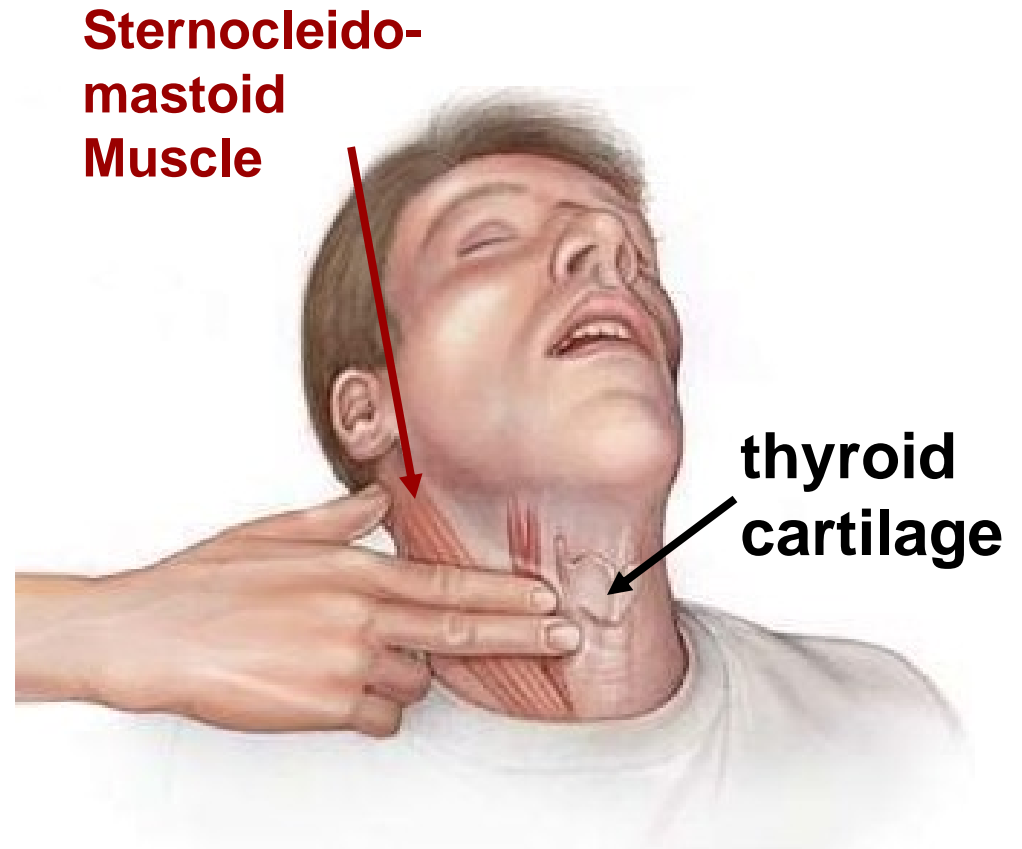
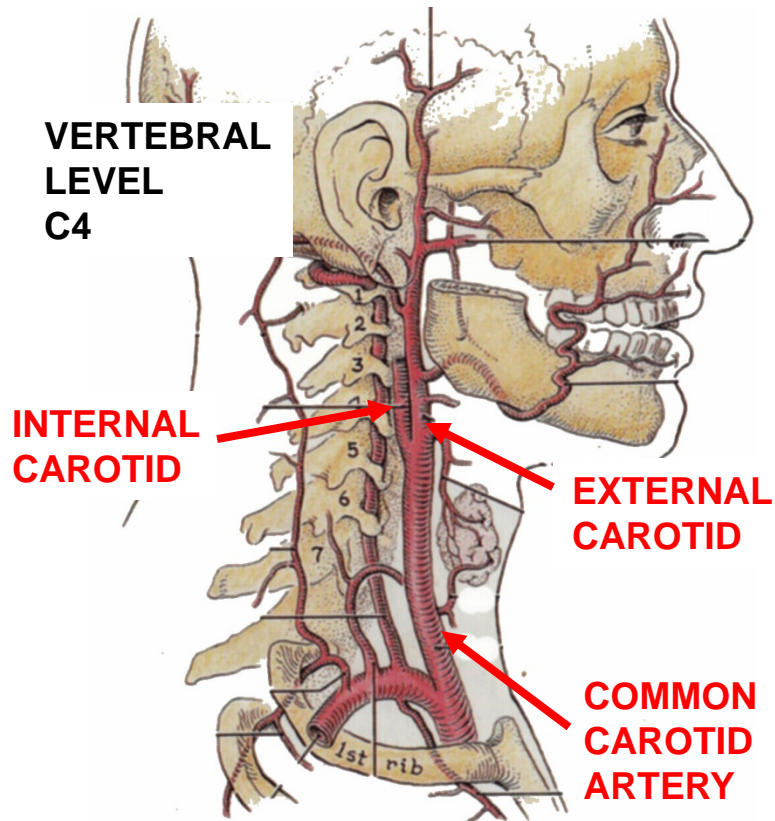


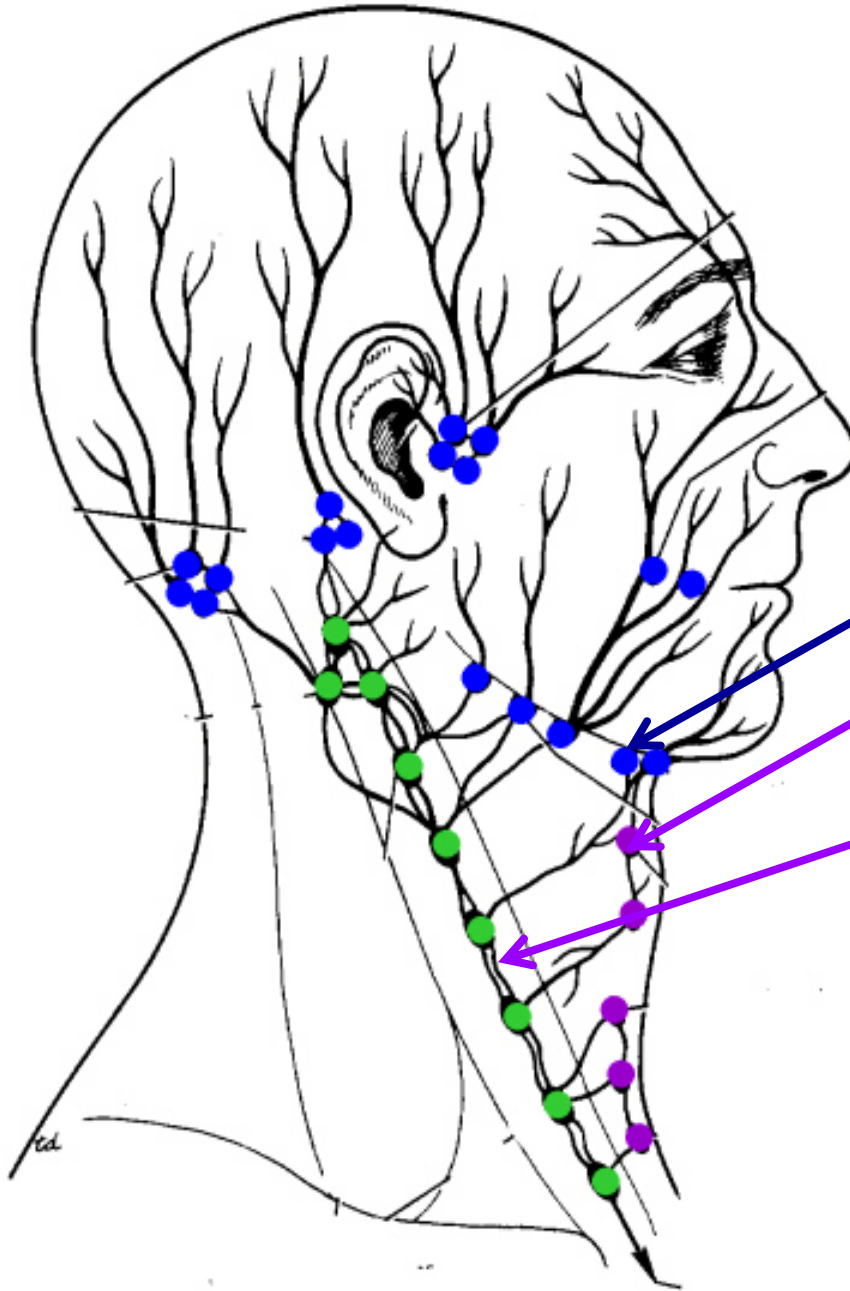
**REVIEW/PREVIEW OF HEAD
AND NECK ANATOMY FOR
ENT EXAM - 2019**

PALPATE CAROTID ARTERY: AT LEVEL OF CAROTID BIFURCATION



PALPATE CAROTID BIFURCATION: ANTERIOR TO STERNOCLEIDOMASTOID MUSCLES AT UPPER BORDER OF THYROID CARTILAGE (VERTEBRAL LEVEL C4)

Anatomy: Overview Lymph Nodes



- Lymph nodes are named for their position

- Three groups

- Two arranged as rings that drain to chain

Superficial Ring;

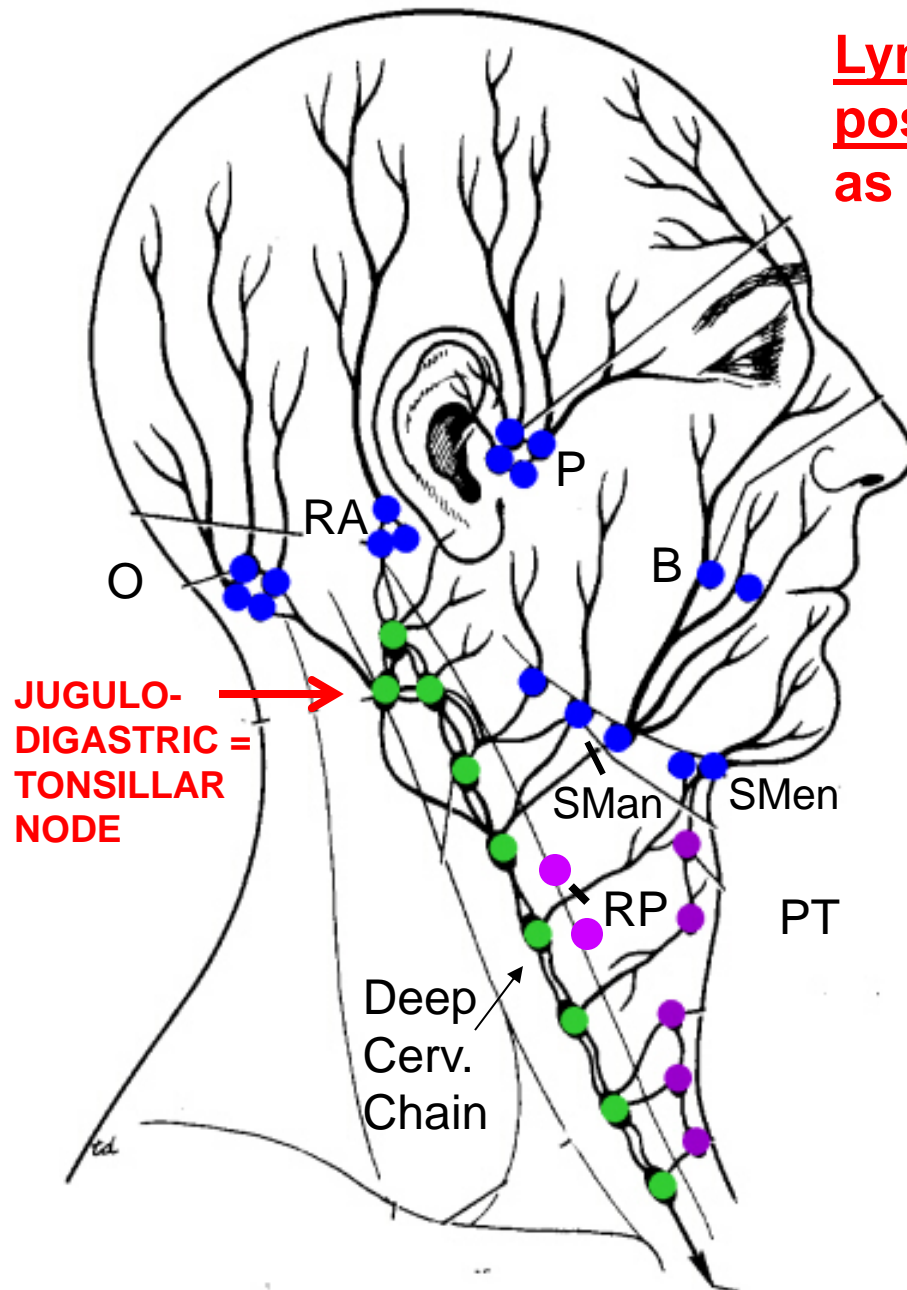
Deep Ring (not palpated)

Deep cervical chain- along Internal Jugular vein; some named (ex. Tonsillar node)

All Lymph from Head drains to Jugular lymph trunk - to Right lymphatic duct or Thoracic duct

Anatomy: Lymph Nodes

Lymph nodes are named for their position; three groups (two arranged as rings; drain to chain)



A. Superficial Ring;
Submental, Submandibular,
Buccal, Parotid, Retro-
auricular, Occipital nodes

B. Deep Ring: Pretracheal,
Retropharyngeal nodes

C. Deep cervical chain-
along Internal Jugular vein;
receive lymph from all
above nodes, **Some named**
(ex. Tonsillar node)

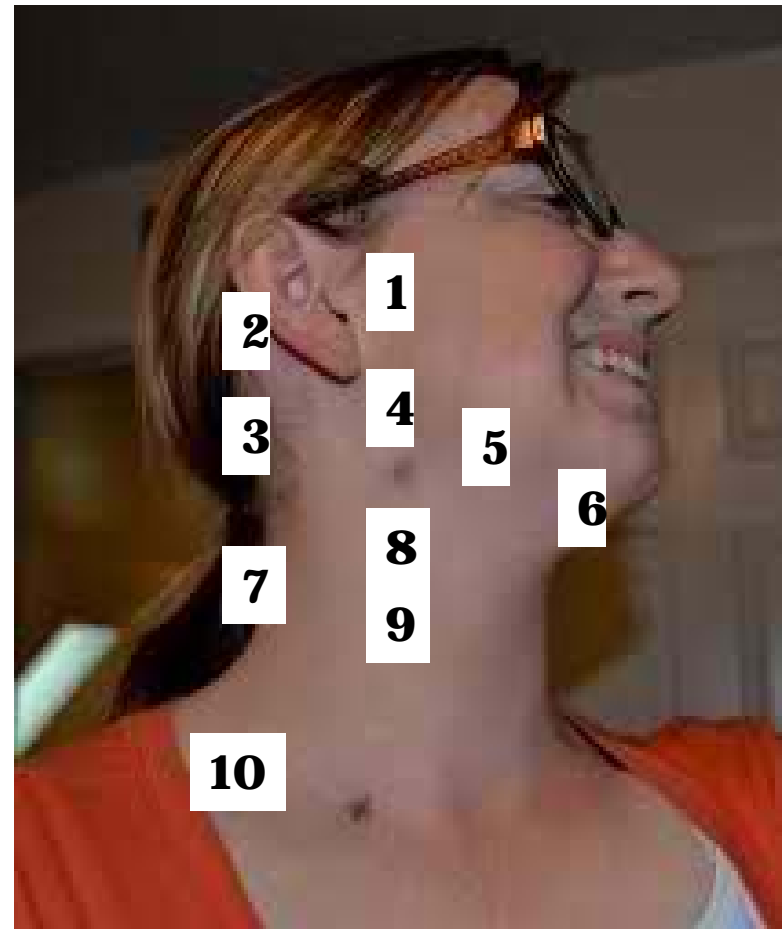
D. Jugular lymph trunk - to
Right lymphatic duct or
Thoracic duct

ENT Exam: Palpate Lymph Nodes

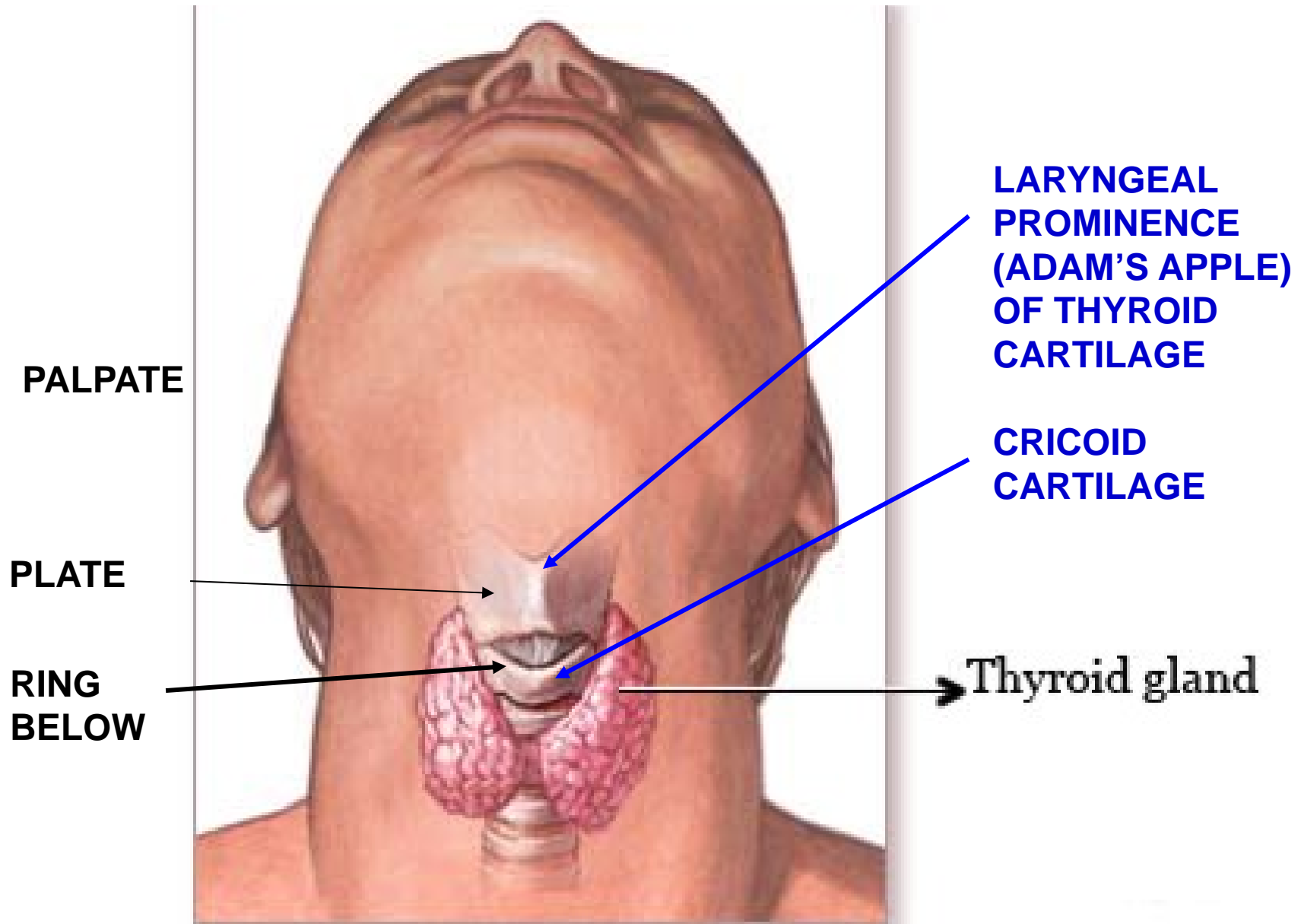
Lymph Nodes (10)

- 1 - Periauricular = Parotid (in front of the ear)
- 2 - Posterior auricular = **Retroauricular** (behind the ear)
- 3 - Occipital (base of skull)
- 4 - **Tonsillar (angle of jaw)**
- 5 - Submaxillary = **Submandibular** (mid-jaw)
- 6 - Submental (under chin)
- 7 - Posterior cervical (back of neck)
- 8 - Superficial cervical
- 9 - Deep cervical
- 10 - Supraclavicular

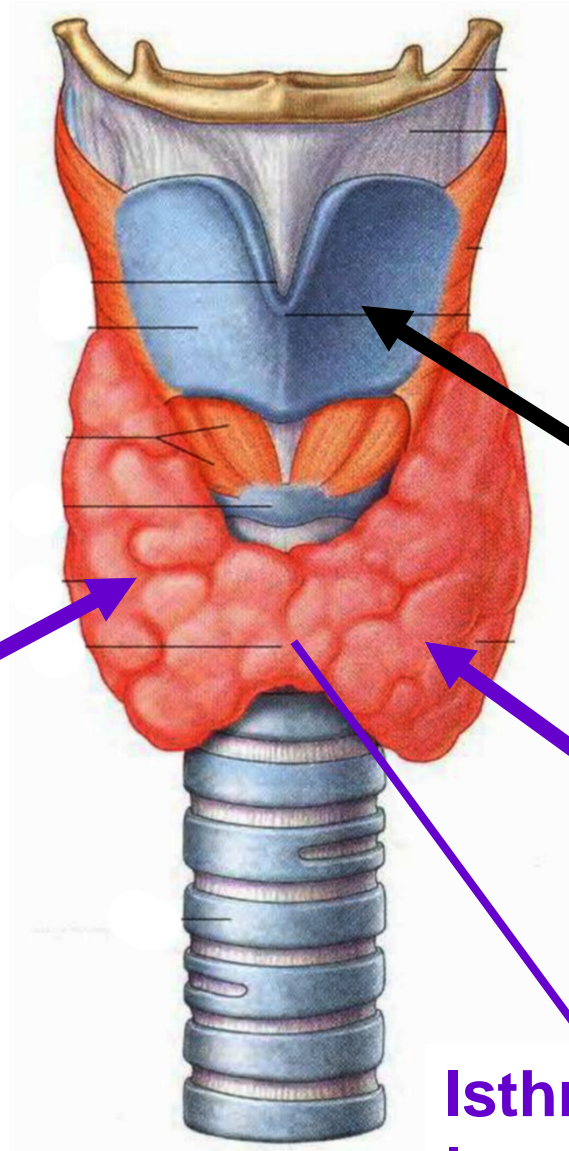
Note: Clinical terms for specific lymph nodes vary and can differ from anatomical terms.



Anatomy: Thyroid Gland



Anatomy: Thyroid Gland



THYROID GLAND

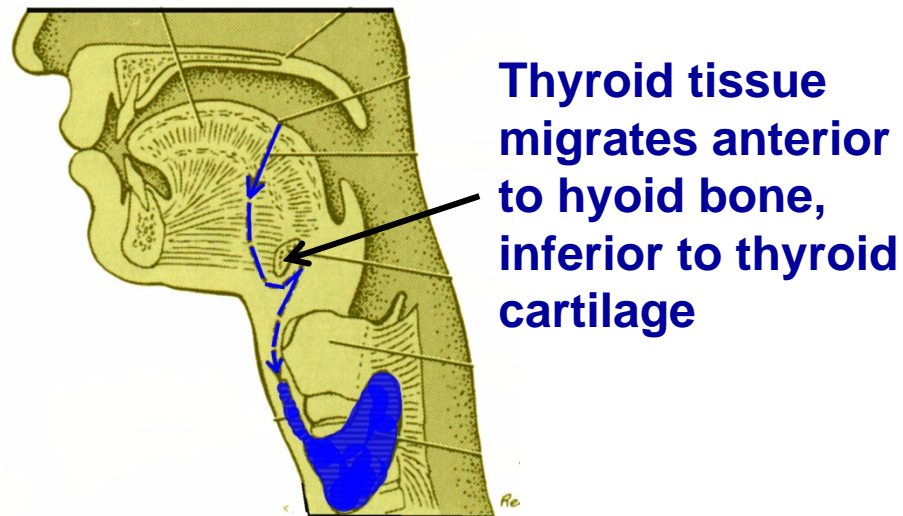
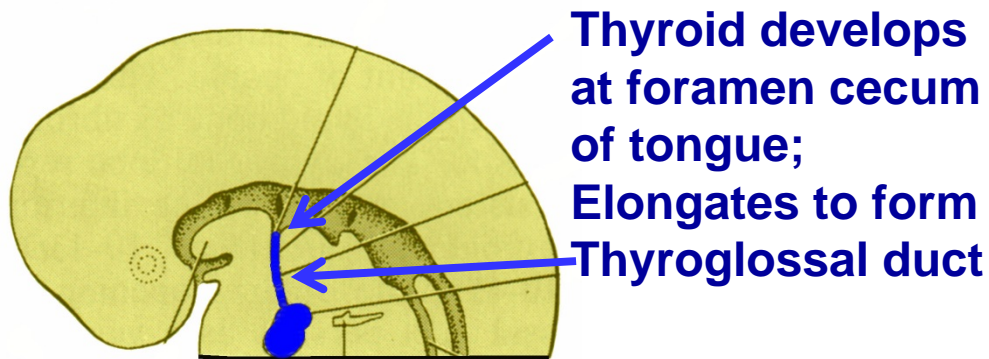
Two Lateral Lobes - inferior to and on sides of Thyroid cartilage

Lateral Lobe

Lateral Lobe

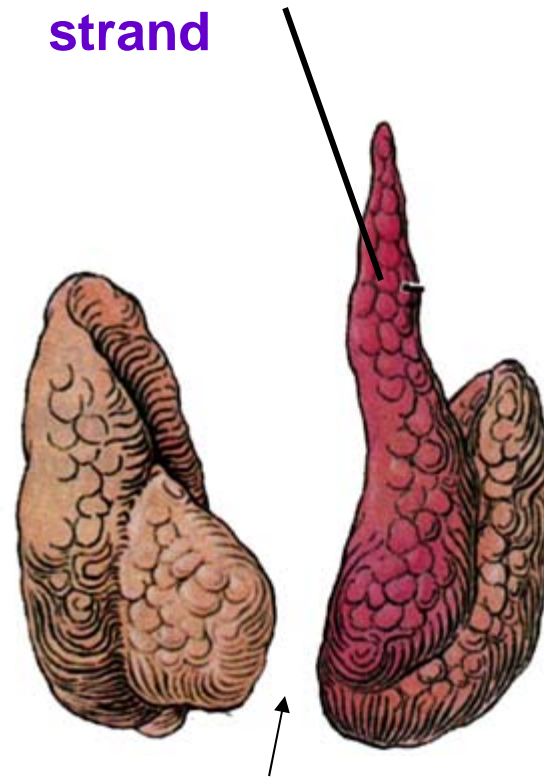
Isthmus - connects Lateral Lobes - located below cricoid cartilage

Development, Normal Variations: Thyroid Gland



Normal variations common

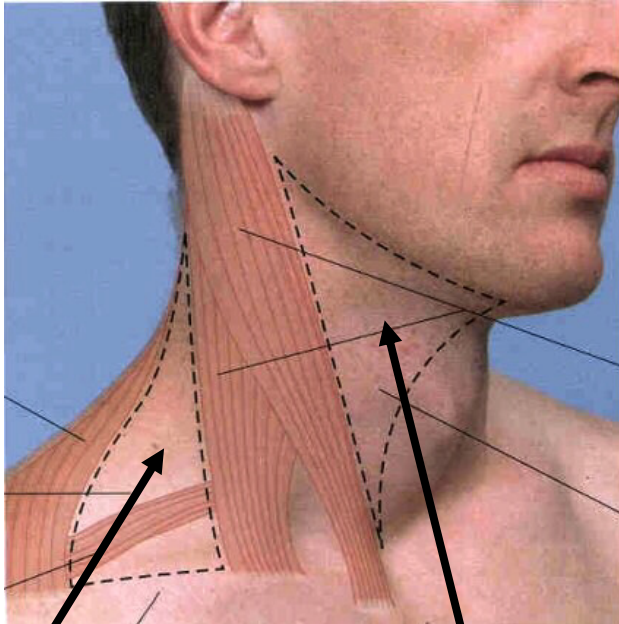
1) Pyramidal lobe - when present often attached to hyoid bone by fibrous strand



2) Absence of Isthmus

ENT: PALPATE THYROID GLAND

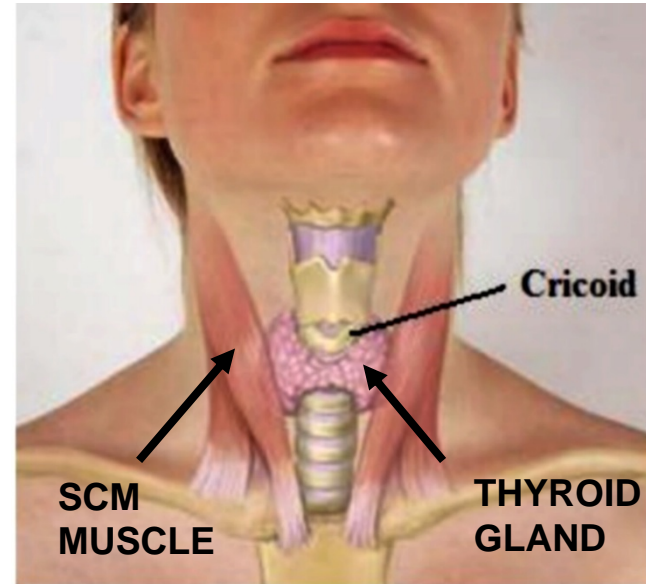
**Sternocleidomastoid (SCM)
defines areas in Neck**



**POSTERIOR
TRIANGLE**

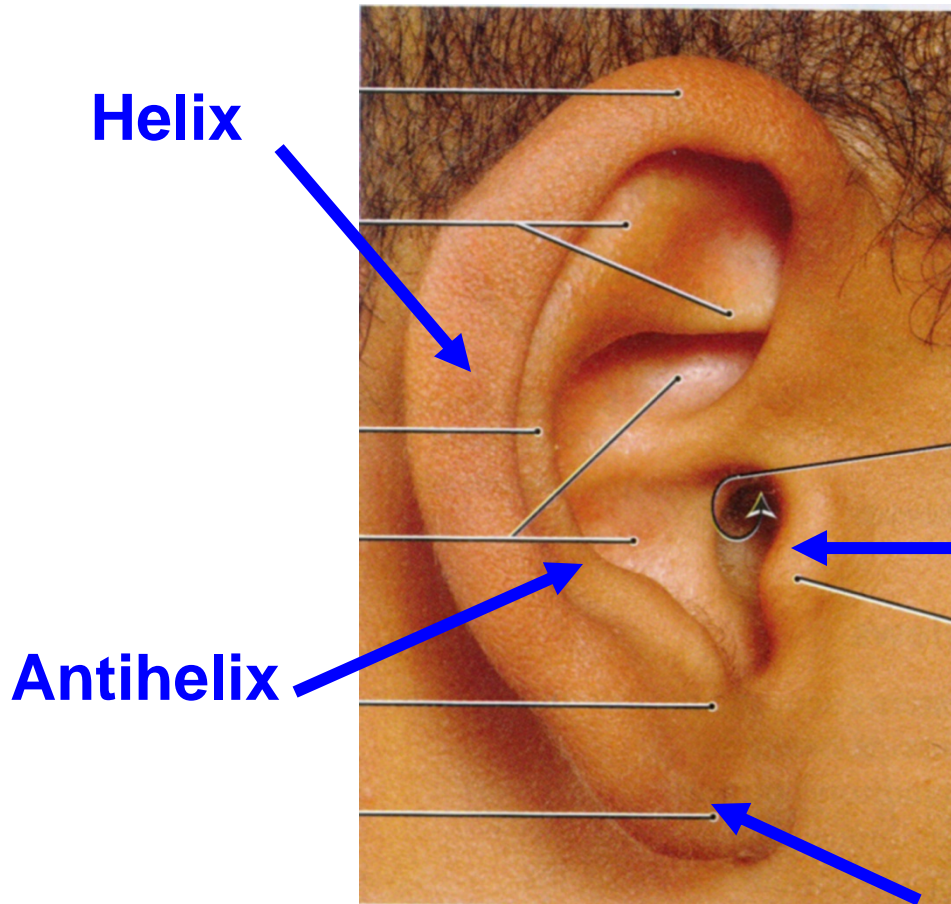
**ANTERIOR
TRIANGLE**

**Thyroid gland: palpated in
Anterior Triangle below
Cricoid cartilage, medial to
Sternocleidomastoid**

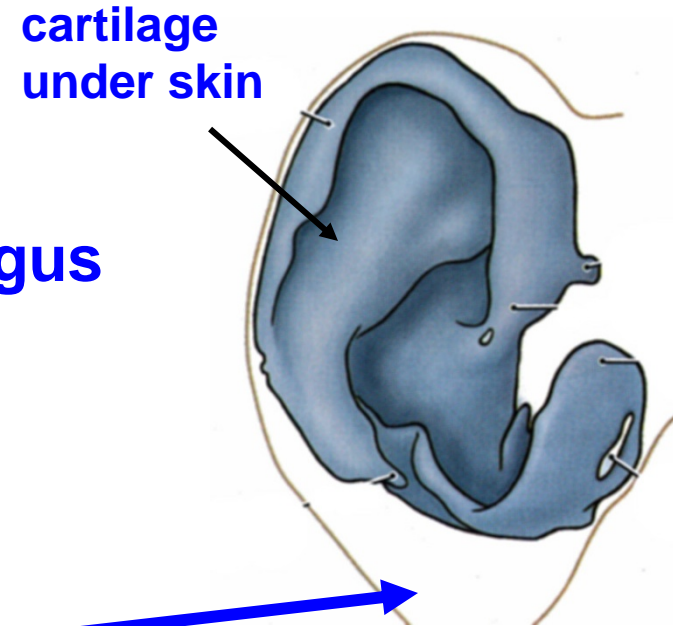


**Stand behind patient;
have patient swallow**

OUTER EAR: ANATOMY



AURICLE (pinna) - elastic cartilage and skin - Reflects sound waves

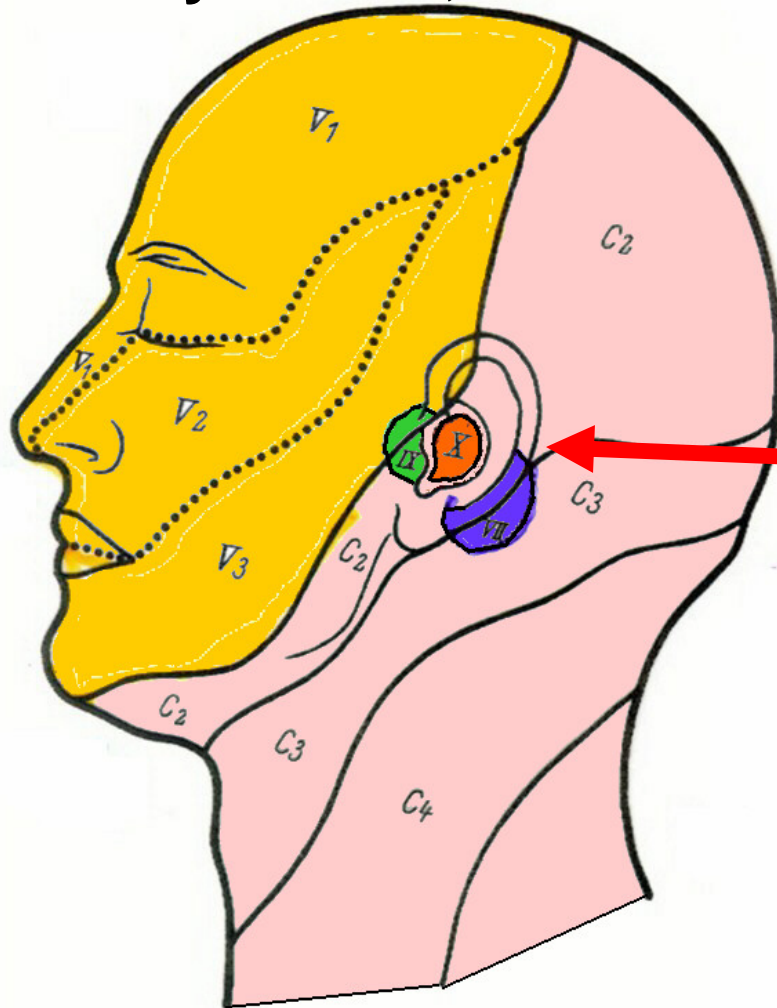


Lobule

Cartilage does not extend into lobule - Can safely pierce and suspend decorative metal objects from lobule

SOMATIC SENSORY

sensory to skin, ORAL cavity, NASAL cavity, joints, muscles



**ALMOST ALL
TRIGEMINAL V
EXCEPTION:
SKIN OF OUTER EAR
ALSO
ALSO**

- 1) VII- FACIAL**
- 2) IX - GLOSSO-
PHARYNGEAL**
- 3) X - VAGUS**

BELL'S PALSY (VII) - PARALYSIS OF FACIAL MUSCLES; IN RECOVERY, PATIENTS COMPLAIN OF EARACHES

EAR ACHE - referred pain

Auriculotemporal Nerve

(branch of V3) -

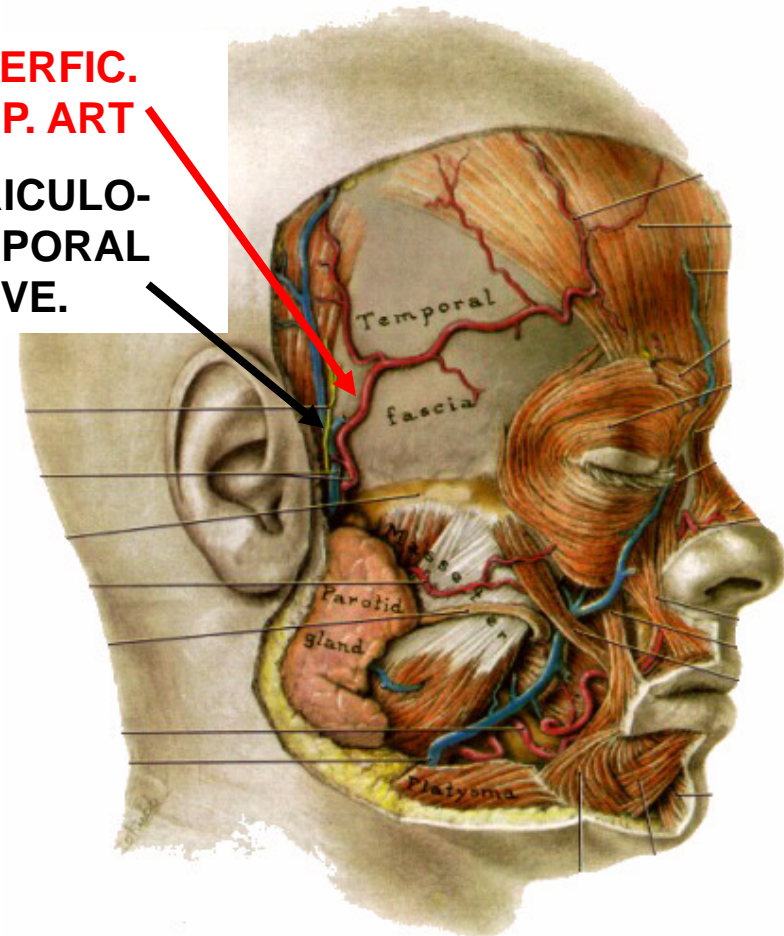
- sensory to Outer Ear
- also Temporomandibular Joint (TMJ)
- passes through Parotid Gland

- Clinical problems with **Parotid enlargement or TMJ** can compress Auriculotemporal nerve

- **Symptom is Ear Ache**

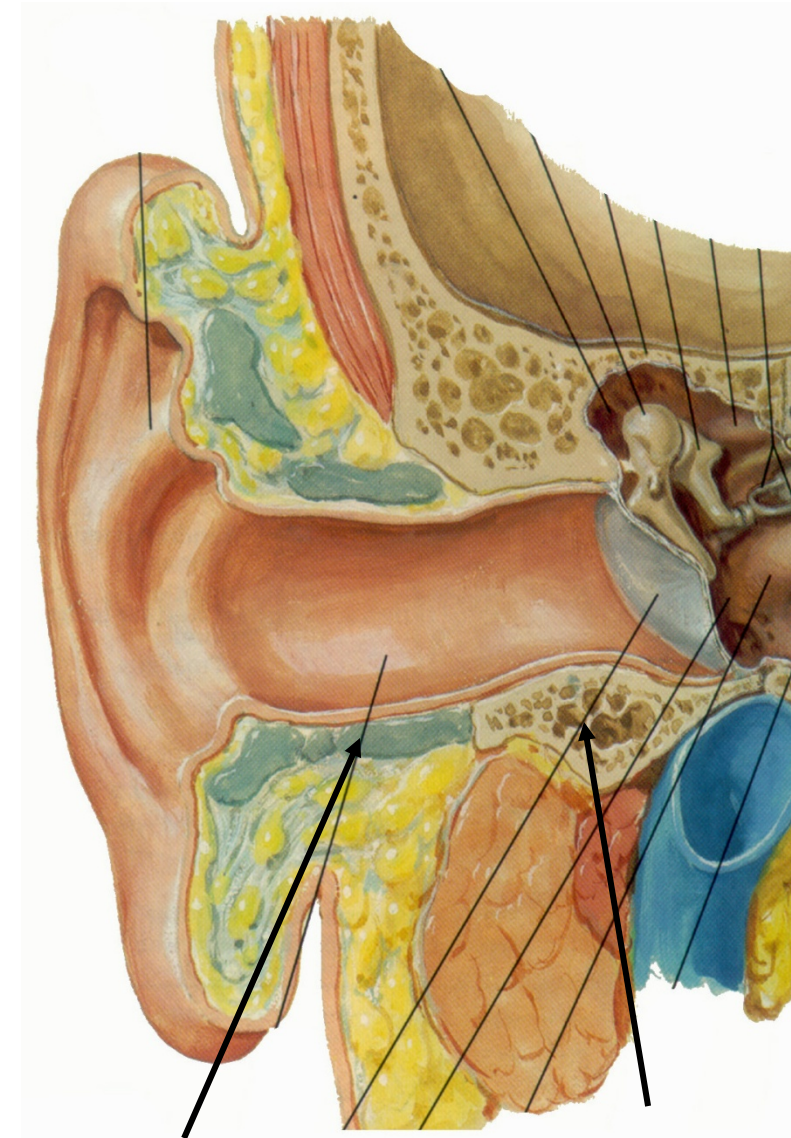
**SUPERFIC.
TEMP. ART**

**AURICULO-
TEMPORAL
NERVE.**



Recall: Face Prosection

ANATOMY: EXTERNAL AUDITORY MEATUS



OUTER 1/3
CARTILAGE

INNER 2/3
BONE

Outer 1/3 - Cartilage - contains hair, sebaceous and ceruminous glands (ear wax [insect repellent]); protects tymp. membrane,

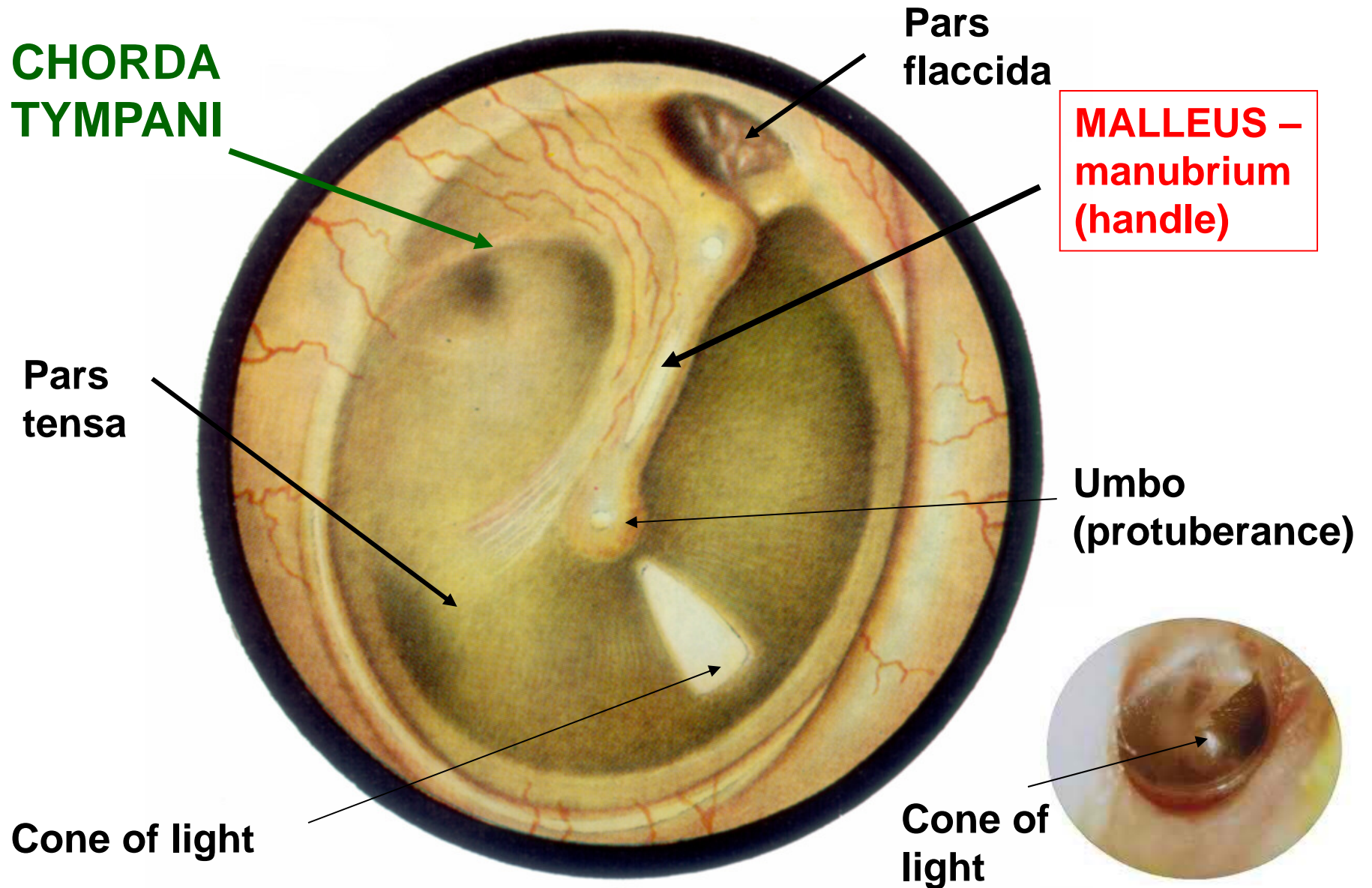
Inner 2/3 - Bone covered by skin

Clinical note: ext. auditory meatus is **straight in children, curved anteriorly in adults**

In Adult - pull up and back to insert otoscope

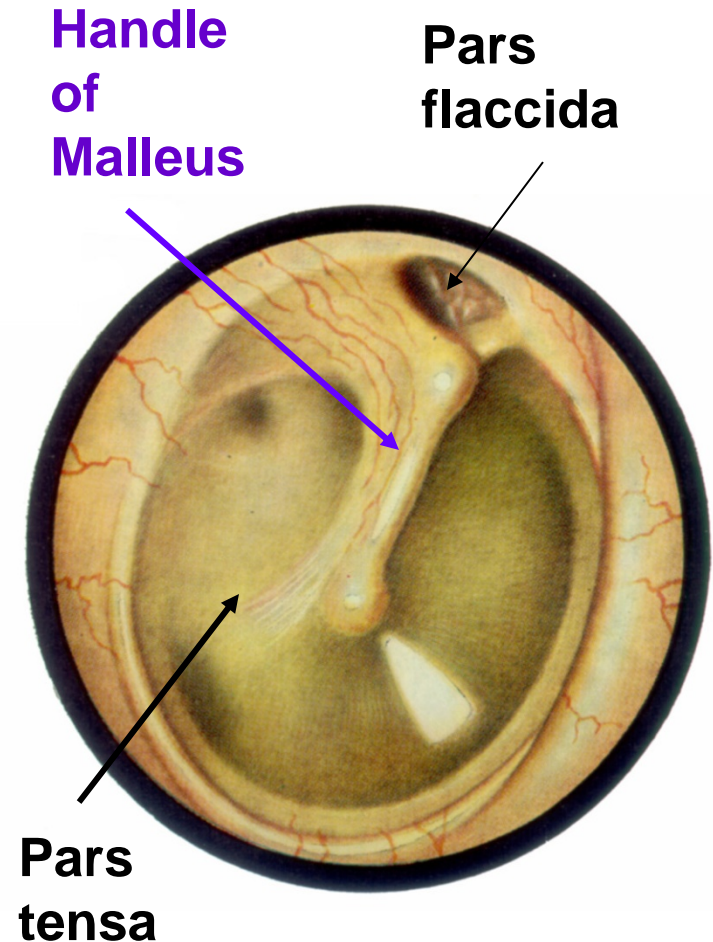
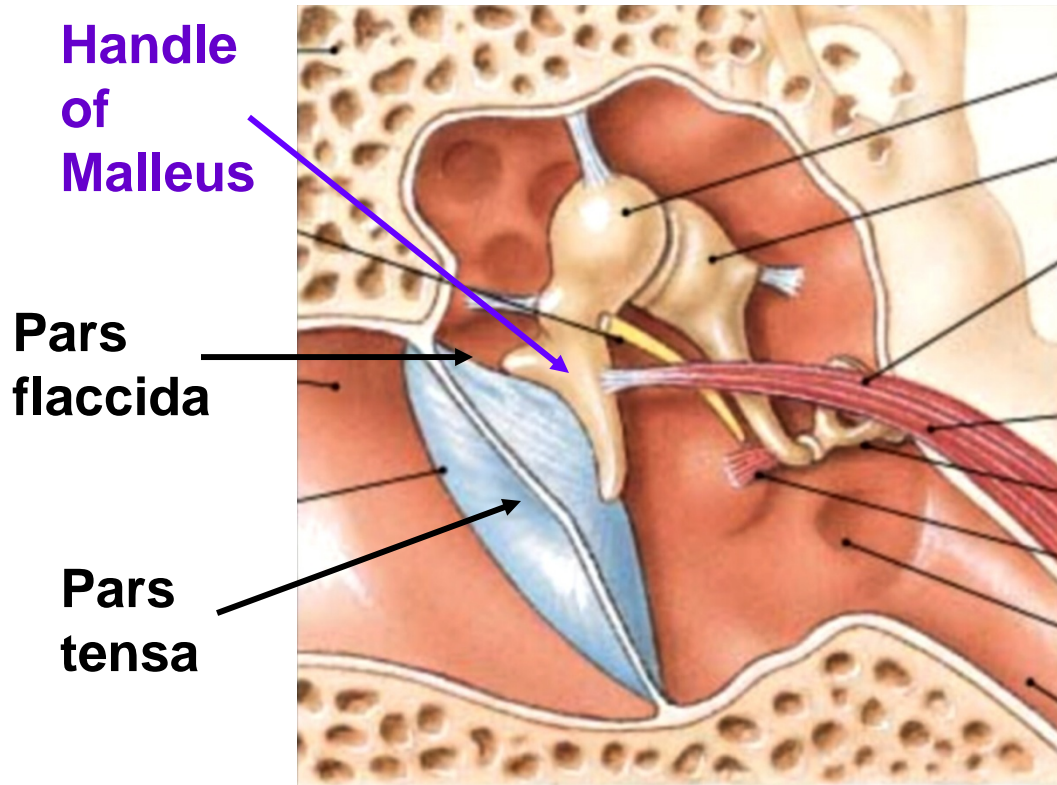


OTOSCOPE VIEW OF TYMPANIC MEMBRANE



OTOSCOPE VIEW OF TYMPANIC MEMBRANE

NOTE: TYMPANIC MEMBRANE IS NOT FLAT



Handle malleus is attached to upper half of Tympanic membrane; malleus is supported by ligaments linking it to wall of Tympanic cavity; part of Tympanic membrane surrounding handle is tense (pars tensa); upper end is less tense (pars flaccida)

TESTING AUDITORY FUNCTION: INNER EAR DETECTS TRANSMITTED VIBRATIONS

Weber test – tuning fork on calvarium causes bone to vibrate; conducted to directly to cochlea by bone; perceived as sound by patient

Can use to test functioning of inner ear (Sensorineural hearing loss) independent of outer, middle ear (Conductive hearing loss)

CONDUCTIVE HEARING LOSS - damage to middle ear (tympanic membrane, auditory ossicles (bones))

SENSORINEURAL HEARING LOSS - damage to inner ear (COCHLEA).



FIGURE 11-18
Weber test. Place the base of the tuning fork on the midline of the skull.

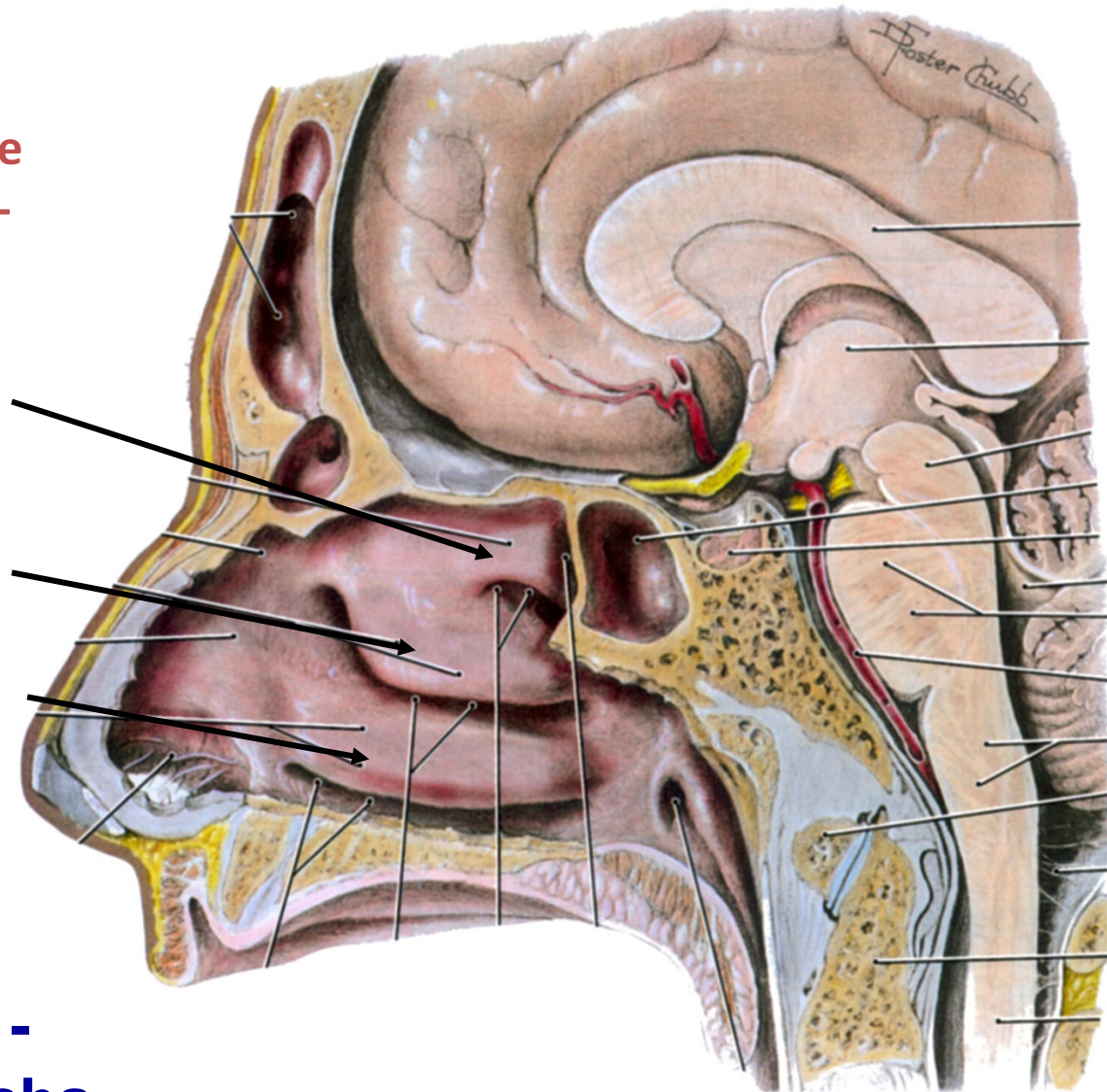
ANATOMY: NASAL CAVITY

Projections = Conchae
(shell) or turbinates –
increase surface area

1) Superior Concha -
Ethmoid

2) Middle Concha -
Ethmoid

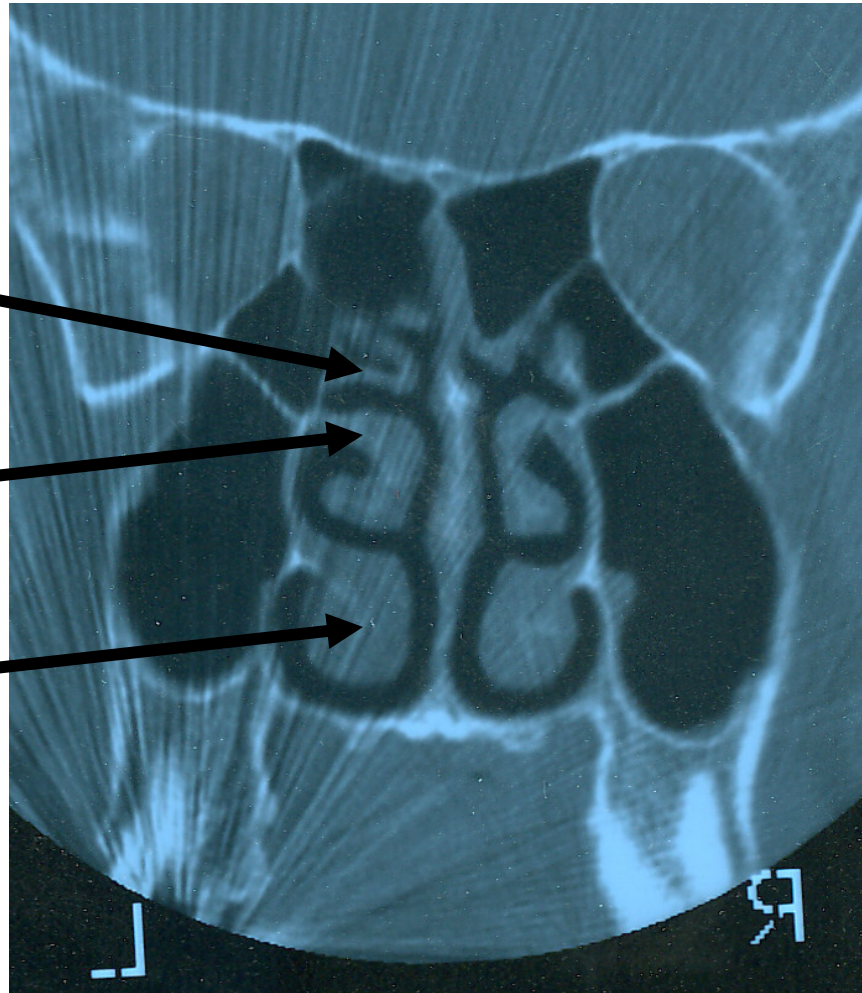
3) Inferior Concha -
separate bone



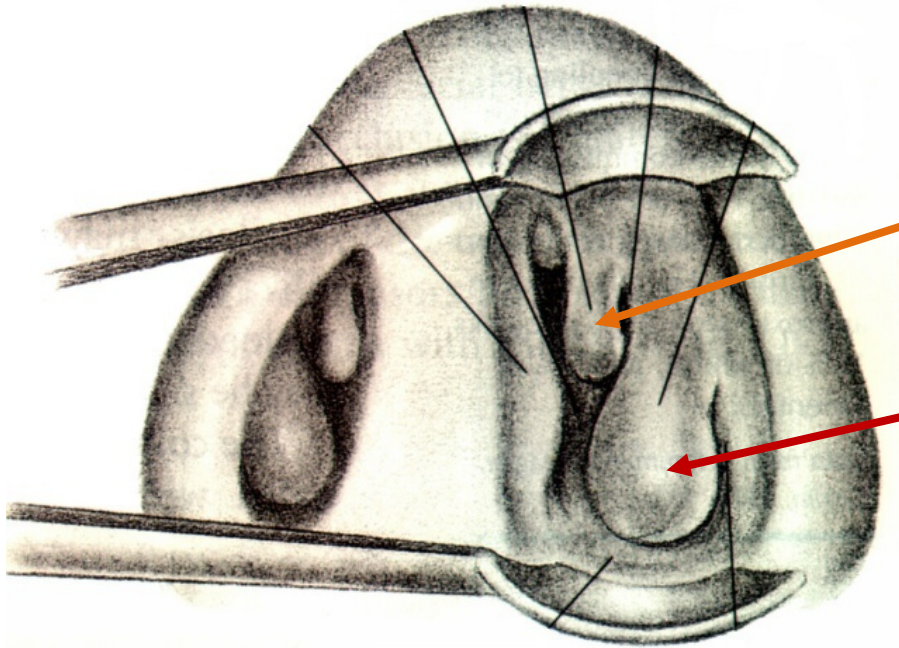
**Meatus (passage) -
Space below Concha**

CORONAL CT of NASAL CAVITY

- 1) Superior
Concha -
Ethmoid
- 2) Middle
Concha -
Ethmoid
- 3) Inferior
Concha -
separate bone



ENT VIEW: NASAL CAVITY



Middle

Inferior

In nasal
speculum view,
See only Middle
and Inferior
Conchae
(Turbinates)