑ Inspection:
 - Symmetry: trachea centered
 - Stability

- ❑ Range of motion:
 - R ear to R shoulder
 - L ear to L shoulder
 - Chin to sternum
 - Hyperextend neck

Assessment: Neck

- ❑ Inspect and palpate neck for trachea (should be at midline), thyroid, lymph nodes.
- ❑ Auscultate carotids for bruits (bell)
 - If bruit is heard, palpate for carotid thrill
 - Palpate one side at a time
- ❑ Perform ROM on neck (active and passive)

The Trachea

- ❑ Inspect that the trachea is in midline of the neck
- ❑ Palpate for tracheal shift
 - Place your index finger in the sternal notch and slip it off to each side
 - ❑ The space should be symmetrical on each side



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Assessment: Thyroid Gland

- ❑ Inspect:
 - Swallow
- ❑ Palpation:
 - Lobes usually not palpable
 - Anterior/posterior, swallow (rises)
- ❑ Auscultation:
 - Use bell to hear bruit sound.

Assessment: Thyroid Gland

- ❑ General approach/Technique:
 - Ask client to swallow from a glass of water during exam, and use adequate lighting to enhance visualization
- ❑ Examination and documentation focus
 - Size
 - Shape
 - Consistency
 - Tenderness
 - occurrence of vascular sounds (bruit)

PE of the Thyroid Gland (TG): Procedure

- Inspect the area of the anterior neck containing the TG
 - Ask client to tilt head back slightly and swallow, note the movement of the trachea and other cartilage
- Normal finding:
 - TG usually too small to be observed
- Deviations from normal
 - Goiter

Palpation of TG (Anterior Approach)

- ❑ Stand facing the client: neck should be relaxed but held in slight extension
- ❑ Use pads of your first and second fingers and locate thyroid isthmus below cricoid cartilage
- ❑ Ask person to swallow (note rubbery texture on palpation)
- ❑ Palpate thyroid lobes
- ❑ Notes for any bulging or masses
- ❑ Palpate left and right thyroid lobes

Palpation of TG (Posterior Approach)

- ❑ Stand behind the client (seated with neck slightly flexed)
- ❑ Rest your thumbs the back of the client's neck and lightly place your fingers below the cricoid cartilage
- ❑ Palpate the middle isthmus as the client swallows
- ❑ Ask client to turn the head slightly to the side and palpate lobes. Use your fingers on the opposite site to displace the gland in a lateral direction
- ❑ Ask the client to swallow as you examine the lobe, repeat the same procedure with the other lobe

Palpation of TG (Posterior Approach)



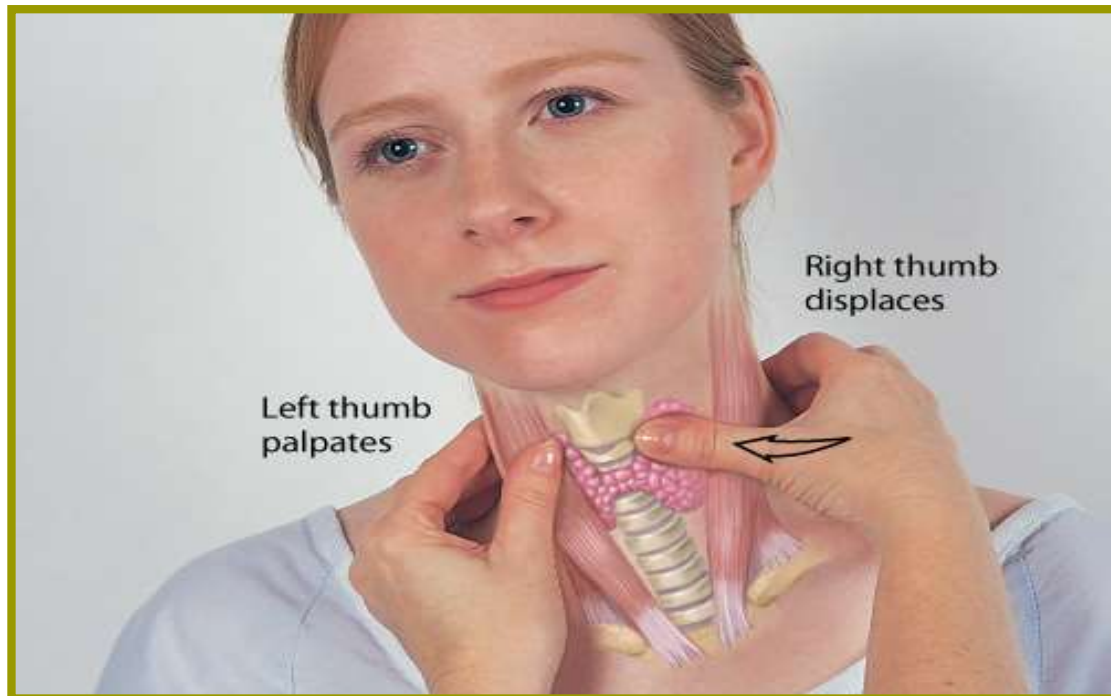
Place fingers on one lobe and push thyroid cartilage to the opposite side.

Have patient swallow

(Posterior Approach)



(Anterior Approach)



Palpation of TG (Anterior and Posterior Approach)

- ❑ Normal findings:
 - Size and shape
 - Rubbery texture
- ❑ Deviations from normal
 - Goiter
 - Firm nodule: usually painless (malignant)
 - Pain on palpation may be associated with inflammation, which often radiates to ears

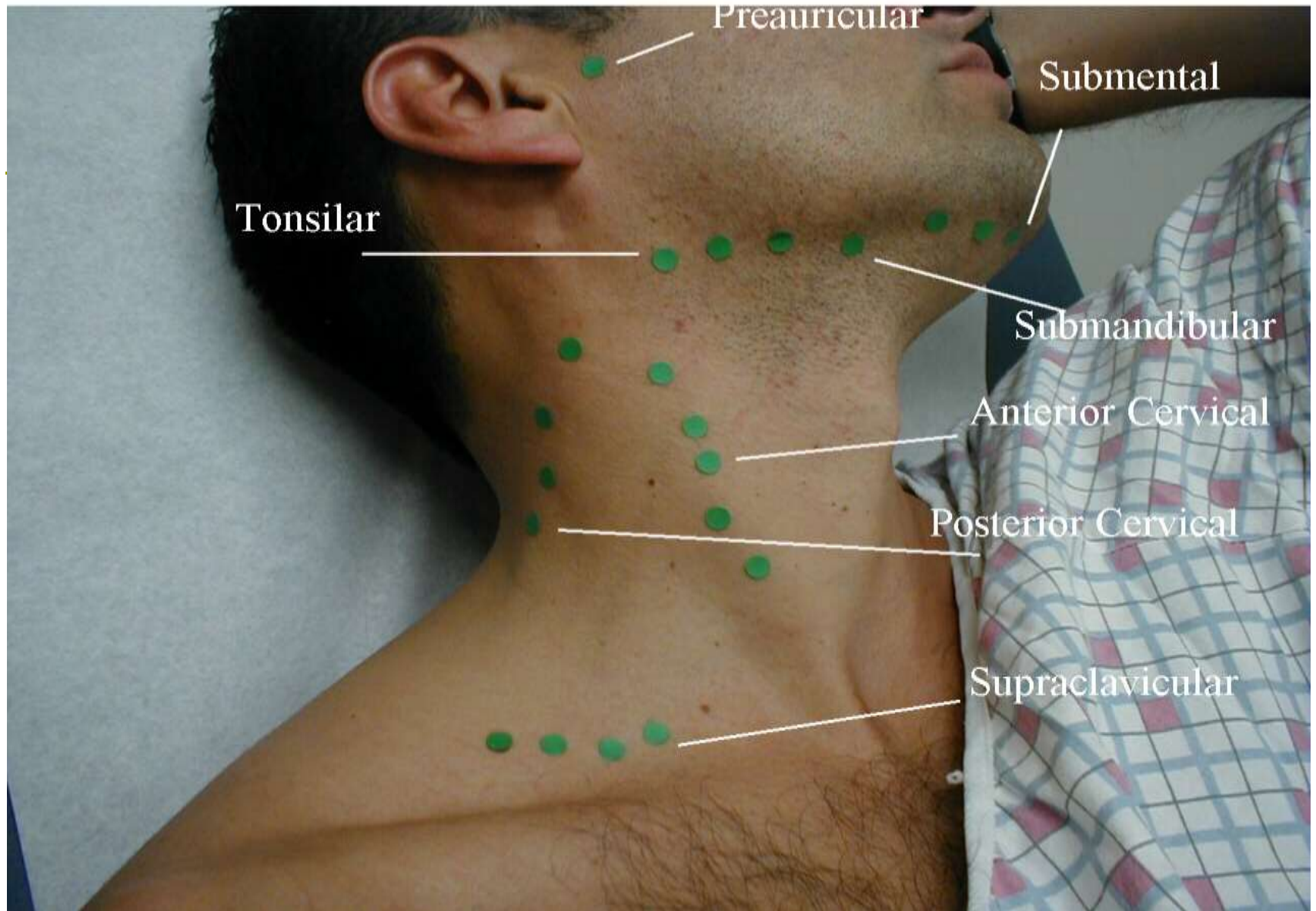
Auscultation of TG (optional)

- ❑ Sites for auscultation:
 - Both lobes of TG
 - Use bell of the stethoscope

- ❑ Deviations from normal
 - Bruit, which occasionally accompanied by a thrill

Assessment: Lymph Nodes

- ❑ 10 sets of nodes
 - Pads of 2nd, 3rd, 4th fingers
 - Palpate both sides except carotid
 - Location, size, shape, number of nodes, surface characteristics, consistency, tenderness, mobility/fixation, & signs of inflammation.



Physical Examination of The Lymphatic System

- ❑ General approach/Technique:
 - Should be incorporated into head-to-toe assessment
 - Superficial lymphatic system is examined by inspection and palpation
 - Location of lymph nodes varies among individual clients
 - Encourage client to report tenderness when palpating lymph nodes
 - Palpable lymph nodes should be distinguished from underlying tissue
 - Lymph nodes could be rolled up and down, side to side between examiner's fingers

Physical Examination of The Lymphatic System

- ❑ General approach/Technique:
 - Small palpable lymph nodes are common
 - Malignancies may result in palpable lymph nodes: non-tender, non-mobile, irregularly shaped, firm, rubbery or nodular – these require further evaluation
- ❑ Examination and documentation focus:
 - Inspection: location of any visible nodes, presence of swelling or red streaks
 - Palpation: nodes are described in terms of location, size (mm or cm), consistency, mobility and tenderness. Determine if it was noticed first by the client

Head and Neck Lymphatic System Assessment Findings

- ❑ Normal findings:
 - Superficial nodes not palpable, and not tender on palpation

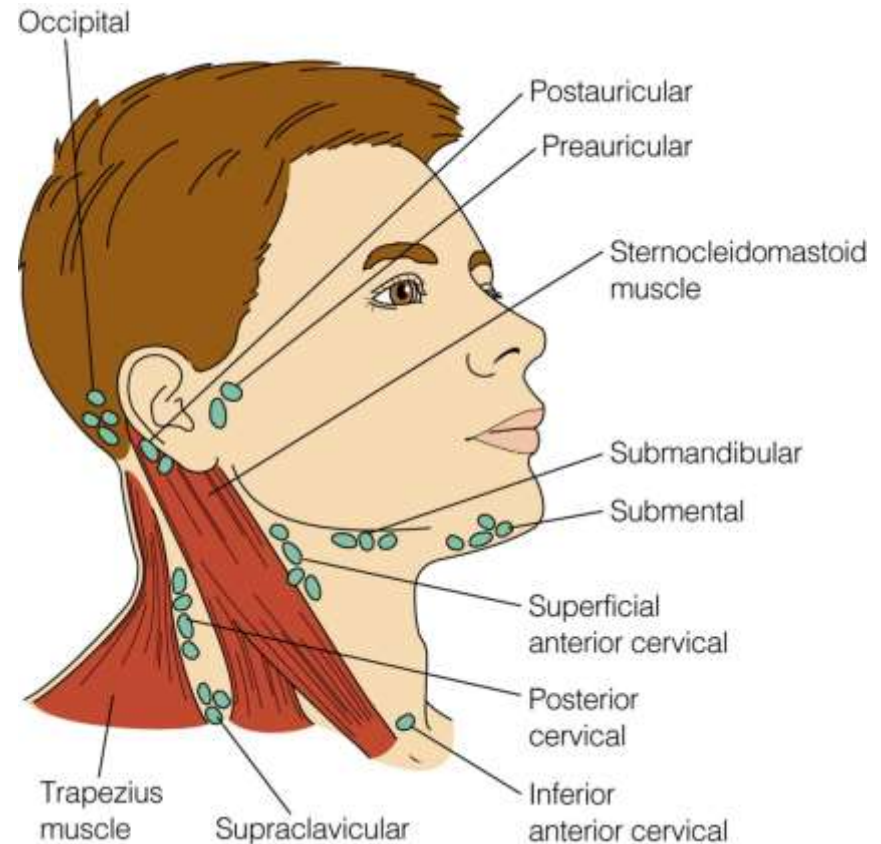
- ❑ Deviations from normal:
 - Greater 1 cm in adults
 - Presence of infection (nodes are enlarged, warm and tender)
 - Sore throat infections
 - Otitis media

Sample Charting

- ❑ Subjective data:
 - no neck pain, no lumps or swelling, no limitation of motion, no lymph nodes swelling
- ❑ Objective data:
 - Supple with full ROM, no pain, symmetric, no lymphadenopathy or masses. Trachea midline, thyroid not palpable. No bruits.

Head and Neck Lymphatic System

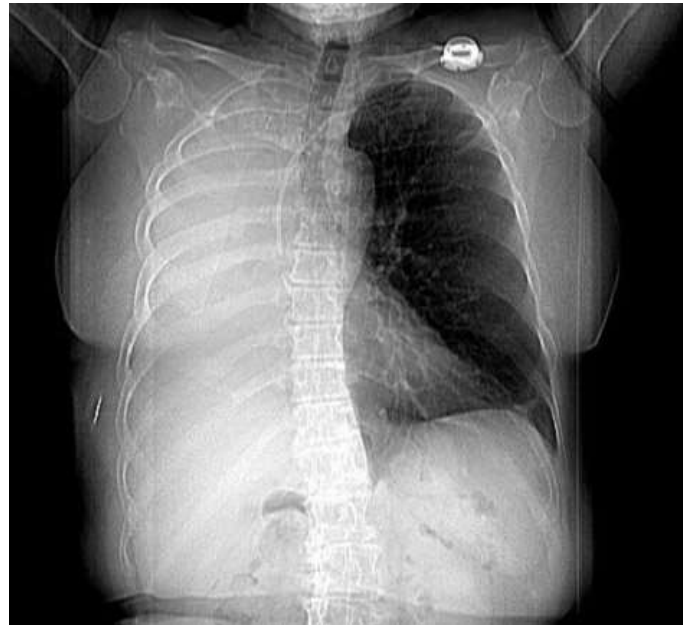
- ❑ Nursing Diagnoses
 - Pain related to swelling and inflammation
- ❑ Clinical problems
 - Lymphadenopathy (local or systemic)



Examples of abnormalities



Goiter



tracheal deviation

Thank you

Have a wonderful time 😊