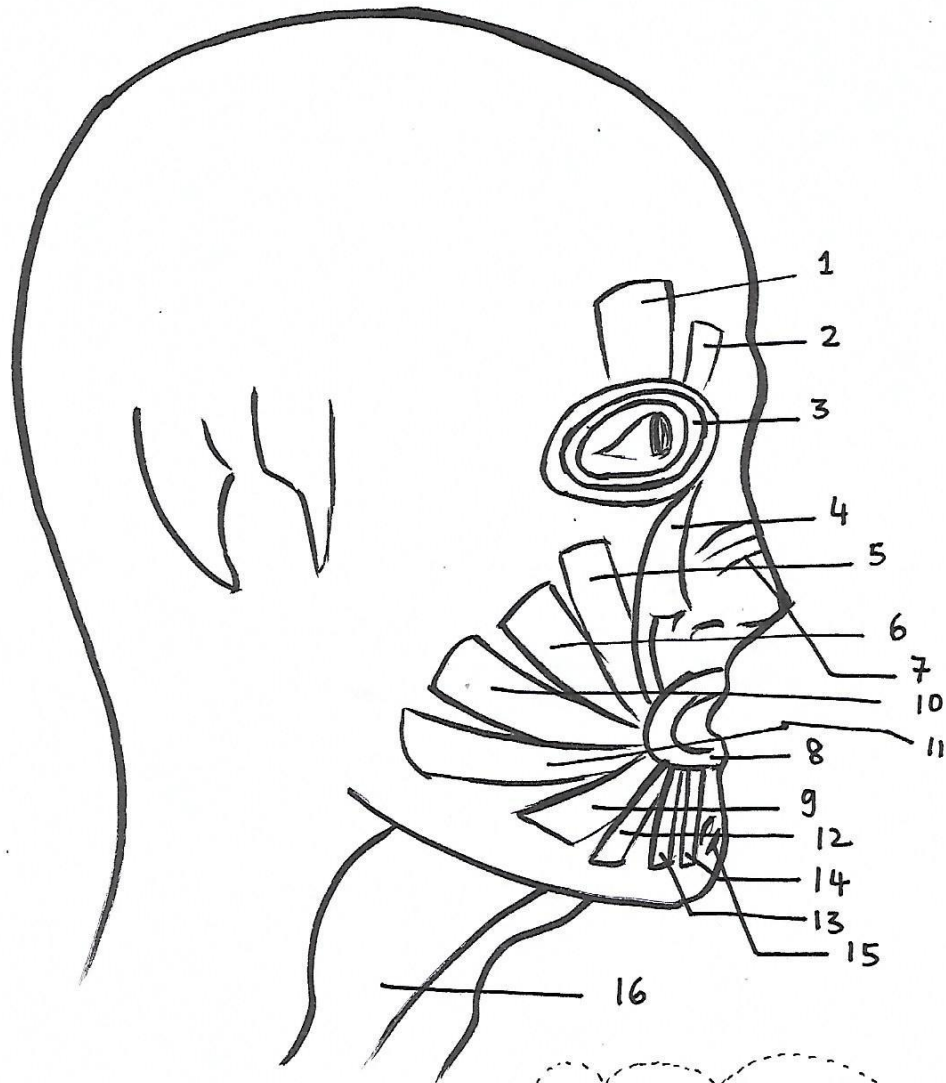


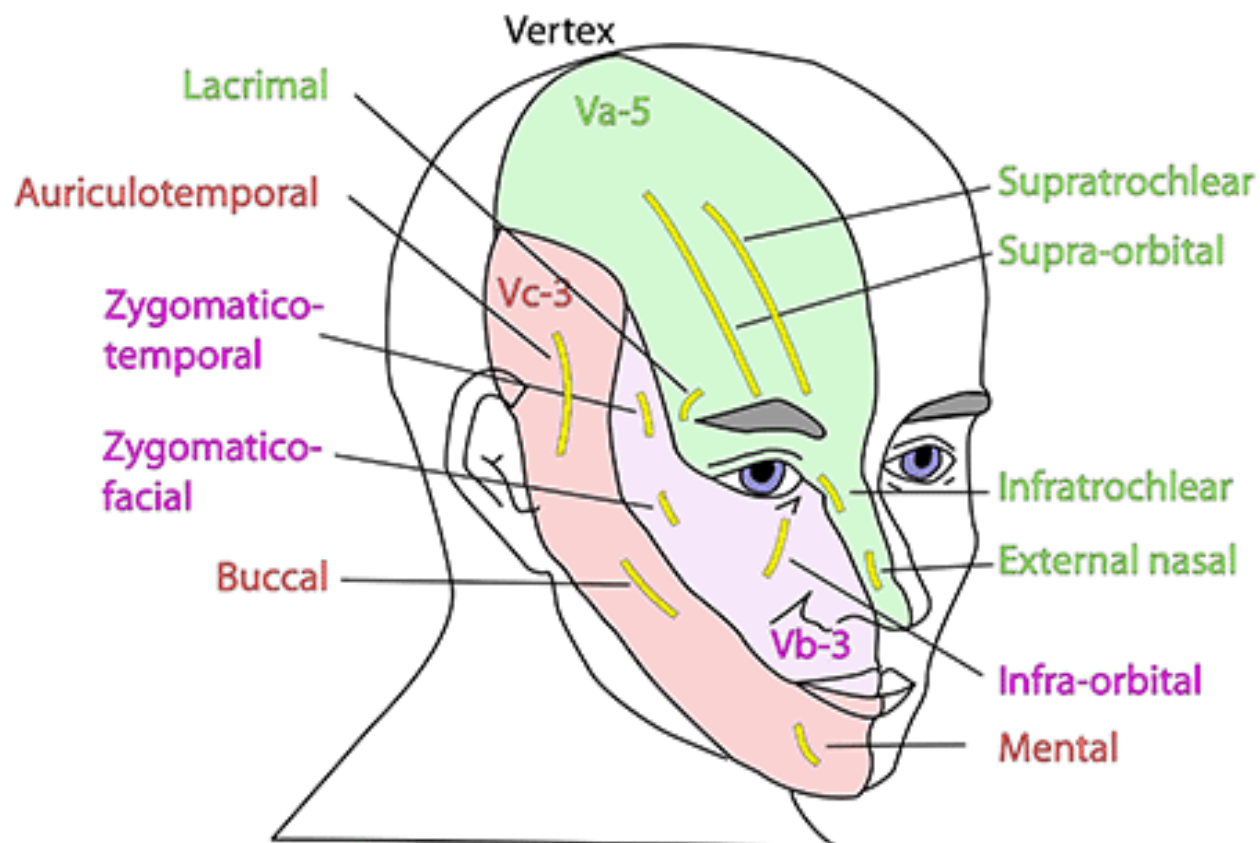
FACIAL MUSCLES



- 1 - Frontalis
- 2 - Corrugator supercilli
- 3 - Orbicularis oculi
- 4 - Levator labii superioris alaeque nasi
- 5 - Levator labii superioris
- 6 - Levator anguli oris
- 7 - Compressor naris
- 8 - Orbicularis oris
- 9 - Buccinator
- 10 - Zygomaticus minor
- 11 - Zygomaticus major
- 12 - Risorus
- 13 - Depressor labii oris
- 14 - Depressor labii inferioris
- 15 - Mentis
- 16 - Platysma

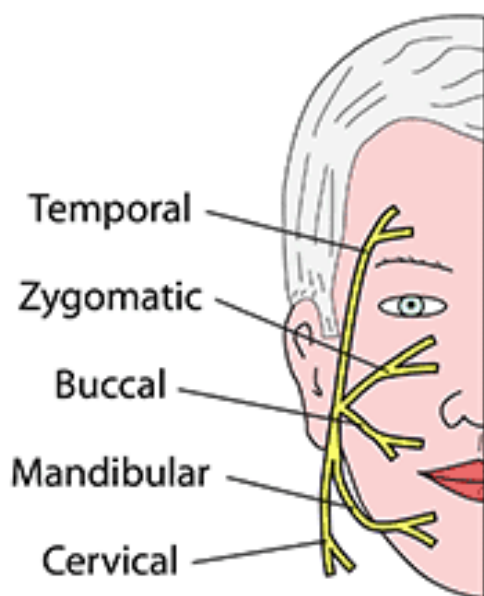
- Temporal branch
- Zygomatic branch
- Upper buccal branch
- Lower buccal branch
- Marginal Mandibular branch
- Cervical branch

SENSORY BRANCHES OF TRIGEMINAL N ON FACE



Ophthalmic (5 branches) Maxillary (3 branches) Mandibular (3 branches)

FACE: MOTOR SUPPLY (VII)



Facial nerve branches:

Temporal: frontalis & procerus

Zygomatic 1: eye & around orbit

Zygomatic 2: mid face & smile

Buccal: buccinator & upper lip

Mandibular: lower lip & orbicularis oris

Cervical: platysma

(note: proprioception is supplied by trigeminal)

Mnemonic:

Two
Zebras
Befriended
My
Cat

Stroke

Inner motor neurone

Bell's Palsy

lower motor neurone



SCALP



SCAN QR
WITH **QRBOT** APP
TO DIRECTLY OPEN VIDEO LINK

SOFT TISSUES COVERING - THE CRANIAL VAULT FROM SCALP

EXTENT OF SCALP -

- 1) ANTERIORLY - SUPRAORBITAL MARGIN
- 2) POSTERIORLY - EXTERNAL OCCIPITAL PROTUBERANCE
- SUPERIOR NUCHAL LINES
- 3) EACH SIDE - SUPERIOR TEMPORAL LINES

MADE UP OF FIVE LAYER - SKIN
- SUPERFICIAL FASCIA
- DEEP FASCIA OR GALEA APONEUROTICA
- LOOSE AREOLAR TISSUE
- PERICRANIUM

- 1) **SKIN** - THICK AND HAIRY
- IT HAS SWEAT GLANDS AND SEBACEOUS GLANDS
- 2) **SUPERFICIAL FASCIA** - MORE FIBROUS AND DENSE IN CENTRE
- CONTAIN BLOOD VESSEL
- ITS BINDS THE SKIN TO SUBJACENT APONEUROSIS
- AND PROVIDE PROPER PASSAGE OF VESSEL AND NERVE OF SKIN
- OCCIPITOFRONTALIS MUSCLE - HAS TWO BELLS OCCIPITALS AND FRONTALIS
- INSERTED-EPICRANIAL APRONEUROSIS

- OCCIPITALIS - SMALL AND SEPARATE
- ARISE - LATERAL 2/3 OF SUPERIOR NUCHAL LINE,
- SUPPLY BY - POSTERIOR AURICULAR BRANCH OF FACIAL NERVE

- FRONTALIS - LARGE AND PARTLY UNITED
- ARISE FROM- SKIN UPPER OF EYELID AND FORE HEAD
- SUPPLY BY- TEMPORAL BRANCH OF FACIAL NERVE

- TEMPORO PARIETALIS- PRESENT ON LATERAL SIDE
- ARISE FROM - TEMPORAL FASCIA AND FUSE WITH EPICRANIAL APONEUROSIS.
- SUPPLY BY TEMPORAL BRANCH OF FACIAL NERVE
- 3) **EPICRANIAL APONEUROSIS**-
- FREELY MOVABLE ON PERICRANIUM
- ATTACHMENT- ANTERIORLY - INSERTION-FRONTALIS
- POSTERIORLY - EXTERNAL OCCIPITAL PROTUBERANCE
- HIGHEST NUCHAL LINE B/W OCCIPITAL BELLIES
- SIDE - SUPERIOR TEMPORAL LINE
- EXPANSION - ZYGOMATIC ARCH
- 5) **LOOSE AREOLAR TISSUE**
- EXTEND - ANTERIORLY-EYELIDS
- POSTERIORLY - SUPERIOR NUCHAL LINE.
- EACH SIDE - SUPERIOR TEMPORAL LINE



- GIVE PASSAGE TO EMISSARY VEIN WHICH CONNECT
- EXTRACRANIAL VEIN TO INTRACRANIAL VENOUS SINUSES

6) **PERICRANIUM** - LOOSELY ATTACHED TO SURFACE OF BONE
- BUT IS FIRMLY ADHERENT TO SUTURE.

ARTERIAL SUPPLY - IN FRONT - SUPRATROCHLEAR → BRANCH → INTERNAL CAROTID A.
- SUPRA ORBITAL → BRANCH → EXTERNAL CAROTID A.

- BEHIND - POSTERIOR AURICULAR → EXTERNAL CAROTID ARTERY
- OCCIPITAL → EXTERNAL CAROTID ARTERY

VENOUS DRAINAGE -

- SUPRATROCHLEAR & SUPRA ORBITAL VEIN - JOIN EACH OTHER TO FORM ANGULAR VEIN → FACIAL VEI
- SUPERFICIAL TEMPORAL VEIN - DESCEND IN FRONT OF TRAGUS → TO ENTER PAROTID GLAND
 - JOIN MAXILLARY VEIN → FORM RETROMANDIBULAR VEIN
 - TERMINATED ANTERIOR & POSTERIOR DIVISION
- POSTERIOR AURICULAR VEIN - IT DESCEND BEHIND AURICLE &
 - UNITES THE POSTERIOR DIVISION OF RETROMANDIBULAR VEIN → FORM EXTERNAL JUGULAR VEIN
 - OCCIPITAL VEIN - TERMINATE - SUBOCCIPITAL VENOUS PLEXUS
- VEIN OF SCALP COMMUNICATE WITH INTRACRANIAL DURAL VENOUS SINUSES THROUGH EMISSARY VEIN :
 - EMISSARY VEIN - VEIN CONNECTING VEIN OUTSIDE THE CRANIUM WITH INTRACRANIAL VEIN BY PASSING THROUGH FORAMEN IN CRANIUM
 - PARIETAL EMISSARY VEIN → COMMUNICATES SUPERIOR SAGGITAL SINUS
 - PASSES PARIETAL FORAMEN
 - MASTOID EMISSARY VEIN - SIGMOID SINUS
 - PASSES MASTOID FORAMEN

LYMPHATIC DRAINAGE

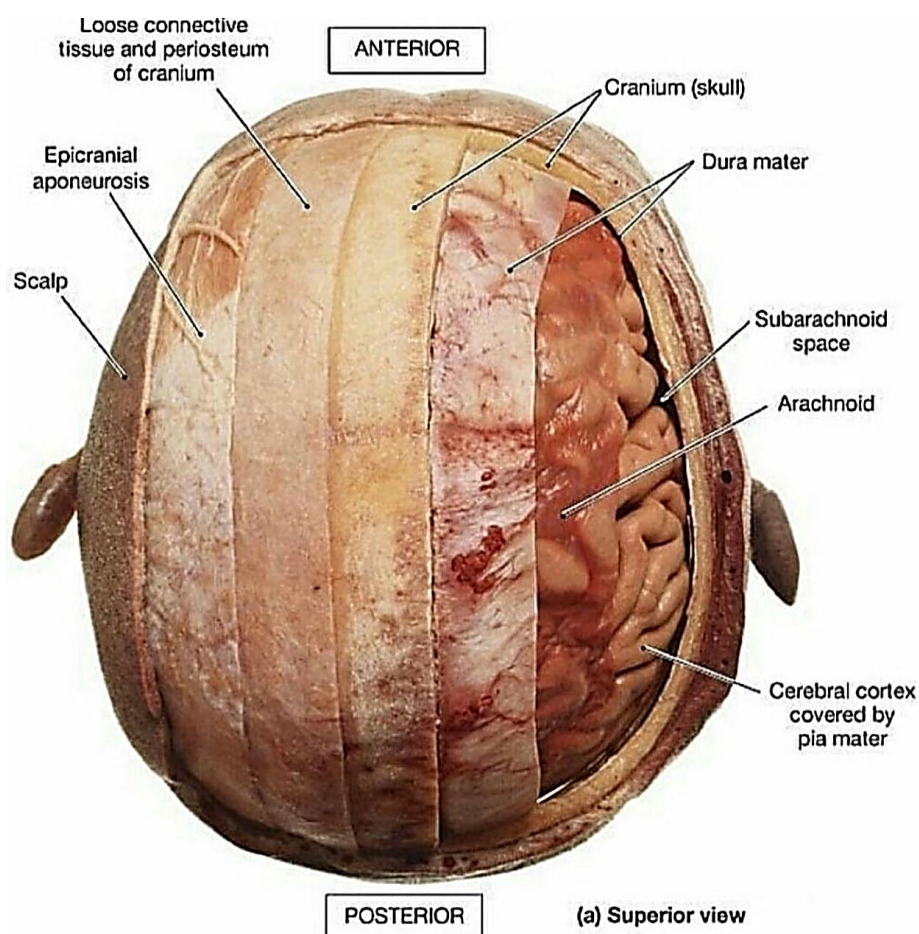
- ANTERIOR PART OF SCALP → DRAIN PREAURICULAR OR SUPERFICIAL PAROTID
- POSTERIOR PART OF SCALP → POSTERIOR AURICULAR OR MASTOID
 - OCCIPITAL LYMPH NODE

NERVE SUPPLY - SUPPLY BY 10 NERVE

- FRONT OF AURICLE - FIVE NERVE (4, SENSARY & 1 MOTOR)
 - SUPRA ORBITAL
 - SUPRATROCHLEAR NERVE
 - ZYGOMATICOTEMPORAL NERVE
 - TEMPORAL BRANCH OF FACIAL NERVE(MOTOR)
 - AURICULOTEMPORAL NERVE
- BEHIND AURICLE - FIVE (4 SENSARY & 1 MOTOR)
 - GREATER AURICULAR NERVE
 - POSTERIOR AURICULAR NERVE(MOTOR)



- LESSER OCCIPITAL NERVE
- GREATER OCCIPITAL NERVE
- THIRD OCCIPITAL NERVE



CLINICAL ANATOMY

DANGEROUS AREA OF THE SCALP

THE LAYER OF LOOSE AREOLAR TISSUE IS KNOWN AS THE "DANGEROUS AREA OF THE SCALP" BECAUSE THE EMISSARY VEINS, WHICH COURSE HERE, MAY TRANSMIT INFECTION FROM THE SCALP TO THE CRANIAL VENOUS SINUSES.

SEBACEOUS CYSTS-

BECAUSE OF THE ABUNDANCE OF SEBACEOUS GLANDS, THE SCALP IS A COMMON SITE FOR SEBACEOUS CYSTS.

BLACK EYE -

THE BLOOD AND FLUID COLLECTING IN LAYER OF LOOSE AREOLAR TISSUE FOLLOWING A BLOW ON HEAD TRACKS FREELY UNDER THE SCALP PRODUCING GENERALISED SWELLING OVER THE DOME OF SKULL



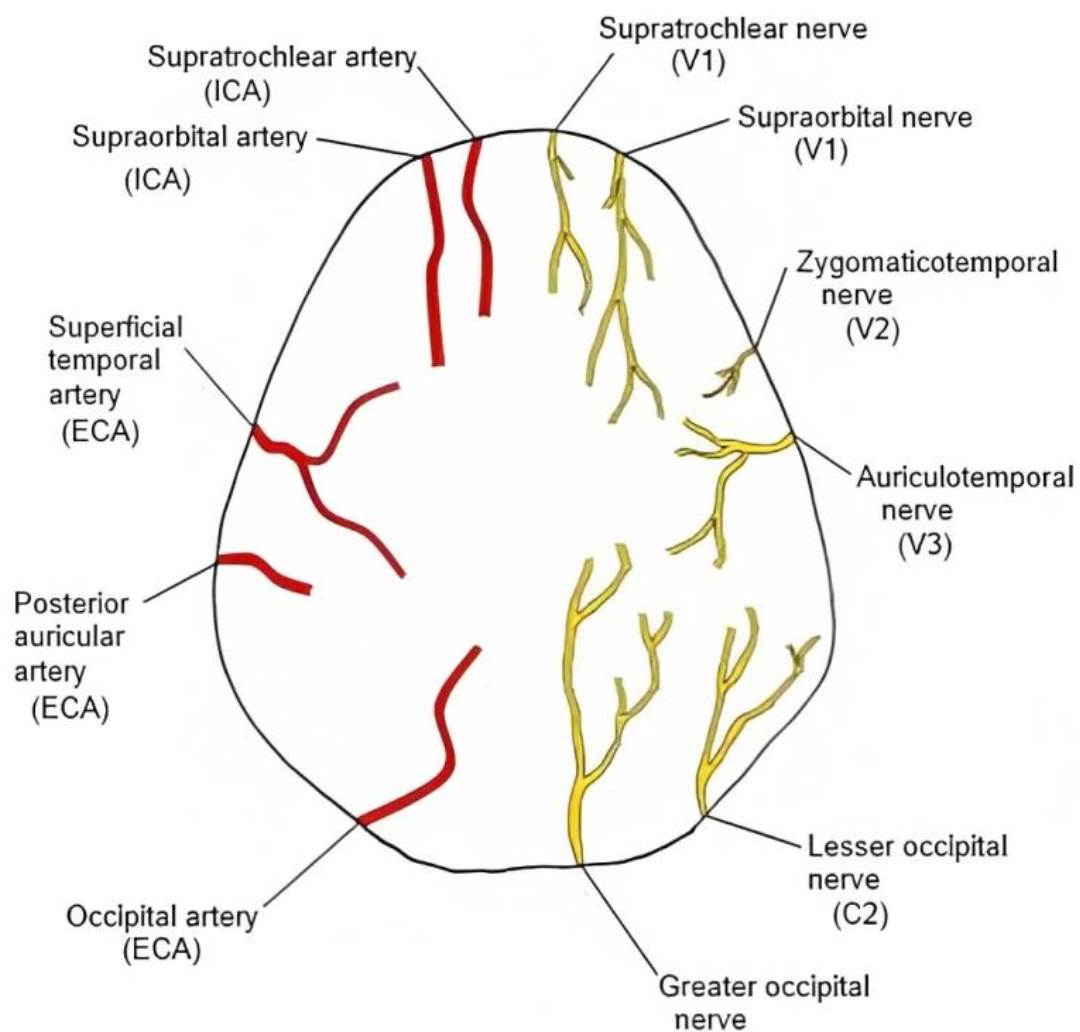
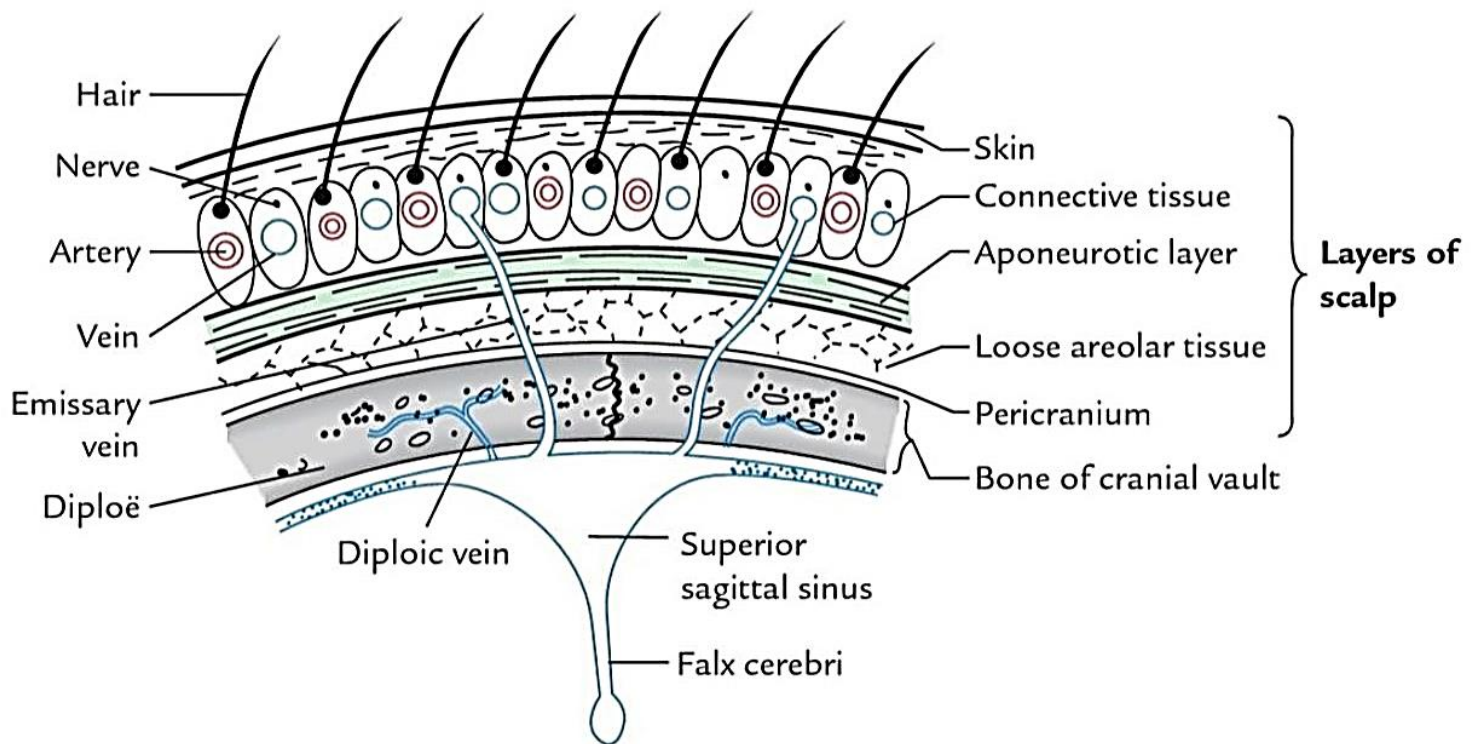
DANGEROUS AREA OF SCALP



SEBACEOUS CYSTS



BLACK EYE





LACRIMAL GLAND

COMPONENTS - STRUCTURE CONCERNED WITH SECRETION AND DRAINAGE OF LACRIMAL TEAR FLUID CONSTITUTE THE LACRIMAL APPARATUS

- MADE - LACRIMAL GLAND AND DUCTS
 - CONJUNCTIVAL SAC
 - LACRIMAL PUNCTA AND LACRIMAL CANALICULI
 - LACRIMAL SAC
 - NASOLACRIMAL SAC

- 1) LACRIMAL GLAND**
 - SEROUS GLAND
 - SITUATED LACRIMAL FOSSA- ANTEROLATERAL OF ROOF OF BONY ORBIT
 - "J" SHAPED GLAND - BEING INDENTED BY - TENDON-OF-> LEVATOR PALPEBRAE SUPERIOR
 - ↳ ORBITAL PART -> LARGER AND DEEPER
 - ↳ PALPEBRAL PART-> SMALLER AND SUPERFICIAL
 - DOZEN OF DUCTS PIERCE - CONJUNCTIVA OF UPPER LID AND OPEN INTO CONJUNCTIVAL SAC
 - ARTERY - LACRIMAL BRANCH OF OPHTHALMIC ARTERY
 - NERVE SUPPLY -> LACRIMAL GLANDS NERVE
- 2) CONJUNCTIVA SAC -**
 - CONJUNCTIVA LINING -> DEEP SURFACE - OF EYELIDS → PALPEBRAL CONJUNCTIVA
 - ↳ FRONT OF EYEBALL → BULBAR CONJUNCTIVA
 - POTENTIAL SPACE B/W PALPEBRAL AND BULBAR -> CALLED CONJUNCTIVA SAC
- 3) LACRIMAL PUNCTA & CANALICULI**
 - EACH LACRIMAL CANALICULI -> BEGINS AT LACRIMAL PUNCTUM, 10MM LONG
 - BOTH CANALICULI OPEN -> LATERAL WALL OF LACRIMAL SAC
 - BEHIND MEDIAL PALPEBRAL LIGAMENT
- 4) LACRIMAL SAC**
 - MEMBRANOUS SAC 12MM LONG AND 5MM WIDE
 - SITUATED IN LACRIMAL GROOVE
 - BEHIND MEDIAL PALPEBRAL LIGAMENT
 - UPPER -> END IS BLIND
 - LOWER END CONTINUOUS WITH NASOLACRIMAL DUCT
- 5) NASOLACRIMAL DUCT**
 - MEMBRANOUS PASSAGE -> 18MM LONG
 - BEGINS -> LOWER END OF LACRIMAL SAC
 - RUN DOWNWARD, BACKWARD -> OPEN INTO -> INFERIOR MEATUS OF NOSE

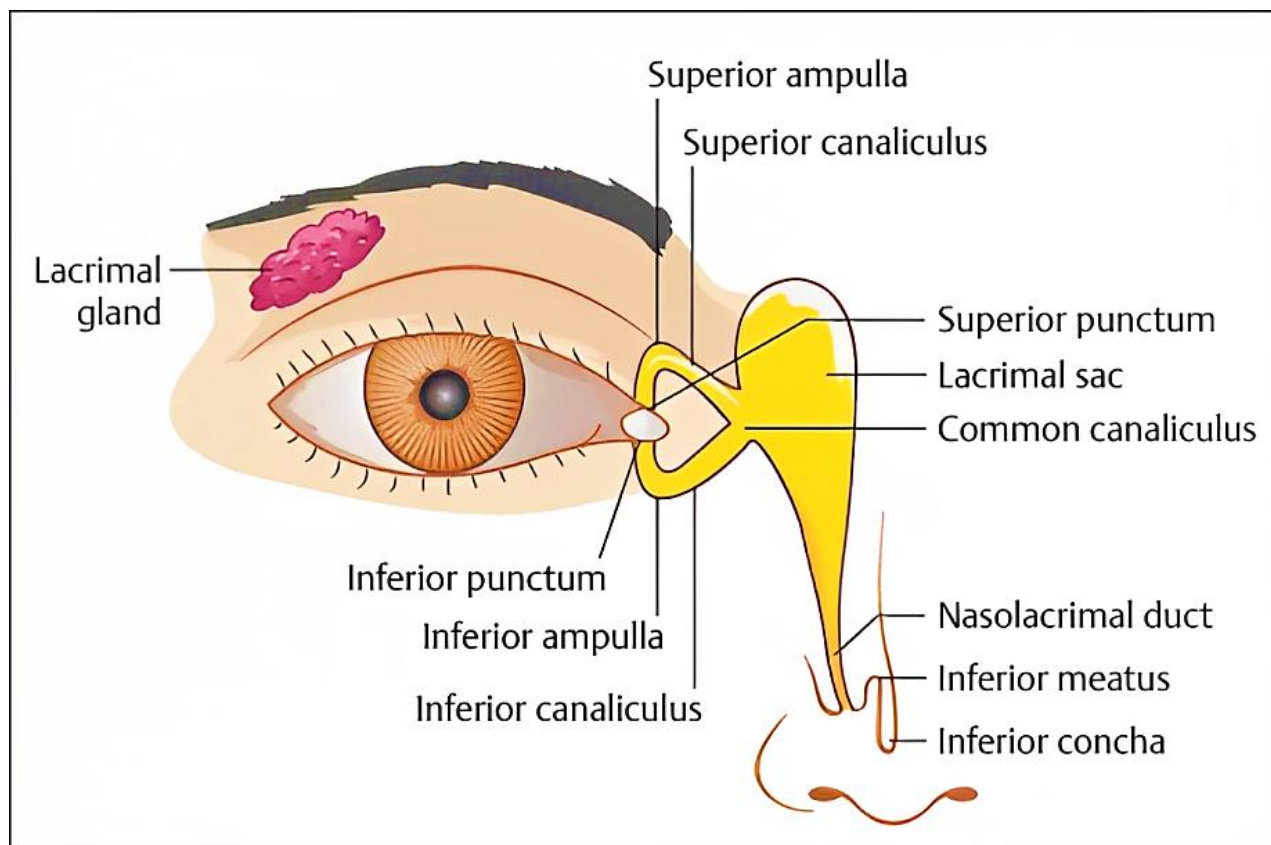
CLINICAL ANATOMY

EPIPHORA -

- OVERFLOW OF TEAR FROM CONJUNCTIVAL SAC OVER CHECK
- OCCUR DUE TO EXCESSIVE SECRETION OF TEARS AND OBSTRUCTION OF LACRIMAL PASSAGE

ARTIFICIAL TEARS

WHEN LACRIMAL GLAND FAILS TO SECRETE LACRIMAL FLUID AS IN CASE OF BELL'S PALSY, THE ARTIFICIAL TEARS ARE INSTILLED IN EYE AT REGULAR INTERVAL TO PREVENT CORNEA FROM DRYING



ANTERIOR TRIANGLE OF NECK

ANTERIOR TRIANGLE OF NECK IS A LARGE TRIANGULAR SPACE ON EACH SIDE OF NECK, IN FRONT OF STERNOCLEIDOMASTOID WITH ITS APEX DIRECTED DOWNWARDS AND BASE DIRECTED UPWARDS

BOUNDARIES

- 1) **MEDIANLY** -> **ANTERIOR MEDIAN PLANE OF NECK**
- 2) **LATERALLY** -> **STERNOCLEIDOMASTOID**
- 3) **BASE** -> **A LINE JOINING THE ANGLE OF MANDIBLE TO MASTOID PROCESS**

SUBDIVISION -> SUB MENTAL TRIANGLE

- > **DIGASTRIC TRIANGLE**
- > **CAROTID TRIANGLE**
- > **MUSCULAR TRIANGLE**

1) SUBMENTAL TRIANGLE

- BOUNDARIES**
- EACH SIDE -> **ANTERIOR BELLY OF DIGASTRIC MUSCLE**
 - **BASE** -> **HYOID BONE**
 - **FLOOR** -> **RIGHT AND LEFT MYLOHYOID**

CONTENTS

- **4 SUBMENTAL LYMPH NODE**
- **SMALL SUB-MENTAL VEIN JOIN TO FORM ANTERIOR JUGULAR VEIN**

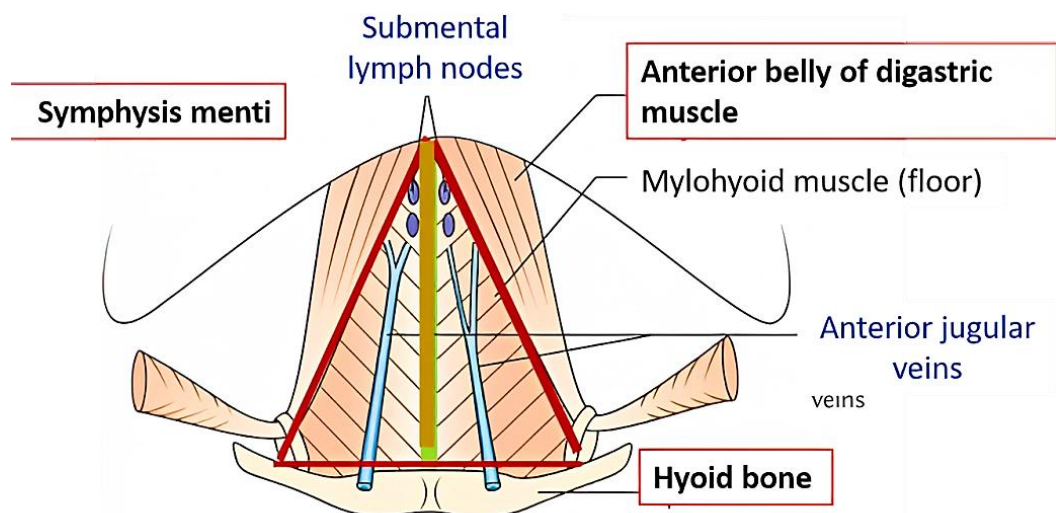
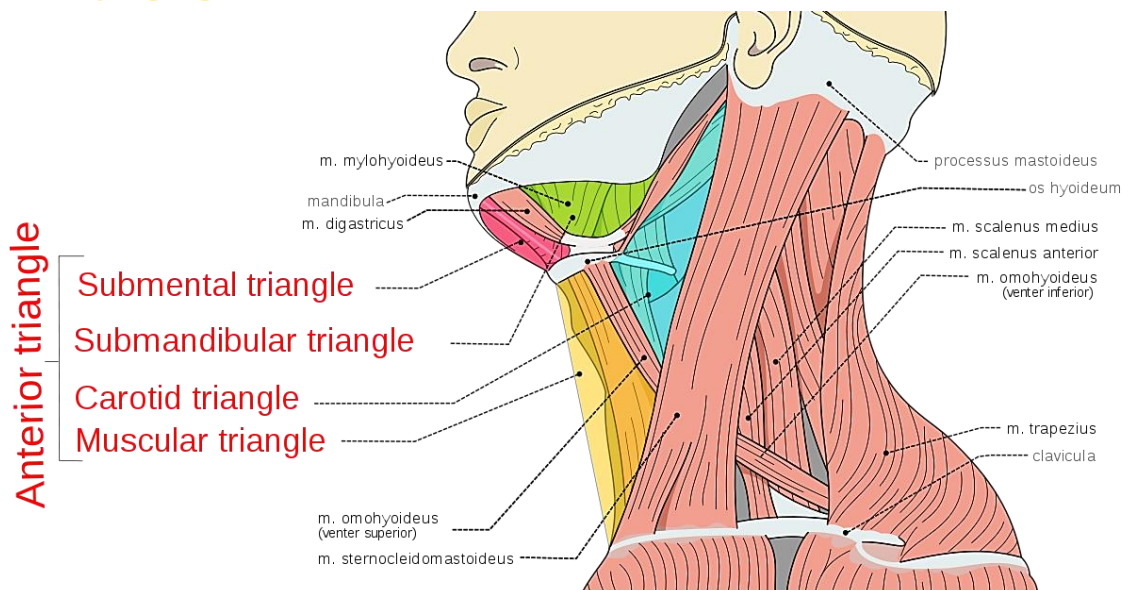
2) DIGASTRIC TRIANGLE

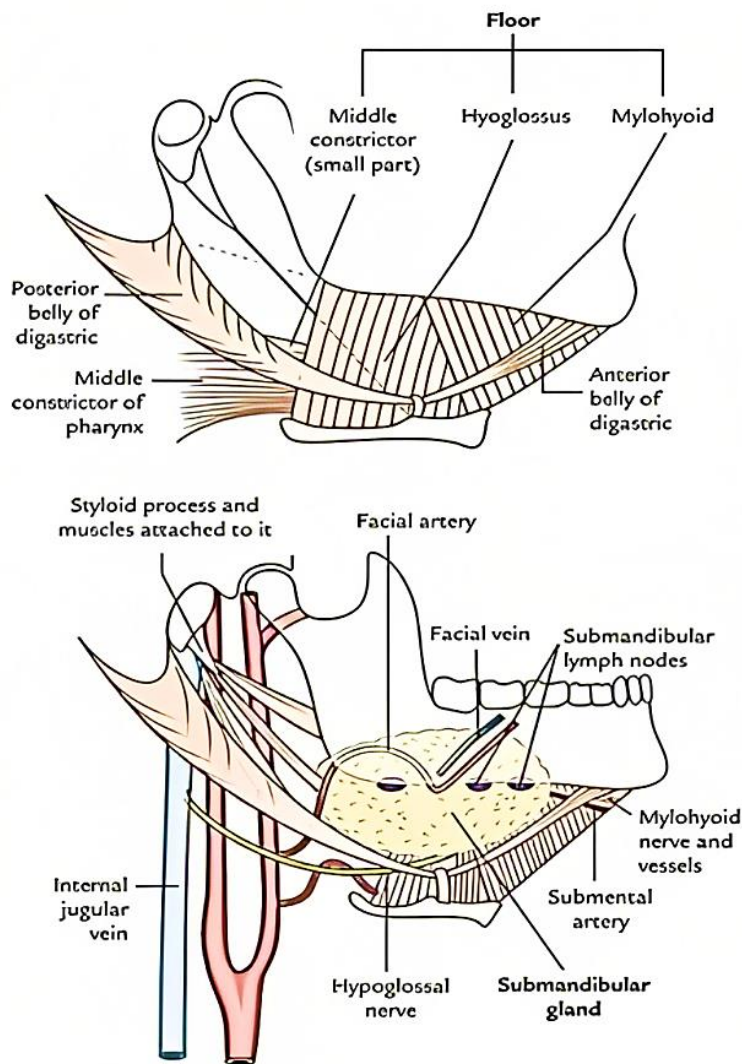
**BOUNDARIES**

- ANTERO-INFERIORLY - ANTERIOR BELLY OF DIGASTRIC
- POSTERO-INFERIORLY - POSTERIOR BELLY OF DIGASTRIC
 - STYLOHYOID
- BASE - BASE OF MANDIBLE
- ROOF - SKIN
 - SUPERFICIAL FASCIA → PLATYSMA
 - CERVICAL BRANCH OF FACIAL NERVE
 - ANTERIOR CUTANEOUS NERVE
 - DEEP FASCIA
- FLOOR - ANTERIORLY - MYLOHYOID MUSCLE
 - POSTERIORLY - HYOGLOSSUS MUSCLE

CONTENTS -

- SALIVARY GLAND
- SUBMANDIBULAR LYMPH NODE
- FACIAL ARTERY AND VEIN
- SUB-MENTAL ARTERY
- HYOGLOSSAL NERVE
- MYLOHYOID NERVE





CONTENTS OF DIGASTRIC TRIANGLE

CAROTID TRIANGLE

INTRODUCTION - SUB-DIVISION OF -> ANTERIOR TRIANGLE OF NECK

BOUNDARIES -

- ANTEROSUPERIORLY - POSTERIOR BELLY OF DIGASTRIC MUSCLE
 - STYLOHYOID
- ANTERO INFERIORLY - SUPERIOR BELLY OF OMOHYOID
- ROOF - SKIN
 - SUPERFICIAL FASCIA CONTAIN - PLASTYSMA
 - CERVICAL BRANCH OF FACIAL NERVE
 - TRANSVERSE CUTANEOUS NERVE
 - DEEP CERVICAL FASCIA
- FLOOR - MIDDLE CONSTRICTOR OF PHARYNX
 - INFERIOR CONSTRICTOR OF PHARYNX
 - THYROID MEMBRANE
- POSTERIORLY - ANTERIOR BORDER OF STERNOCLEIDOMASTOID

CONTENTS

ARTERY

- COMMON CAROTID ARTERY
- INTERNAL CAROTID ARTERY



- EXTERNAL CAROTID ARTERY - SUPERIOR THYROID.
- LINGUAL
- FASCIAL
- ASCENDING PHARYNGEAL ARTERY

VEIN

- INTERNAL JUGULAR VEIN
- COMMON FACIAL VEIN
- PHARYNGEAL VEIN
- LINGUAL VEIN

NERVE

- VAGUS NERVE
- SPINAL ACCESSORY NERVE
- SUPERIOR LARYNGEAL BRANCH -> EXTERNAL LARYNGEAL NERVE
- > INTERNAL LARYNGEAL NERVE
- HYPOGLOSSAL NERVE
- SYMPATHETIC CHAIN NERVE

- LYMPH NODE - DEEP CERVICAL LYMPH NODE
- JUGULODIGASTRIC NODE
- JUGULO-OMOHYOID NODE



CLINICAL ANATOMY

ENLARGEMENT OF SUBMENTAL LYMPH NODES -

INFECTION OF FLOOR OF MOUTH, TIP OF TONGUE, AND INCISOR TEETH CAUSE PAINFUL ENLARGEMENT OF SUBMENTAL LYMPH NODES BECAUSE LYMPH FROM THESE STRUCTURES IS DRAINED INTO THESE NODE

CAROTID SINUS SYNDROME -

IN AN INDIVIDUAL WITH CAROTID SINUS HYPERSENSITIVITY, PRESSURE ON CAROTID SINUSES CAN CAUSE ENOUGH SLOWING OF HEART RATE, FALL IN BP AND CEREBRAL ISCHAEMIA THAT WILL LEAD TO FAINTING

CAROTID SHEATH

CONDENSATION OF FIBROAREOLAR TISSUE -> AROUND MAIN VESSEL OF NECK

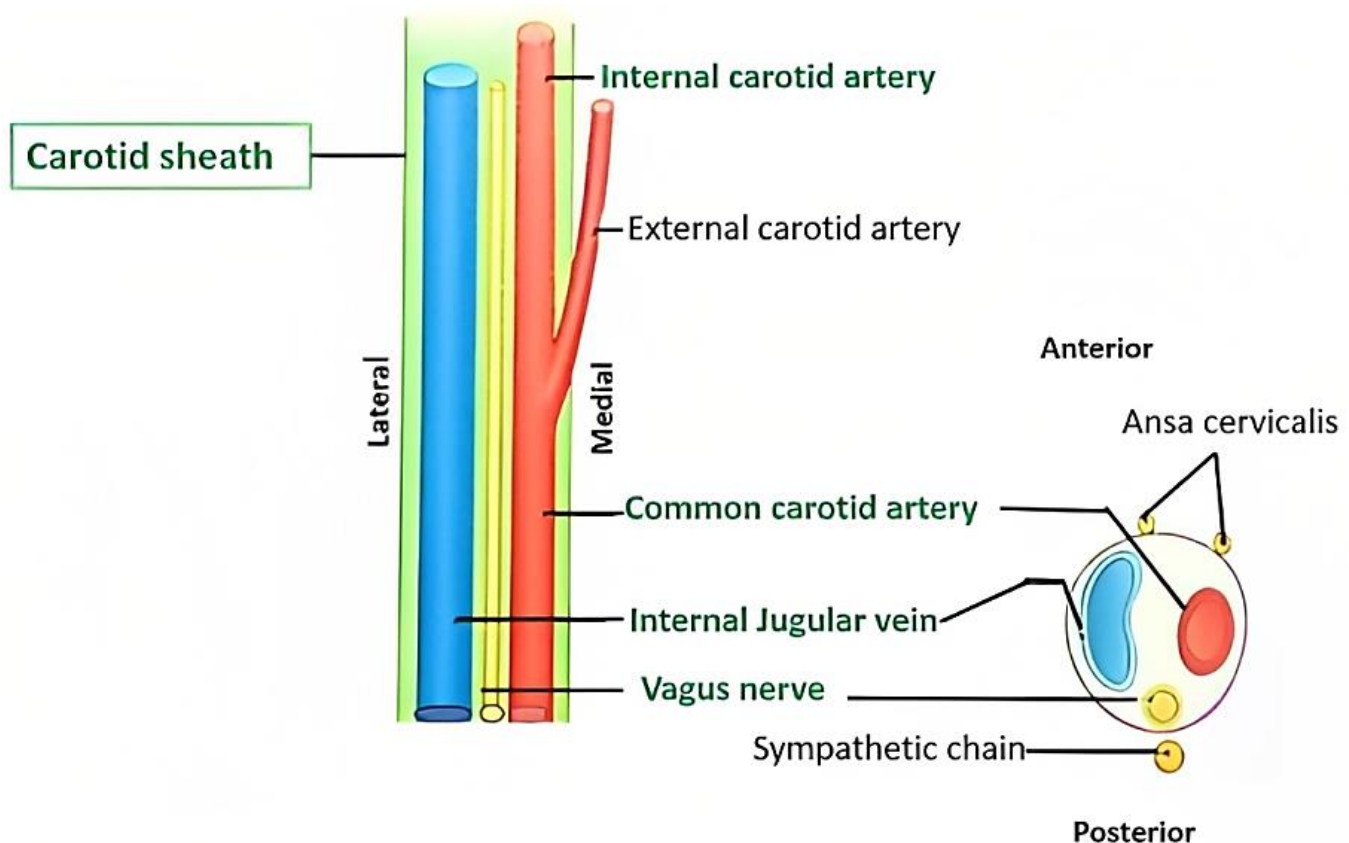
FORMATION: ANTERIOR - PRETRACHEAL FASCIA
POSTERIOR - PREVERTEBRAL FASCIA

CONTENT -

- INTERNAL CAROTID ARTERIES
- INTERNAL JUGULAR VEIN
- VAGUS NERVE
- IN UPPER PART OF SHEATH - IX, XI, XII NERVE

RELATION -

- ANTERIOR WALL -> ANSA CERVICALIS LIE EMBEDDED
- POSTERIOR WALL -> SYMPATHETIC CHAIN LIE BEHIND
- OVERLAPPED BY -> STERNOCLEIDOMASTOID MUSCLE
- FUSED TO -> DEEP CERVICAL FASCIA





ANSA CERVICALIS

THIN NERVE LOOP (C1, C2 & C3)

LIE EMBEDDED - IN ANTERIOR WALL OF CAROTID SHEATH

SUPPLIES - INFRAHYOID MUSCLES → THYROHYOID

→ OMOHYOID

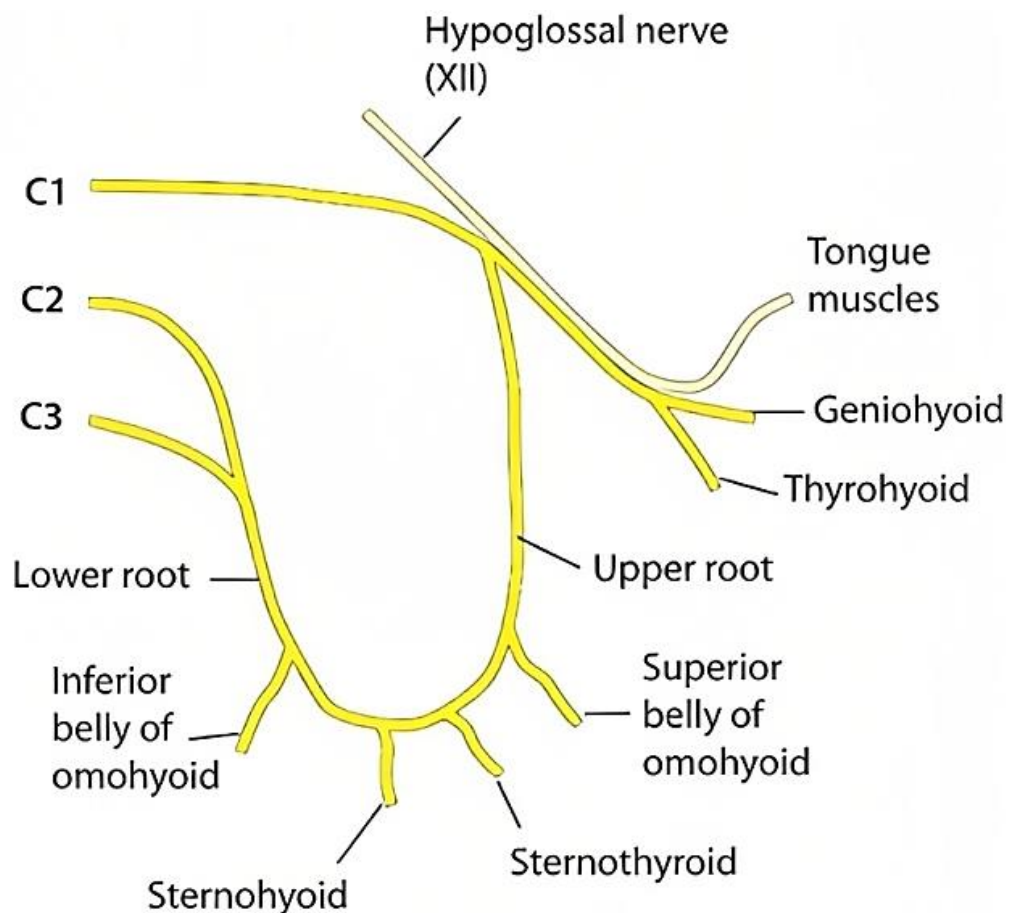
→ STERNOHYOID & STERNOHYOID

FORMATION - FORMED BY - SUPERIOR & INFERIOR ROOT

- SUPERIOR ROOT - FIBERS ARE DERIVED- FROM FIRST CERVICAL NERVE
 - CONTINUATION OF DESCENDING BRANCH OF HYPOGLOSSAL NERVE.
 - DESCEND OVER - INTERNAL CAROTID ARTERY
 - COMMON CAROTID ARTERY
- INFERIOR ROOT - DERIVED FROM 2ND & 3RD CERVICAL SPINAL NERVE
 - DESCENDS -> IT WINDS ROUND - INTERNAL JUGULAR VEIN
 - CONTINUOUS - ANTEROINFERIORLY - TO JOIN SUPERIOR ROOT IN FRONT OF COMMON CAROTID ARTERY

- DISTRIBUTION**
- SUPERIOR ROOT - SUPERIOR BELLY OF OMOHYOID
 - INFERIOR ROOT - INFERIOR BELLY OF OMOHYOID
 - ANSA CERVICALIS - STERNOHYOID
 - STERNOHYOID

THYROHYOID & GENIOHYOID SUPPLIED BY - SEPARATE BRANCHES FROM 1ST CERVICAL NERVE.





POSTERIOR TRIANGLE OF NECK

IT IS THE TRIANGULAR SPACE ON SIDE OF NECK BEHIND THE STERNOCLEIDOMASTOID MUSCLE
ITS APEX IS DIRECTED UPWARD AND BACKWARD TOWARDS THE MASTOID PROCESS
AND BASE DOWNARDS TOWARDS THE CLAVICLE

BOUNDARIES

ANTERIOR - POSTERIOR BORDER OF STERNOCLEIDOMASTOID

POSTERIOR - ANTERIOR BORDER OF TRAPEZIUS

BASE - MIDDLE 1/3 OF CLAVICLE

APEX - LIES ON SUPERIOR NUCHAL LINE

- WHERE TRAPEZIUS AND STERNOCLEIDOMASTOID MEET

FLOOR - FORMED BY PREVERTEBRAL LAYER OF DEEP CERVICAL FASCIA

- COVERING FOLLOWING MUSCLE

- SPLENIUS CAPITIS

- LEVATOR SCAPULAE

- SCALENUS MEDIUS

- SEMISPINALIS CAPITIS

ROOF - SKIN

- SUPERFICIAL FASCIA - INVESTING LAYER OF DEEP CERVICAL FASCIA

- CONTAINS - PLATYSMA

- EXTERNAL JUGULAR VEIN

- SUPRACLAVICULAR NERVE

- GREATER AURICULAR

- TRANSVERSE CUTANEOUS

- LESSER OCCIPITAL NERVE

- SUPRASCAPULAR ARTERY

- OCCIPITAL TRANSVERSE CERVICAL ARTERY

- LYMPH VESSEL

DIVISION OF POSTERIOR TRIANGLE

- SUB-DIVIDED BY- OMOHYOID MUSCLE

- LARGER UPPER PART - OCCIPITAL TRIANGLE

- SMALL LOWER PART- SUBCLAVIAN TRIANGLE

CONTENTS -

OCCIPITAL TRIANGLE

1) NERVE

→ SPINAL ACCESSARY NERVE - 4X CUTANEOUS BRANCH

- TRANSVERSE CUTANEOUS NERVE

- SUPRACLAVICULAR NERVE

- GREAT AURICULAR NERVE

- LESSER OCCIPITAL NERVE

→ MUSCULAR BRANCH - 2 LEVATAR SCAPULAE

- 2 TRAPEZIUS

- NERVE TO RHOMBOID



- 2) VESSELS - TRANSVERSE CERVICAL ARTERY AND VEIN
- OCCIPITAL ARTERY

- 3) LYMPH NODE - SUPRA-CLAVICULAR NODE
- OCCIPITAL NODE

SUBCLAVIAN TRIANGLE

- 1) NERVE -
- ROOT AND TRUNK BRACHIAL PLEXUS
 - NERVE TO SUBCLAVIUS
 - NERVE TO SERRATUS ANTERIOR
 - SUPRASCAPULAR NERVE
- 2) VESSEL -
- 3RD PART OF SUBCLAVIAN ARTERY AND VEIN
 - SUPRASCAPULAR ARTERY
 - TRANSVERSE CERVICAL ARTERY
 - EXTERNAL JUGULAR VEIN

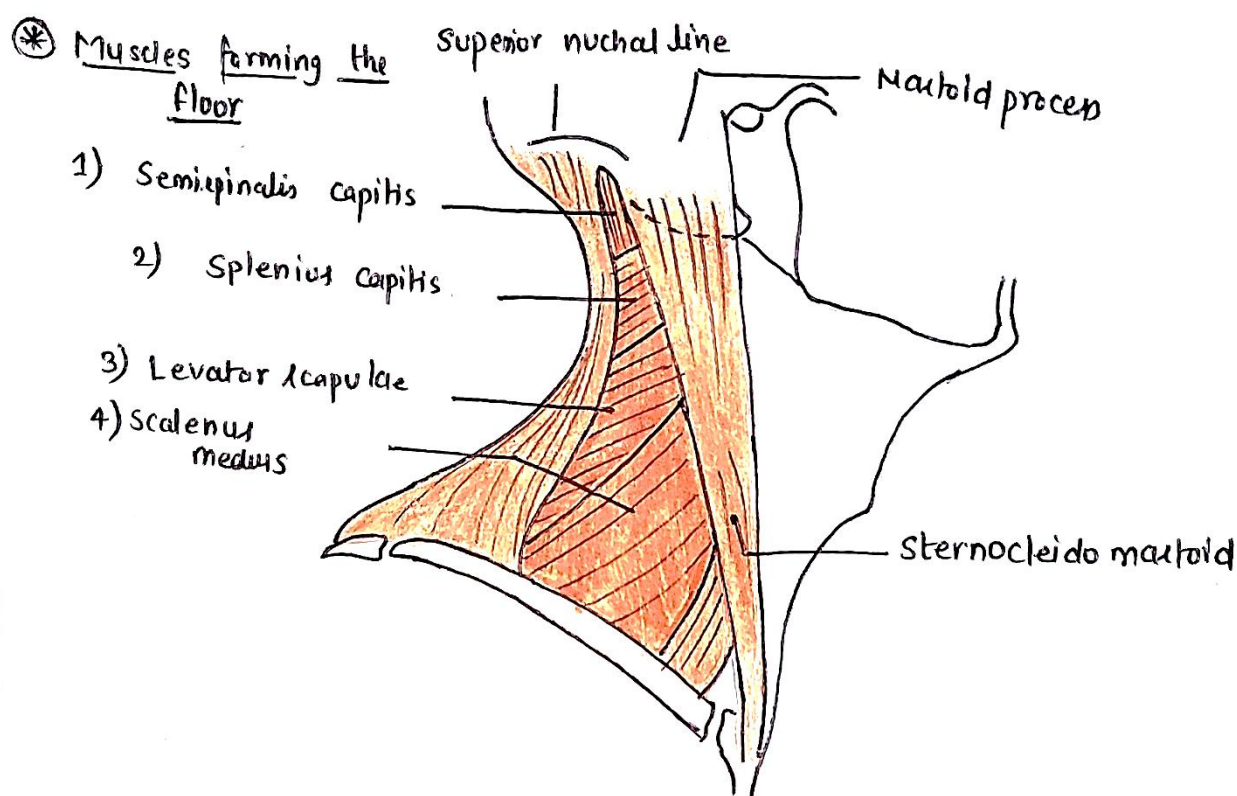
CLINICAL ANATOMY

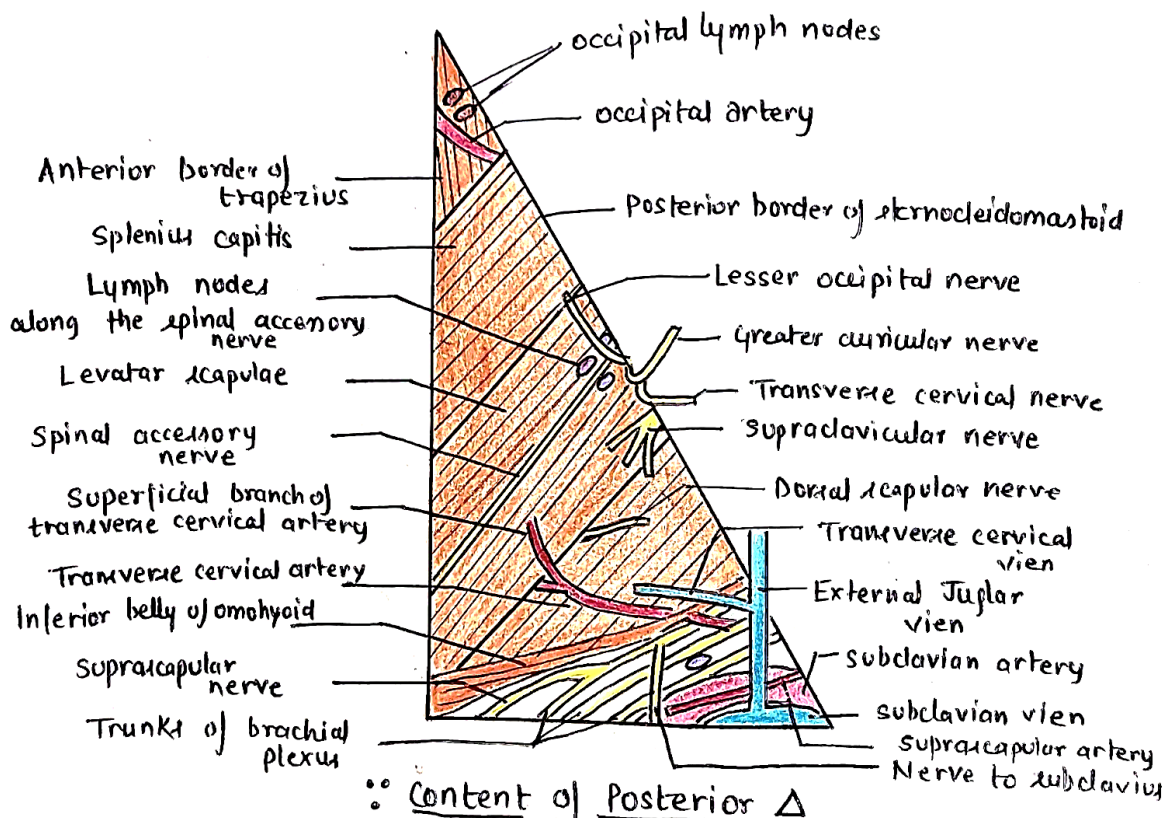
COLD ABSCESS IN POSTERIOR TRIANGULAR -

- PUS COLLECTED IN POSTERIOR TRIANGULAR TRIANGLE DEEP TO ITS FASCIAL CARPET FROM TUBERCULAR CERVICAL VERTEBRAE
- IT MAY TRACK DOWNWARDS AND laterally along AXILLARY SHEATH TO FIRST APPEAR IN AXILLA OR EVEN IN ARM SUBSEQUENTLY

SWELLING IN POSTERIOR TRIANGLE

- MOST COMMON CAUSE OF SWELLING IN POSTERIOR TRIANGLE IS DUE TO ENLARGEMENT OF LYMPH NODE -> SUPRACLAVICULAR LYMPH NODES ARE COMMONLY INVOLVED





PAROTID GLAND

INTRODUCTION

- LARGEST SALIVARY GLAND - 25G
- SITUATED- BELOW EXTERNAL ACOUSTIC MEATUS.
- B/W RAMUS OF MANDIBLE AND STERNOCLEIDOMASTOID
- ANTERIORLY- OVERLAP - MASSETER MUSCLE

CAPSULE - INVESTING LAYER OF DEEP CERVICAL FASCIA-FORM CAPSULE FOR GLAND

- SUPPLIED-BY AURICULAR NERVE
- FASCIA SPLITS - ENCLOSE GLAND
- SUPERIOR LAMINA - THICK & ADHERENT TO GLAND
 - ATTACHED ABOVE - ZYGOMATIC ARCH
- DEEP LAMINA - THIN
 - ATTACHED -> TYMPANI PLATE
 - PORTION OF D.L EXTEND B/W STYLOID PROCESS AND MANDIBLE -> IS THICKENED FORM **STYLOMANDIBULAR LIGAMENT**

EXTERNAL FEATURES

- 3 SIDE PYRAMID
- APEX - DOWNWARD
- 4 SURFACE - SUPERIOR
 - SUPERFICIAL
 - ANTEROMEDIAL
 - POSTEROMEDIAL
- 3 BORDER-
 - ANTERIOR



- POSTERIOR
- MEDIAL

RELATION**1) APEX - POSTERIOR BELLY DIGASTRIC**

- CERVICAL BRANCH OF FACIAL NERVE
- 2 DIVISION OF RETROMANDIBULAR VEIN

2) SURFACE**1) SUPERIOR SURFACE -**

- SUPERFICIAL TEMPORAL VESSEL
- AURICULO TEMPORAL NERVE
- EXTERNAL ACOUSTIC MEATUS
- POSTERIOR SURFACE OF TMJ

2) SUPERFICIAL SURFACE → SKIN

- SUPERFICIAL FASCIA
- PAROTID FASCIA
- DEEP PAROTID LYMPH NODE

3) ANTEROMEDIAL SURFACE -

- RAMUS OF MANDIBLE
- MASSETER
- MEDIAL PTERYGOID
- LATERAL SURFACE OF TMJ

4) POSTEROMEDIAL SURFACE - MASTOID PROCESS

- STYLOID PROCESS

3) BORDER -**1) ANTERIOR BORDER - TERMINAL BRANCH OF FACIAL NERVE**

- PAROTID DUCT
- TRANSVERSE FACIAL VESSEL

2) POSTERIOR BORDER SEPARATE → SUPERFICIAL SURFACE TO POSTEROMEDIAL SURFACE**3) MEDIAL BORDER SEPARATE → ANTEROMEDIAL TO POSTEROMEDIAL SURFACE****STRUCTURE WITHIN THE PEROTID GLAND****ARTERIES - "ECA" ENTER POSTEROMEDIAL SURFACE**

- MAXILLARY A. LEAVE → ANTEROMEDIAL SURFACE
- TFA → ANTERIOR PART - SUPERIOR SURFACE

VEIN - RETROMANDIBULAR VEIN → FORMED IN GLAND WITH BY STV + MV

- LOWER PART ANTERIOR, POSTERIOR DIVISION → EMERGE, APEX

NERVE - FACIAL NERVE - ENTER → POSTEROMEDIAL SURFACE

- LEAVE → ANTEROMEDIAL SURFACE

**- BRANCH ->**

TEMPORAL BRANCH
 ZYGOMATIC BRANCH
 BUCCAL BRANCH
 MARGINAL MANDIBULAR NERVE
 CERVICAL BRANCH

PAROTID DUCT — EMERGS, MIDDLE OF ANTERIOR BORDER
 - RUN FORWARD DOWNLOAD ON MASSETER
 - PIERCE IN- BUCCINATOR MUSCLE
 - FINALLY DUCT OPEN - VESTIBULE OF MOUTH

BLOOD SUPPLY - ARTERY - EXTERNAL CAROTID ARTERY

VEIN SUPPLY - EJU AND IJU

NERVE SUPPLY -

- 1) SENSORY NERVE - AURICULOTEMPORAL NERVE
- 2) SYMPATHETIC NERVE - VASOMOTOR - PLEXUS AROUND - MIDDLE MENINGEAL ARTERY
- 3) PARASYMPATHIC NERVE - SECRETO MOTOR

INFERIOR SALIVATORY NUCLEUS
 GLOSSOPHARYNGEAL NERVE
 TYMPANIC BRANCH
 TYMPANIC NERVE
 LESSER PETROSAL NERVE
 OTIC GANGLION
 POST-GANGLIONIC FIBRE THROUGH AURICULOTEMPORAL NERVE

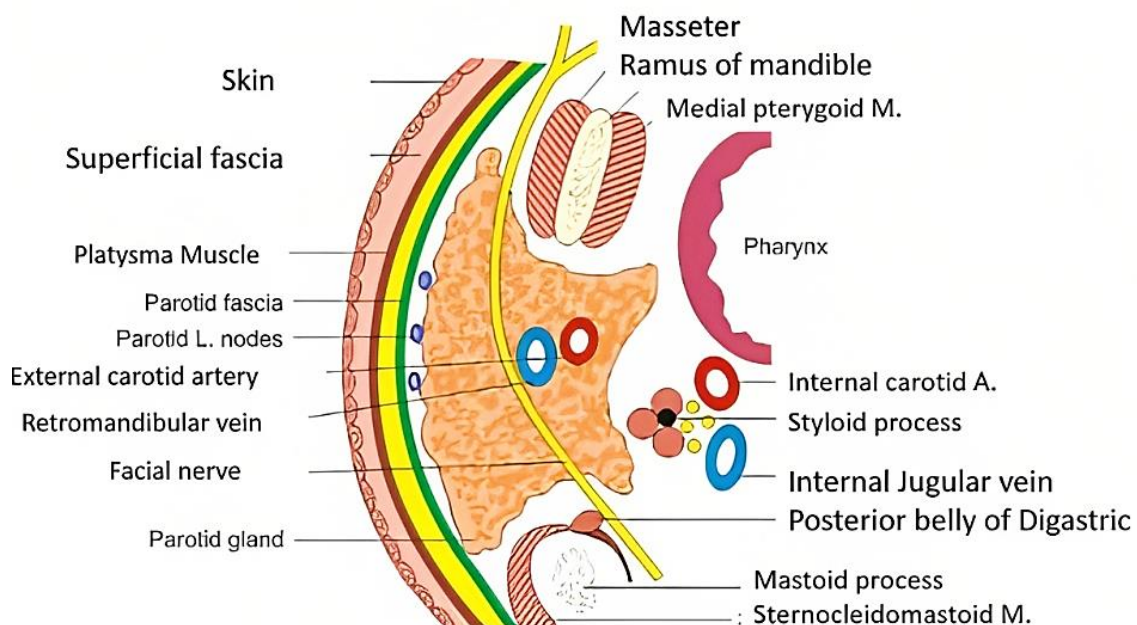
CLINICAL ANATOMY

MIXED PAROTID TUMOR -

- ITS IS SLOW GROWING LOBULATED PAINLESS TUMOR OF LARGE SUPERFICIAL PART OF PAROTID GLAND
- IT IS SO CALLED BECAUSE OF ITS MIXED HISTOLOGICAL APPEARANCE, CURRENTLY, IT IS TERMED PLEOMORPHIC ADENOMA

FREY'S SYNDROME NERVE SYNDROME

- SOMETIME PENETRATING WOUNDS OF PAROTID GLAND MAY DAMAGE AURICULOTEMPORAL AND GREAT AURICULAR NERVE
- THE PRESENTING FEATURES
 - > WHEN A PERSON EAT, THE IPSILATERAL CHEEK BECOME RED, HOT AND PAINFUL
 - > WHEN A PERSON SHAVES, THERE IS CUTANEOUS HYPERESTHESIA IN FRONT OF EAR







SUBMANDIBULAR GLAND

THIS IS LARGEST SALIVARY GLAND, SITUATED IN ANTERIOR PART OF DIGASTRIC TRIANGLE
GLAND IS ABOUT -> SIZE OF WALNUT WEIGHING ABOUT - 15 TO 20G
POSTERIOR BORDER OF MYLOHYOID - DIVIDE -> INTO LARGER PART -SUPERFICIAL TO MUSCLE
-> SMALL PART - DEEP TO MUSCLE

COVERINGS

- 1) GLAND PARTIALLY ENCLOSED BETWEEN TWO LAYERS OF DEEP CERVICAL FASCIA
- 2) SUPERFICIAL LAYER OF FASCIA - COVER - INFERIOR SURFACE OF SURFACE & ATTACHED TO BASE OF MANDIBLE
- 3) DEEP LAYER - COVER - MEDIAL SURFACE OF GLAND & SUPERIORLY TO MYLOHYOID LINE OF MANDIBLE

SUPERFICIAL PART

- THIS PART OF GLAND FILLS - DIGASTRIC TRIANGLE
- EXTENDS - SUPERIORLY DEEP TO MANDIBLE UP TO MYLOHYOID LINE

RELATIONS - SUPERFICIAL SURFACE -> SKIN

- > SUPERFICIAL FASCIA CONTAINING PLATYSMA
- > DEEP FASCIA
- > FACIAL VEIN
- > SUBMANDIBULAR LYMPH NODE

LATERAL SURFACE -> MEDIAL PTERYGOID MUSCLE

-> FACIAL ARTERY

MEDIAL SURFACE -> DIVIDED INTO

ANTERIOR PART -> MYLOHYOID MUSCLE

-> SUBMENTAL BRANCH OF OF FACIAL ARTERY

-> LINGUAL & HYPOGLOSSAL NERVE

MIDDLE PART -> HYOGLOSSUS MUSCLE

-> STYLOGLOSSUS MUSCLE

POSTERIOR PART -> STYLOGLOSSUS PART

-> STYLOHYOID LIGAMENT

DEEP PART -

- THIS PART IS SMALL IN SIZE
- LIE DEEP TO MYLOHYOID

RELATION - MEDIAL -> HYOGLOSSUS

LATERAL -> MYLOHYOID

SUPERIOR -> LINGUAL NERVE AND SUBMANDIBULAR GANGLION

INFERIOR -> HYPOGLOSSAL NERVE ACCOMPANIED BY A PAIR OF VEINS

ARTERY SUPPLY -> FACIAL ARTERY

VEIN DRAINAGE -> FACIAL VEIN

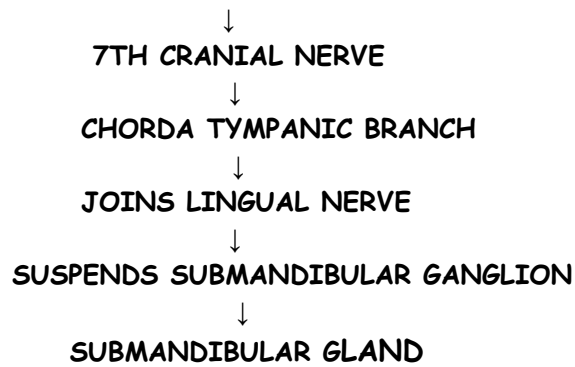
NERVE SUPPLY

1) SENSORY FIBERS -> LINGUAL NERVE

2) VASOMOTOR SYMPATHETIC FIBERS FROM -> PLEXUS ON FACIAL ARTERY



3) SECRETOMOTOR FIBERS - SUPERIOR SALIVATORY NUCLEUS



CLINICAL ANATOMY

FORMATION OF CALCULI IN SUBMANDIBULAR GLAND -

MORE COMMON THEN IN PAROTID GLAND DUE TO SECRETION IS MORE VISCID AND DUCT TAKE A TORTUOUS AND UPWARD COURSE

RANULA

- LARGE MUCUS RETENTION CYST IN FLOOR OF MOUTH ARISING FROM SUBLINGUAL GLAND



THYROID GLAND

THYROID GLAND - LARGEST ENDOCRINE GLAND

- LOWER PART OF FRONT AND SIDE OF NECK
- FUNCTION - BASAL METABOLIC RATE
 - CALCIUM METABOLISM
 - NATURAL IODINE SYNTHESIS
- CONSIST OF - 2 LOBES -> RIGHT & LEFT LOBE -> JOINED TO EACH OTHER BY ISTHMUS
- SITUATION - GLAND LIES AGAINST - C5-C7, T1 VERTEBRAE
 - EACH LOBE EXTEND -> MIDDLE OF THYROID CARTILAGE TO FIFTH TRACHEAL RING
- ISTHMUS EXTEND -> SECOND TO FOURTH TRACHEAL RING

CAPSULE OF THYROID

- TRUE CAPSULE -> PERIPHERAL CONDENSATION OF CONNECTIVE TISSUE OF GLAND
 - > DENSE CAPILLARY PLEXUS IS PRESENT DEEP TO TRUE CAPSULE
- FALSE CAPSULE -> DERIVED FROM - PRETRACHEAL LAYER OF DEEP CERVICAL FASCIA
 - > THIN IN POSTERIOR BORDER OF LOBE
 - > THICK INNER SURFACE OF GLAND TO FORM SUSPENSARY LIGAMENT (OF BERRY)

PARTS AND RELATIONS

- 1) LOBES - APEX
 - BASE
 - 3 SURFACES - LATERAL
 - MEDIAL
 - POSTEROLATERAL
 - 2 BORDER - ANTERIOR
 - POSTERIOR
- 2) ISTHMUS - 2 SURFACE - ANTERIOR
 - POSTERIOR
 - 2 BORDER - SUPERIOR
 - INFERIOR

THYROID GLAND RELATION

LOBES:

- 1) APEX - STERNOTHYROID MUSCLE
 - SUPERIOR THYROID ARTERY
 - EXTERNAL LARYNGEAL NERVE
- 2) BASE - INFERIOR THYROID ARTERY
 - RECURRENT LARYNGEAL NERVE
- 3) SURFACE:
 - 1) LATERAL - STERNO THYROID
 - STERNO HYOID
 - SUPERIOR BELLY OF OMOHYOID
 - STERNOCLEIDOMASTOID
 - 2) MEDIAL - 2X TUBE - TRACHEA
 - OESOPHAGUS
 - 2 MUSCLE - INFERIOR CONSTRUCTOR
 - CRICOTHYROID

**-2 NERVE - EXTERNAL RECURRENT LARYNGEAL NERVE****3) POSTEROLATERAL - CAROTID SHEATH****4) BORDER****ANTERIOR BORDER - THIN**

- SUPERIOR THYROID ARTERY

POSTERIOR BORDER - THICK

- INFERIOR THYROID ARTERY
- PARATHYROID GLAND
- THORACIC DUCT

ISTHMUS**1) ANTERIOR SURFACE - STERNO THYROID**

- STERNO HYOID

2) POSTERIOR SURFACE- 2ND TO 4TH TRACHEAL RINGS**3) UPPER SURFACE - SUPERIOR THYROID ARTERIES****4) LOWER SURFACE - INFERIOR THYROID VEIN****ARTERIAL SUPPLY -****1) SUPERIOR THYROID ARTERY - FIRST BRANCH OF ECA**

- DOWNWARD, FORWARDS RUN
- RELATION-EXTERNAL LARYNGEAL NERVE
- APEX OF LOBE

2) INFERIOR THYROID ARTERY - BRANCH OF THYROCERVICAL TRUNK - SUB CLAVIAN ARTERY

- UPWARD, MEDIALY RUN
- RELATION- RECURRENT LARYNGEAL NERVE
- BASE OF GLAND

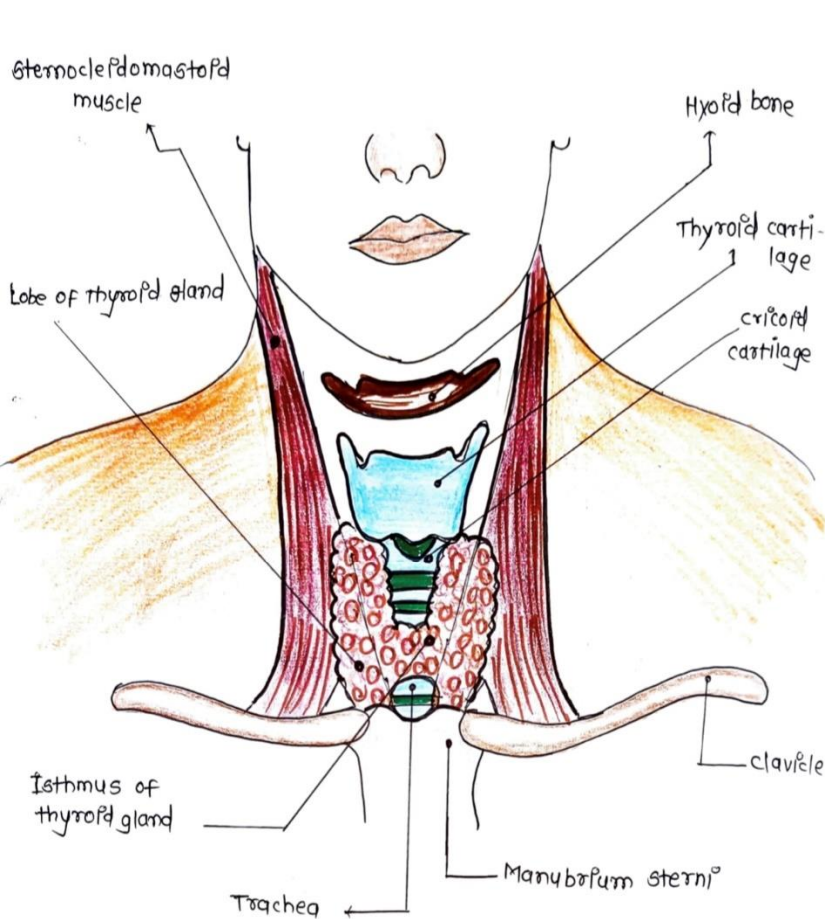
3) ACCESSORY THYROID ARTERY - ARISE FROM TRACHEA AND OESOPHAGUS ARTERY**VENOUS DRAINAGE**

- SUPERIOR THYROID VEIN - DRAIN - INTERNAL JUGULAR VEIN
- MIDDLE THYROID VEIN → INTERNAL JUGULAR VEIN
- INFERIOR THYROID VEIN - LEFT BRACHIOCEPHALIC VEIN

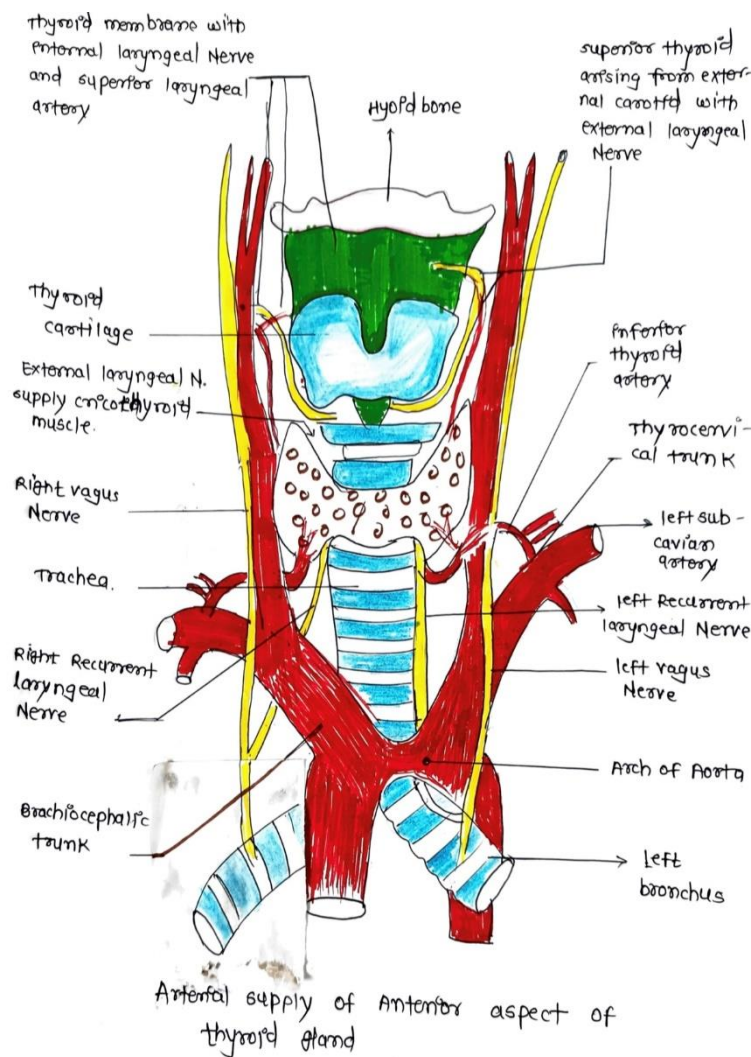
LYMPHATIC - DEEP CERVICAL LYMPH NODES**NERVE - DERIVED FROM-> MIDDLE CERVICAL GANGLION****PARTLY FROM -> SUPERIOR AND INFERIOR CERVICAL GANGLION****CLINICAL ANATOMY****GOITRE -**

- ENLARGEMENT OF THYROID GLAND EXCEPT THAT DURING MENSTRUATION AND LACTATION IS CALLED GOITRE
- IT MAY BE ASSOCIATED WITH HYPOFUNCTION OR HYPERFUNCTION OF GLAND

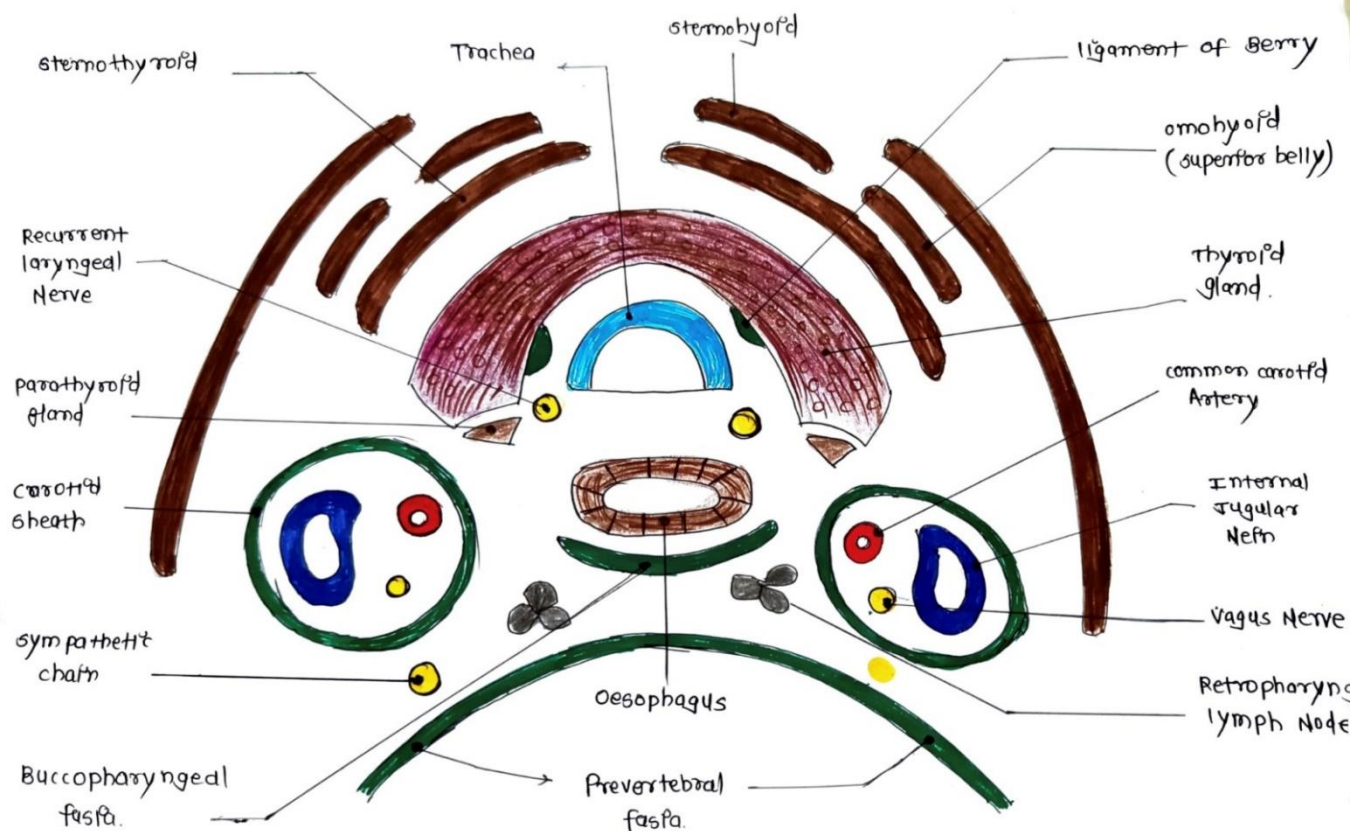
SIMPLE GOITRE -**ENLARGEMENT OF THYROID GLAND WITHOUT SIGNS OF HYPERTHYROIDISM****BENIGN TUMORS****MAY COMPRESS OR ALSO DISPLACE THE NEIGHBOURING STRUCTURE WHEREAS MALIGNANT GROWTH TENDS TO INVAD E SURROUNDING STRUCTURES**



Position of thyroid gland.



Arterial supply of Anterior aspect of thyroid gland





TEMPAROMANDIBULAR JOINT

TYPE OF JOINT: SYNOVIAL JOINT OF CONDYLAR VARIETY

- ARTICULAR SURFACE - UPPER ARTICULAR SURFACE IS FORMED BY -> TEMPORAL BONE
-> ARTICULAR TUBERCLE
-> MANDIBULAR FOSSA
-> TYMPANIC PLATE
- INFERIOR ARTICULAR SURFACE → HEAD OF MANDIBLE

LIGAMENTS

- 1) FIBROUS CAPSULE -
ATTACH - ABOVE -> ARTICULAR TUBERCLE CIRCUMFERENCE OF MANDIBULAR FOSSA
- BEHIND -> SQUAMOTYMPANIC FISSURE
- BELOW -> NECK OF MANDIBLE
- SYNOVIAL MEMBRANE LINE -> FIBROUS CAPSULE
- 2) LATERAL TEMPOROMANDIBULAR LIGAMENT -
ATTACH - ABOVE - ARTICULAR TUBERCLE
- BELOW - POSTEROLATERAL ASPECT OF NECK OF MANDIBLE
- STRENGTH— LATERAL PART - CAPSULE
- 3) SPHENOMANDIBULAR LIGAMENT -
ATTACH -
SUPERIORLY -> SPINE OF SPHENOID
INFERIARLY -> LINGUAL OF MANDIBULAR FORAMEN
-> ACCESSARY LIGAMENT
-> REMNANT - DORSAL PART OF MECKEL CARTILAGE
- 4) STYLOMANDIBULAR LIGAMENTS-
ATTACHED - ABOVE- STYLOID PROCESS
- BELOW - ANGLE AND POSTERIOR BORDER OF RAMUS OF MANDIBLE
- ACCESSARY LIGAMENT
- THICKEND - DEEP CERVICAL
- 5) ARTICULAR DISC-
- OVAL PREDOMINANTLY FIBROUS PLATE JOINT -> DIVIDE JOINTS UPPER AND LOWER COMPARTMENT
- COMPOSED OF - ANTERIOR EXTENSION
ANTERIOR BAND - INTERMEDIATE- POSTERIOR BAND BILAMINAR REGION
- DISC REPRESENTS - DEGENERATED PRIMITIVE INSERTION OF LATERAL PTERYGOID
- PREVENTS FRICTION BETWEEN THE ARTICULATING SURFACES
- SHOCK ABSORPTION
- "PROPRIOCEPTIVE FIBRE" HELP REGULATE MOVEMENTS OF JOINT

RELATION

- 1) LATERAL - SKIN
- SUPERFICIAL FASCIA
- PAROTID GLAND



- TEMPORAL BRANCH OF FACIAL NERVE

2) MEDIAL - TYMPANIC PLATE

- SPINE OF SPHENOID
- ANTERIOR-LATERAL PTERYGOID
- AURICULO TEMPORAL AND CHORDO-TYMPANI NERVE
- MIDDLE MENINGEAL ARTERY

3) ANTERIOR - LATERAL PTERYGOID

- MASSETERIC NERVE AND ARTERY

4) POSTERIOR - PAROTID GLAND

- SUPERFICIAL TEMPORAL VESSEL
- AURICULO-TEMPORAL NERVE

5) SUPERIOR- MIDDLE CRANIAL FOSSA

6) INFERIOR - MAXILLARY ARTERY

BLOOD SUPPLY - SUPERFICIAL TEMPORAL ARTERY AND VEIN
- MAXILLARY ARTERIES AND VEIN

NERVE SUPPLY - AURICULO-TEMPORAL NERVE
- MASSETERIC NERVE

MOVEMENTS

1) DEPRESSION (OPEN MOUTH) - LATERAL PTERYGOID

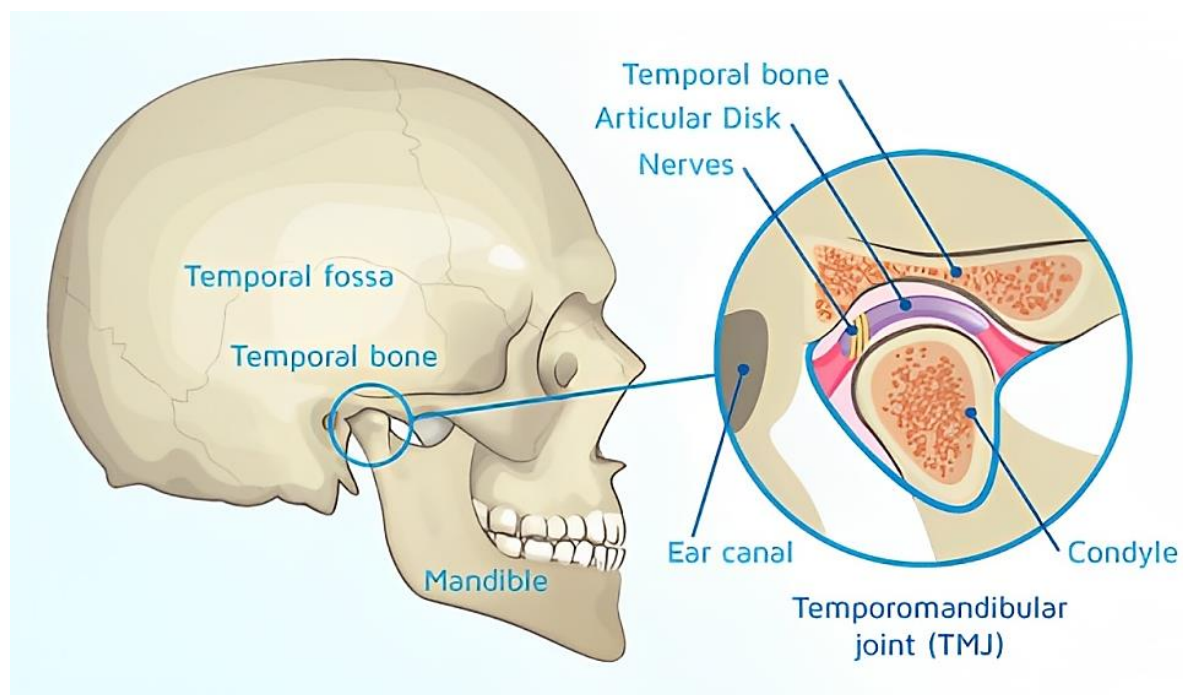
- DIGASTRIC AND GENIOHYOID

2) ELEVATION (CLOSE MOUTH) → MASSETER AND MEDIAL PTERYGOID

3) PROTRUSION - MEDIAL & LATERAL PTERYGOID.

4) RETRUSION - TEMPORALIS & MASSETER

5) SIDE TO SIDE MOVEMENT DURING CHEWING





MUSCLE OF MASTICATION

THE MUSCLE OF MASTICATION ARE CONCERNED WITH MOVEMENT OF MANDIBLE AT THE TEMPOROMANDIBULAR JOINTS DURING MASTICATION

THEY ARE DIVIDED INTO TWO GROUPS

1) PRINCIPAL MUSCLE -> TEMPORALIS

- > MASSETER
- > LATERAL PTERYGOID
- > MEDIAL PTERYGOID

2) ACCESSORY MUSCLE -> DIGASTRIC

- > BUCCINATOR
- > MYLOHYOID
- > GENIOHYOID

1) MASSETER - QUADRILATERAL

ORIGIN - SUPERFICIAL - ZYGOMATIC PROCESS OF MAXILLA
- ANTERIOR 1/3 ZYGOMATIC ARCH

- DEEP - ZYGOMATIC ARCH
- MIDDLE - 1/3 OF ZYGOMATIC ARCH

INSERTION - SUPERFICIAL - LOWER LATERAL SURFACE OF MANDIBLE

- DEEP - RAMUS OF MANDIBLE
- MIDDLE - CENTRAL PART OF RAMUS OF MANDIBLE

NERVE - MASSETER NERVE OF MANDIBULAR NERVE

ACTION - ELEVATION OF MANDIBLE

2) TEMPORALIS - FAN-SHAPED

ORIGIN - TEMPORAL FOSSA EXCLUDING ZYGOMATIC BONE

INSERTION - DEEP SURFACE OF CORONOID PROCESS

- ANTERIOR BORDER OF RAMUL OF MANDIBLE

NERVE - DEEP TEMPORAL BRANCH OF M.N

ACTION - ELEVATION & RETRACTION OF MANDIBLE

3) LATERAL PTERYGOID:

ORIGIN - UPPER HEAD - INFRA-TEMPORAL SURFACE & INFRA-TEMPORAL CREST OF GREATER WING OF SPHENOID BONE

LOWER HEAD - LATERAL PTERYGOID PLATE

INSERTION - PTERYGOID FOVEA ON ANTERIOR OF NECK OF MANDIBLE

NERVE - ANTERIOR DIVISION OF MANDIBULAR NERVE

ACTION - DEPRESSION OF MANDIBLE & PROTRACTIN

4) MEDIAL PTERYGOID - QUADRILATERAL

ORIGIN - SUPERFICIAL HEAD - TUBEROSITY OF MAXILLA

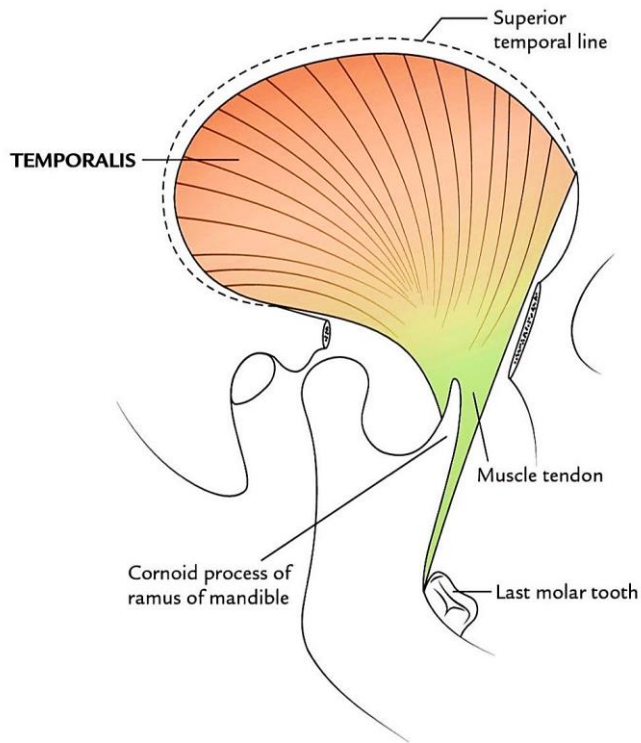
DEEP HEAD - MEDIAL SURFACE OF - LATERAL PTERYGOID PLATE

INSERTION - MEDIAL SURFACE OF ANGLE OF ADJOINING RAMUS OF MANDIBLE

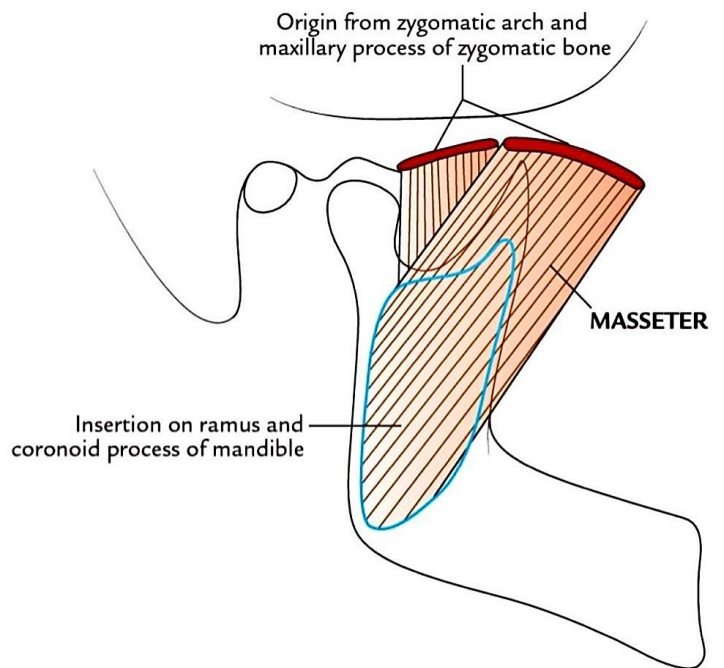


NERVE- NERVE TO MEDIAL PTERYGOID → MANDIBULAR NERVE

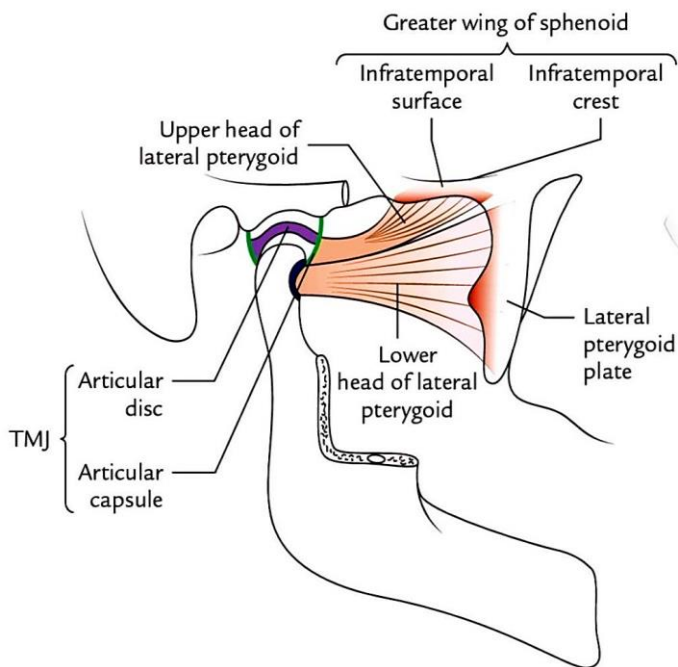
ACTION - ELEVATION OF MANDIBLE & PROTRACTION



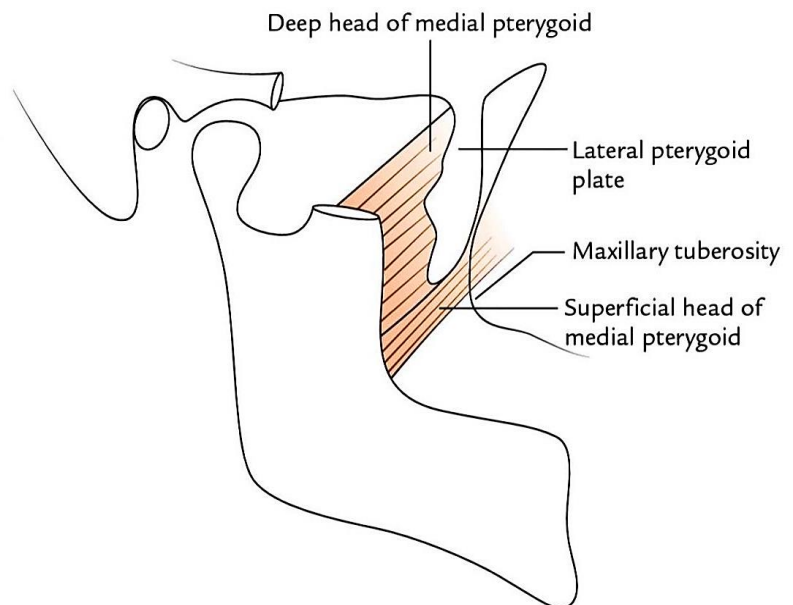
Origin and insertion of the temporalis muscle.



Origin and insertion of the masseter muscle.



Origin and insertion of the lateral pterygoid muscle.



Origin and insertion of the medial pterygoid



INFRATEMPORAL FOSSA

INFRATEMPORAL FOSSA IS SPACE BENEATH THE BASE OF SKULL BETWEEN SIDE WALL OF PHARYNX AND RAMUS OF MANDIBLE

IT COMMUNICATES WITH TEMPORAL FOSSA THROUGH A GAP DEEP TO ZYGOMATIC ARCH
IT ALSO REFERRED TO AS THE P[ARAPHARYNGEAL SPACE

BOUNDARIES

ROOF -> FORMED BY INFRATEMPOAL SURFACE OF GREATER WING OF SPHENOID

MEDIAL WALL -> FORMED BY LATERAL SURFACE OF LATERAL PTERYGOID PLATE OF SPHENOID

LATERAL WALL -. FORMED BY RAMUS OF MANDIBLE

ANTERIOR WALL -> FORMED BY INFRATEMPORAL SURFACE OF MAXIILA

FLOOR -> OPEN AND EXTENDS UP TO LEVEL OF BASE OF MANDIBLE

POTERIOR WALL -> FORMED BY STYLOID PROCESS OF TEMPORAL BONE

CONTENTS

1) MUSCLE -> LATERAL PTERYGOID, MEDIAL PTERYGOID AND TENDON OF TEMPORALIS

2) BLOOD VESSEL -> MAXILLARY ARTERY, MAXILLARY VEIN AND PTERYGOID VENOUS PLEXUS

3) NEURAL STRUCTURE -> MANDIBULAR NERVE, TYMPANI NERVE AND OTIC GANGLION



PTERYGOPALATINE FOSSA

PTERYGOPALATINE FOSSA IS A PYRAMIDAL SPACE SITUATED DEEPLY BELOW THE APEX OF ORBIT BETWEEN THE PTERYGOID PROCESS OF SPHENOID BEHIND AND PERPENDICULAR PLATE OF PALATINE IN FRONT

BOUNDARIES

ANTERIOR -> PERPENDICULAR PLATE OF PALATINE AND POSTERIOR SURFACE OF MAXILLA

POSTERIOR -> PTERYGOID PROCESS AND ADJOINING PART OF ANTERIOR SURFACE OF GREATER WING OF SPHENOID

MEDIAL -> UPPER PART OF PERPENDICULAR PLATE OF PALATINE ORBITAL AND SPHENOIDAL PROCESS OF PALATINE

LATERAL -> FOSSA OPENS INTO INFRATEMPORAL FOSSA THROUGH PTERYGOMAXILLARY FISSURE

SUPERIOR -> INNER SURFACE OF BODY OF SPHENOID AND ORBITAL PROCESS OF PALATINE

INFERIOR -> PYRAMIDAL PROCESS OF PALATINE BONE IN ANGLE BETWEEN THE MAXILLA AND PTERYGOID PROCESS

CONTENTS -> MAXILLARY NERVE
-> PTERYGOPALATINE GANGLION
-> THIRD PART OF MAXILLARY ARTERY



MANDIBULAR NERVE

- LARGEST MIXED BRANCH OF TRIGEMINAL NERVE

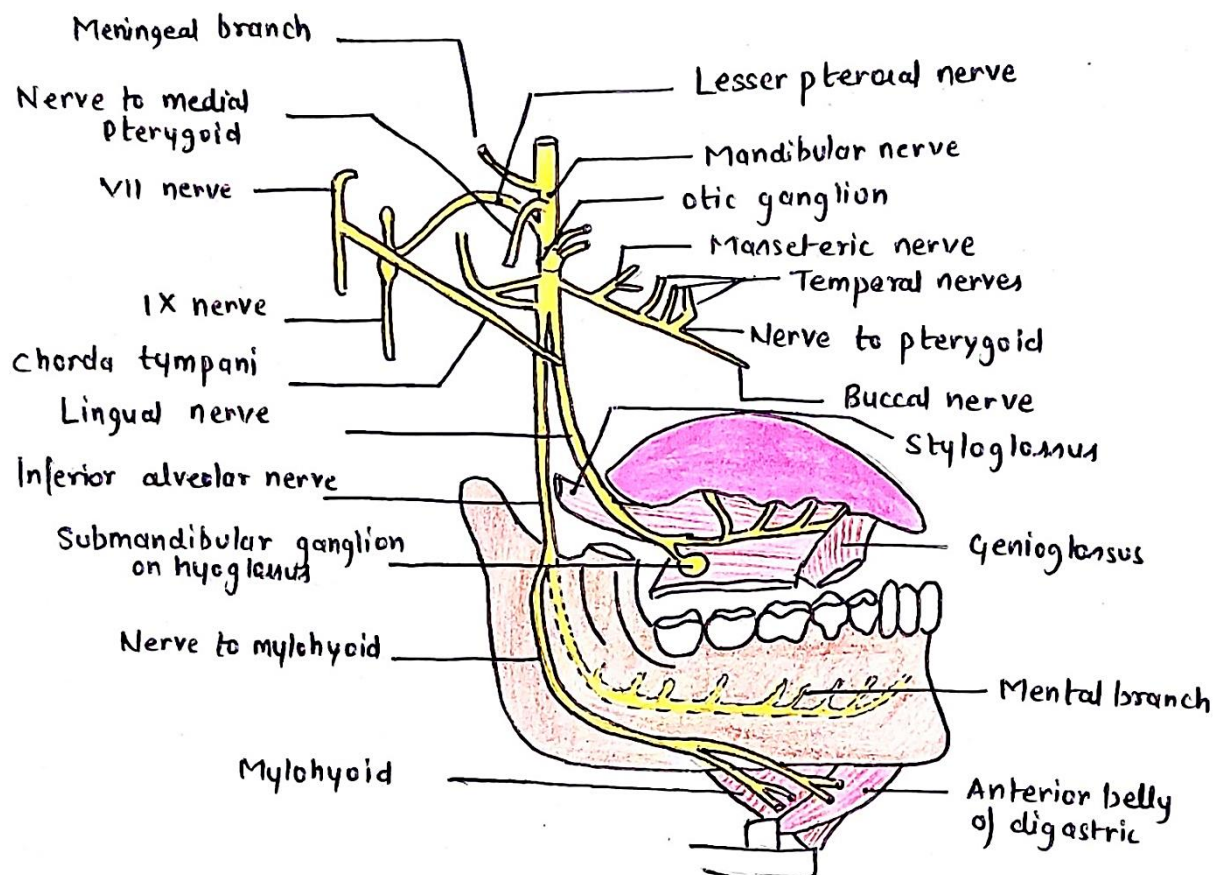
- IT IS A MIXED NERVE, CONSISTING OF BOTH SENSORY AND MOTOR FIBRES
- IT IS A NERVE OF FIRST PHARYNGEAL ARCH
- **OTIC AND SUB-MANDIBULAR GLANDS - ASSOCIATED WITH THIS NERVE**

COURSE

- 1) BEGIN IN MIDDLE CRANIAL FOSSA THROUGH, LARGE SENSORY ROOT & SMALL MOTOR ROOT
- 2) LARGE SENSORY ROOT ARISE FROM LATERAL PART OF TRIGEMINAL GANGLION
LEAVE CRANIAL CAVITY FORAMEN OVALE
- 3) SMALL MOTOR ROOT LIE DEEP TO TRIGEMINAL GANGLION - LEAVE - CRANIAL CAVITY → FORAMEN OVALE
- 4) BOTH ROOT JOIN BELOW FORAMEN FORM - MAIN TRUNK
- 5) MAIN TRUNK IN INFRATEMPORAL FOSSA DEEP TO LATERAL PTERYGOID
- 6) MAIN TRUNK DIVIDED → ANTERIOR TRUNK, POSTERIOR TRUNK

BRANCHES

1. MAIN TRUNK -> MENINGEAL BRANCH, NERVE TO MEDIAL PTERYGOID
2. ANTERIOR TRUNK -> SENSORY BRANCH -> BUCCAL NERVE
-> MOTOR BRANCH -> MASSETERIC, DEEP TEMPORAL NERVE
-> NERVE TO LATERAL PTERYGOID
3. POSTERIOR TRUNK -> AURICULO TEMPORAL NERVE, LINGUAL, INFERIOR ALVEOLAR NERVE





BLOOD SUPPLY OF HEAD AND NECK

EXTERNAL CAROTID ARTERY

ECA IS TERMINAL BRANCH OF COMMON CAROTID ARTERY

CHIEF ARTERY OF SUPPLY → FRONT OF NECK & FACE

COURSE

- BEGIN → IN CAROTID TRIANGLE AT LEVEL OF UPPER BORDER OF THYROID CARTILAGE
- OPPOSITE TO C3 & C4
- RUN UPWARD, BACKWARD AND LATERALLY

TERMINATE - BEHIND NECK OF MANDIBLE

- DIVIDING → MAXILLARY AND SUPERFICIAL TEMPORAL ARTERY
- SLIGHTLY CURVED COURSE → LOWER ANTEROMEDIAL - TO ICA
→ UPPER ANTEROLATERAL TO ICA
- IN CAROTID TRIANGLE → IS SUPERFICIAL
→ LIE UPPER COVER OF ANTERIOR BORDER OF STERNOCLEIDOMASTOID MUSCLE
- ABOVE CAROTID → LIE - DEEP IN PAROTID GLAND
 - RELATED - RETROMANDIBULAR VEIN
 - & FACIAL NERVE

BRANCHES - ANTERIOR - SUPERIOR THYROID A.

- LINGUAL A.
- FACIAL A
- POSTERIOR - OCCIPITAL
 - POSTERIOR AURICULAR A.
- MEDIAL - ASCENDING PHARYNGEAL A.
- TERMINAL - MAXILLARY ARTERY
 - SUPERFICIAL TEMPORAL A.

1) SUPERIOR THYROID A.

- BRANCH OF ECA - JUST BELOW GREATER CORNUA OF HYOID BONE
- RUN - DOWNWARD, FORWARD PARALLEL TO LATERAL LOBE OF THYROID
- SUPPLY - THYROID GLAND - TERMINAL BRANCH - SUPERIOR LARYNGEAL ARTERY

2) LINGUAL A - ARISE - OPPOSITE TIP OF GREATER CORNUA OF HYOID BONE

- BRANCH - SUPRAHYOID, DORSAL LINGUAL, SUB- LINGUAL

3) FACIAL A. - SAME AS FACIAL ARTERY NOTES (NEXT TOPIC)

4) OCCIPITAL A - OPPOSITE ORIGIN OF FACIAL ARTERY

- CROSSED AT ITS ORIGIN HYPOGLOSSAL NERVE

5) POSTERIOR AURICULAR ARTERY

- ABOVE POSTERIOR BELLY OF DIGASTRIC
- UPWARD BACKWARD → DEEP PAROTID GLAND & STYLOID PROCESS
- SUPPLY → SKIN → OVER MASTOID PROCESS & BACK OF SCALP

**6) ASCENDING PHARYNGEAL ARTERY**

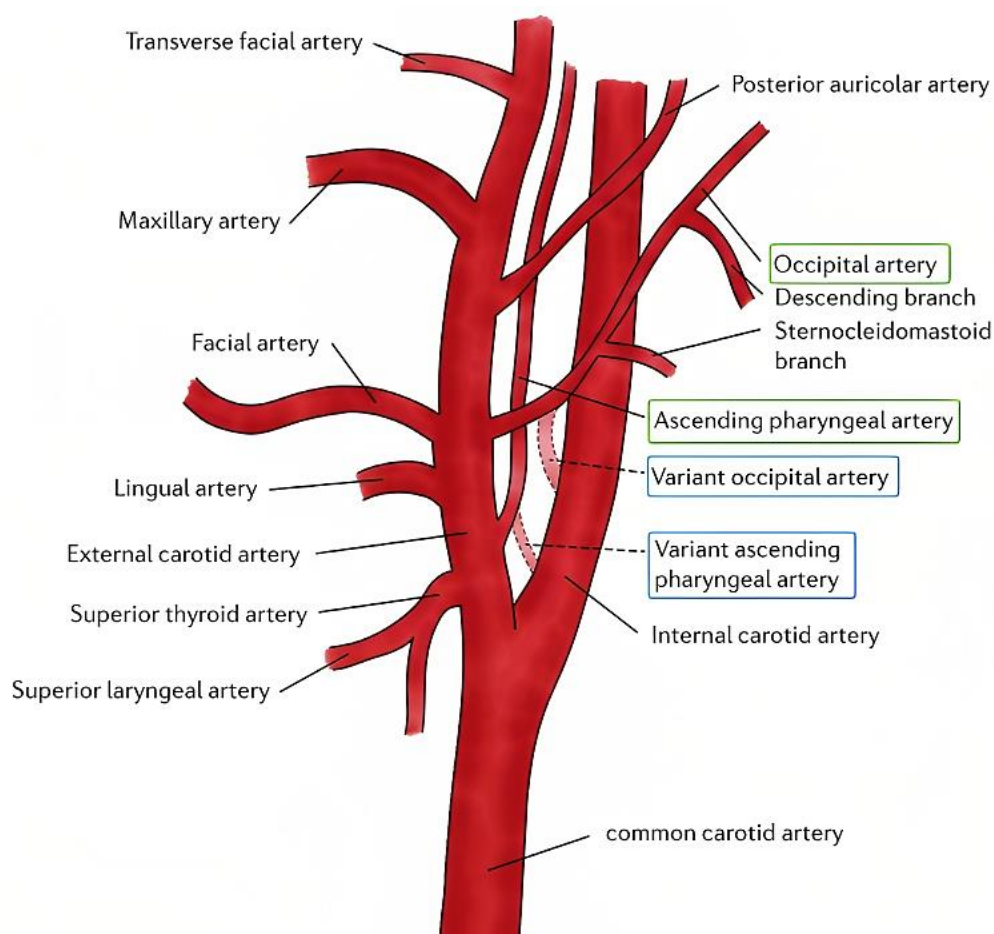
- SMALLEST BRANCH
- ARISES→MEDIAL SIDE OF ECA
- VERTICALLY UPWARD -> BETWEEN SIDE WALL OF PHARYNX TONSIL & MEDIAL WALL OF MIDDLE EAR

7) MAXILLARY ARTERY -> LARGEST BRANCH

- > BEHIND NECK OF MANDIBLE UNDER PAROTID GLAND
- > BELOW AURICULO-TEMPORAL NERVE

8) SUPERFICIAL TEMPORAL ARTERY - SMALLER TERMINAL BRANCH

- BEHIND NECK OF MANDIBLE
- DIVIDED→ANTERIOR & POSTERIOR BRANCH
→SUPPLY TEMPLE & SCALP

**FACIAL ARTERY****CHIEF ARTERY OF FACE**

BRANCH → OF EXTERNAL CAROTID ARTERY → GIVE OFF IN CAROTID TRIANGLE → JUST ABOVE GREATER CORNUA OF HYOID BONE.

COURSE -

- ENTER FACE→WINDING AROUND MANDIBLE → AND PIERCING → DEEP CERVICAL FASCIA
- FIRST RUN UPWARD FORWARD → 1.25CM LATERAL TO ANGLE OF MOUTH
 - ASCENDS BY SIDE OF NOSE → UP TO ANGLE OF EYE



- TERMINATE BY SUPPLYING LACRIMAL SAC → BY ANASTOMOSING WITH DORSAL NASAL BRANCH
- LIE BETWEEN SUPERFICIAL & DEEP MUSCLE OF FACE.

BRANCHES - ANTERIOR BRANCH → INFERIOR LABIAL
→ SUPERIOR LABIAL
→ LATERAL NASAL

- POSTERIOR BRANCH → SMALL AND UNNAMED

ANASTOMOSES

- LARGE ANTERIOR → ANASTOMOSES SIMILAR BRANCH OF OPPOSITE SIDE
- SMALLER POSTERIOR → TRANSVERSE FACIAL INFRA ORBITAL ARTERIES
- TERMINAL BRANCH OF FACIAL ARTERY → OPHTHALMIC ARTERY.

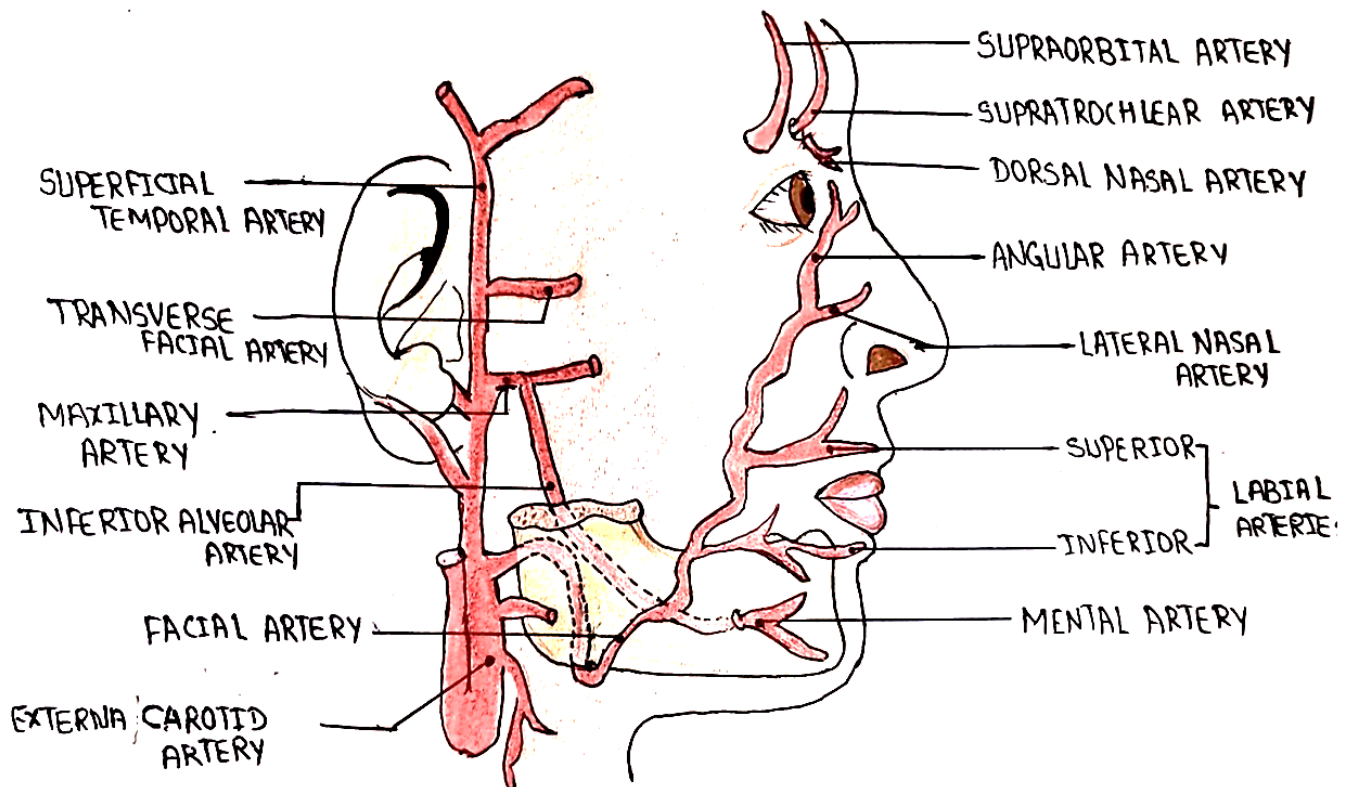
CLINICAL ANATOMY

WOUNDS OF FACE BLEED PROFUSELY -

SINCE THE FACE IS RICHLY VASCULAR, THE WOUNDS OF FACE BLEED PROFUSELY BUT FORTUNATELY THEY HEAL QUICKLY

PULSATION OF FACIAL ARTERY

- AT THE BASE OF MANDIBLE, CLOSE TO ANTEROINFERIOR ANGLE OF MASSETER
- ABOUT 1.25CM LATERAL TO ANGLE OF MOUTH



**MAXILLARY ARTERY**

LARGEST TERMINAL BRANCH OF ECA → GIVEN OFF BEHIND NECK OF MANDIBLE

- SUPPLIES** - EXTERNAL & MIDDLE EAR
- DURA MATER
 - MUSCLE OF TEMPORAL & INFRA TEMPORAL REGION
 - NOSE & PARA-NASAL AIR SINUSES
 - PALATE
 - ROOF OF PHARYNX

COURSE & RELATION - DIVIDED INTO 3x PARTS -

- 1) **FIRST (MANDIBULAR) PART** - RUN HORIZONTALLY FORWARDS
 - BETWEEN NECK OF MANDIBLE & **SPLENO MANDIBULAR LIGAMENT**
- 2) **SECOND (PTERYGOID) PART** - RUN UPWARD & FORWARDS
 - SUPERFICIAL TO LOWER HEAD OF LATERAL PTERYGOID
- 3) **THIRD (PTERYGOPALATINE) PART** - PASSES BETWEEN TWO HEAD OF LATERAL PTERYGOID
 - THROUGH PTERYGOMAXILLARY FISSURE → TO ENTER → PTERYGOPALATINE FOSSA

BRANCHES -PART 1

- 1) **DEEP AURICULAR ARTERY** → SUPPLY EXTERNAL ACOUSTIC MEATUS TYMPANIC MEMBRANE
- 2) **ANTERIOR TYMPANIC** → SUPPLY MIDDLE EAR MEDIAL SURFACE OF TYMPANIC MEMBRANE
- 3) **MIDDLE MENINGEAL ARTERY** → ENTER FORAMEN SPINOSUM → REACH MIDDLE CRANIAL FOSSA
→ SUPPLY LARGE FRONTAL BRANCH & SMALL PARIETAL
- 4) **ACCESSARY MENIGEAL ARTERY** → FORAMEN OVALE → REACH MIDDLE CRANIAL FOSSA
→ SUPPLY INFRA TEMPORAL FOSSA
- 5) **INFERIOR ALVEOLAR ARTERY** → MANDIBULAR FORAMEN
→ SUPPLY MANDIBLE & ROOT OF TOOTH

PART2

- 1) MASSETERIC
- 2) DEEP TEMPORAL
- 3) TO PTERYGOID MUSCLE
- 4) BUCCAL BRANCH

PART-3

- 1) **POSTERIOR SUPERIOR ALVEOLAR ARTERY** - ENTER - PTERYGOMAXILLARY FISSURE
 - SUPPLY - MOLAR AND PREMOLAR TEETH
 - MAXILLARY AIR SINUS
- 2) **INFRA-ORBITAL ARTERY** - ENTER -> PTERYGOMAXILLARY FISSURE → INFERIOR -ORBITAL FISSURE → ENTER → ORBITAL
 - SUPPLY - ORBITAL BRANCHES
 - MIDDLE SUPERIOR ALEVOLAR BRANCH
 - ANTERIOR SUPERIOR ALVEOLAR BRANCH

GREATER PALATINE A - ENTER - GREATER PALATINE FORAMEN → GREATER PALATINE CANAL

HEAD AND NECK ANATOMY



4) **PHARYNGEAL BRANCH** - ENTER -> PHARYNGEAL CANAL

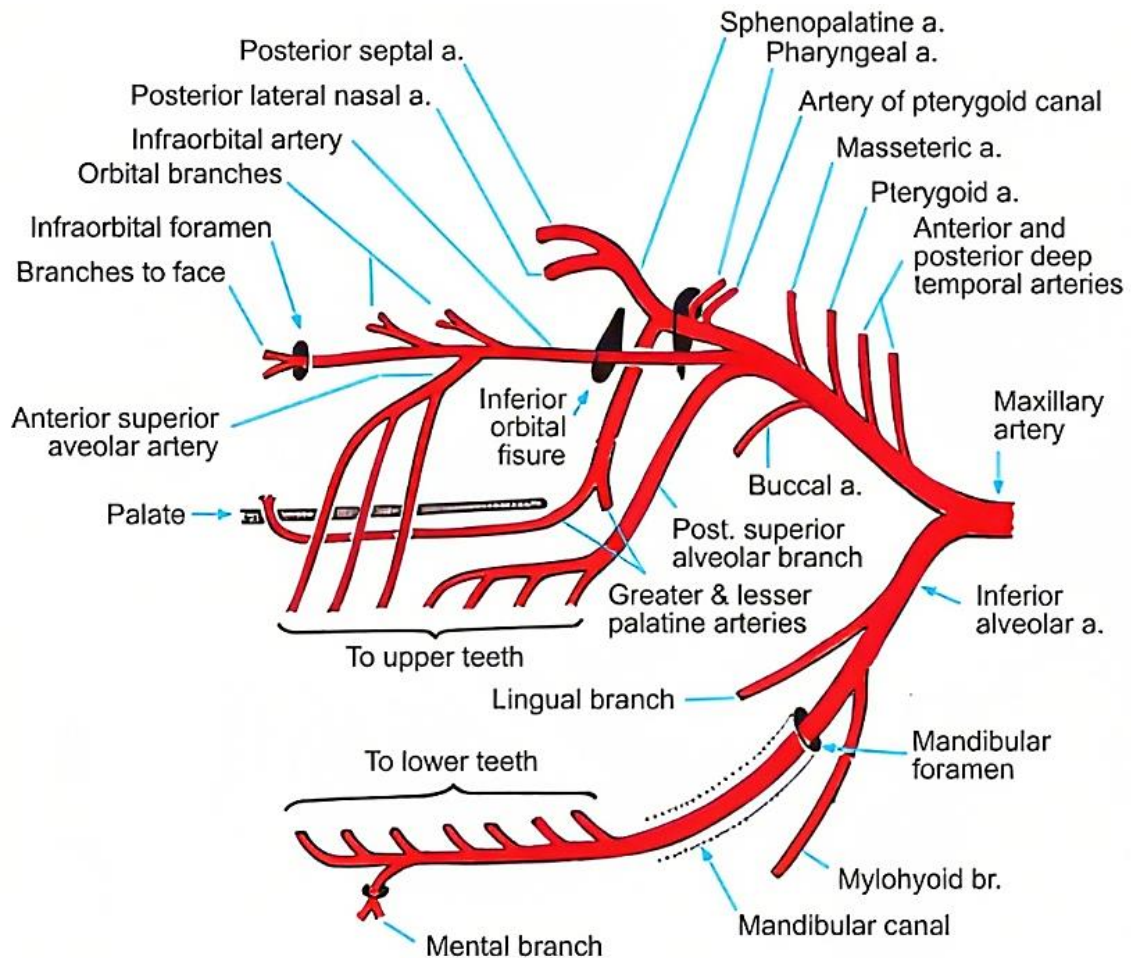
- SUPPLY -> NASOPHARYNX & AUDITORY TUBE

5) **ANTERIOR ARTERY OF PTERYGOID CANAL** -> PTERYGOID CANAL

- SUPPLY -> PHARYNX & TYMPANI CAVITY

6) **SPHENOPALATINE ARTERY** -> SPHENOPALATINE FORAMEN

-> POSTEROLATERAL & POSTEROMEDIAL -> NASAL BRANCH



VENOUS SINUSES OF DURA MATER

1) **VENOUS SPACE IN** -> WALL WHICH ARE FORMED BY DURA MATER

-> NO MUSCLE IN THEIR WALL

-> THEY HAVE NO VALVE

2) **VENOUS SINUSES RECEIVE** -> VENOUS BLOOD FROM BRAIN, MENINGS BONE OF SKULL

3) **CRANIAL VENOUS SINUSES COMMUNICATED** -> WITH OUTSIDE SKULL THROUGH EMISSARY VEINS

4) **BLOOD FROM DURAL VENOUS SINUS ULTIMATELY DRAINED INTO INTERNAL JUGULAR VEIN**

4) **COMMUNICATIONS HELP TO KEEP THE PRESSURE OF BLOOD CONSTANT**

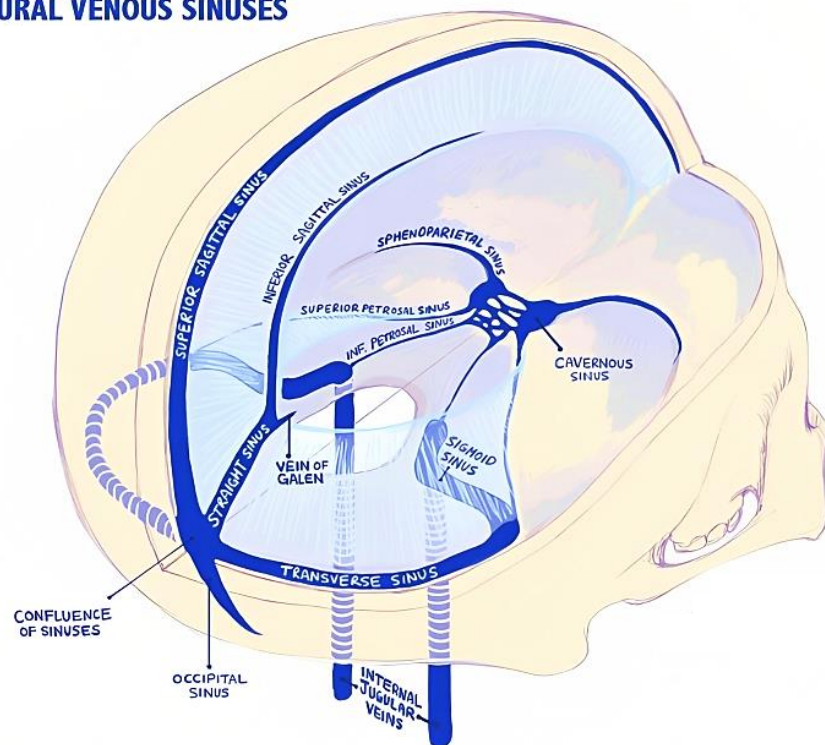
5) **23 VENOUS SINUSES** -> 8 PAIRED & 7 UNPAIRED

**PAIRED VENOUS SINUSES -**

- CAVERNOUS SINUS
- SUPERIOR PETROSAL SINUS
- INFERIOR PETROSAL SINUS
- TRANSVERSE SINUS
- SIGMOID SINUS
- SPHENO-PARIETAL SINUS
- PETRO-SQUAMOUS SINUS
- MIDDLE MENINGEAL SINUS

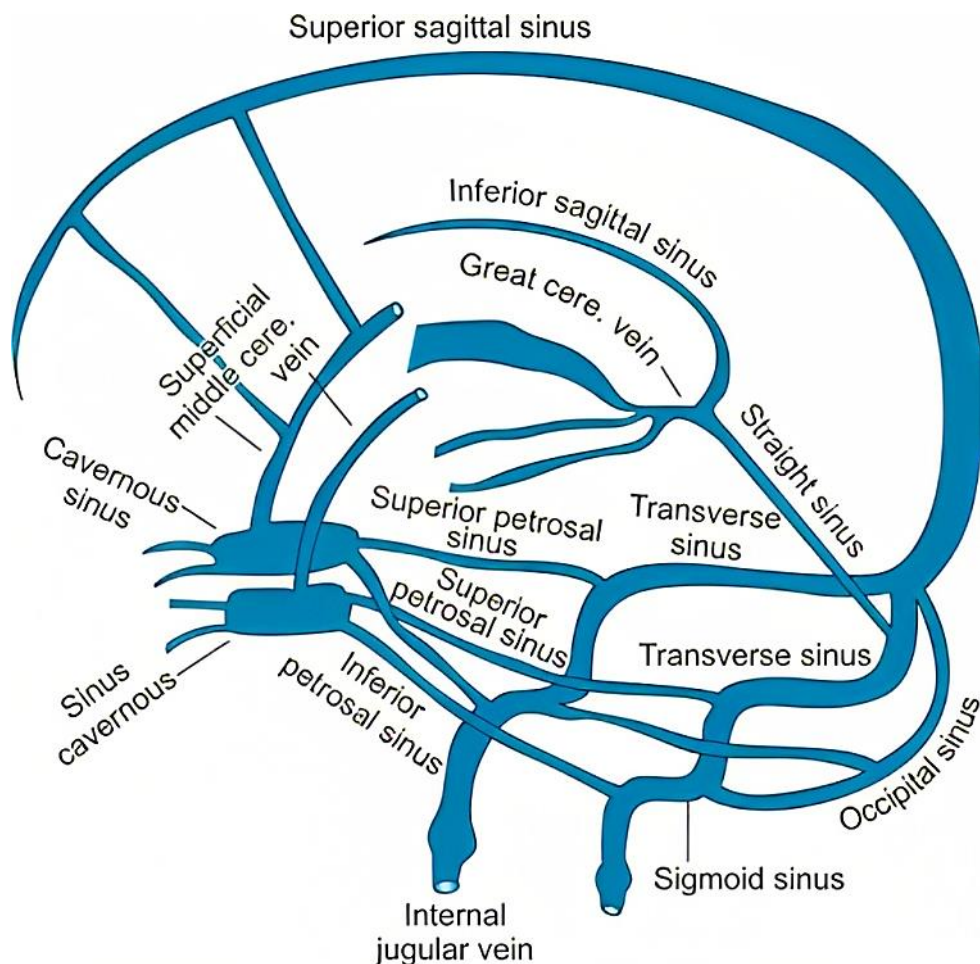
UNPAIRED VENOUS SINUSES

- SUPERIOR SAGITAL SINUS
- INFERIOR SAGITAL SINUS
- STRAIGHT SINUS
- OCCIPITAL SINUS
- ANTERIOR INTER CAVERNOUS SINUS
- POSTERIOR INTER CAVERNOUS SINUS
- PLEXUS OF VEIN

DURAL VENOUS SINUSES

ALL THE VENOUS SINUSES, EXCEPT INFERIOR SAGITTAL AND STRAIGHT SINUSES, LIE BETWEEN THE MENINGEAL AND ENDOSTEAL LAYER OF DURA MATER

THE SINUSES HAVE THIN WALLS AND ARE LINED BY ENDOTHELIUM





CAVERNOUS SINUS

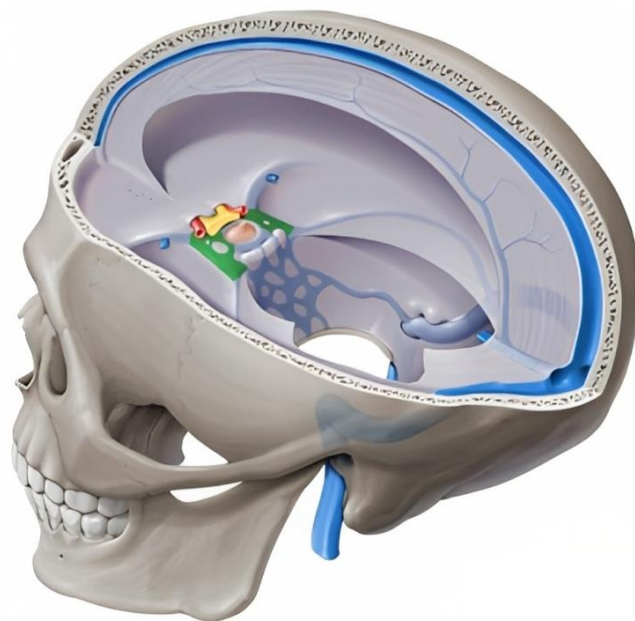
LARGE VENOUS SPACE -> SITUATED IN MIDDLE CRANIAL FOSSA EITHER SIDE, BODY OF SPHENOID

LOOR & MEDIAL WALL -> ENDOSTEAL DURA MATTER
ROOF & LATERAL WALL -> MENINGEAL DURA MATTER

- EXTEND - ANTERIORLY - SUPERIOR ORBITAL FISSURE
- POSTERIORLY - APEX OF PETROUS TEMPORAL BONE

RELATION

- 1) SUPERIORLY -> OPTIC TRACT
 - > OPTIC CHIASMA
 - > OLFACTORY TRACT
 - > INTERNAL CAROTID ARTERY
- 2) INFERIORLY -> FORAMEN LACERUM
 - > GREATER WING OF SPHENOID BONE
- 3) MEDIALY -> HYPOPHYSIS CEREBRI
 - > SPHENOIDAL AIR SINUS
- 4) LATERALLY -> TEMPORAL LOBE
- 5) ANTERIORLY -> SUPERIOR ORBITAL FISSURE
- 6) POSTERIORLY -> APEX OF PETROUS TEMPORAL



STRUCTURE WITHIN LATERAL WALL:

- OCULOMOTOR NERVE
- TROCHLEAR NERVE
- OPHTHALMIC NERVE
- MAXILLARY NERVE
- TRIGEMINAL GANGLION

STRUCTURE PASSING THROUGH MEDIAL ASPECT OF SINUS :

- INTERNAL CAROTID ARTERY
- ABDUCENT NERVE

TRIBUTARIES OR INCOMING CHANNEL :

- 1) FROM ORBIT - SUPERIOR OPHTHALMIC VEIN
 - INFERIOR OPHTHALMIC VEIN
 - CENTRAL VEIN OF RETINA
- 2) FROM BRAIN - SUPERFICIAL MIDDLE CEREBRAL VEIN
 - INFERIOR CEREBRAL VEIN



- 3) FROM MENINGES - SPHENO-PARIETAL SINUS
- MIDDLE MENINGEAL VEIN

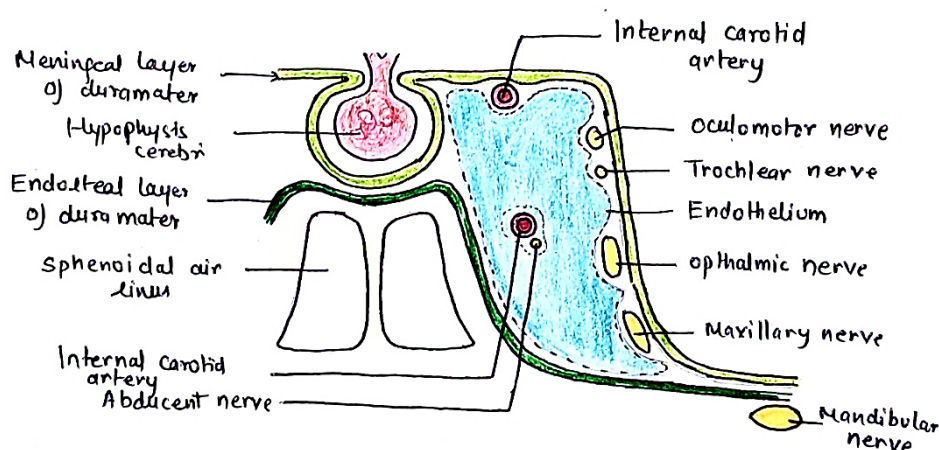
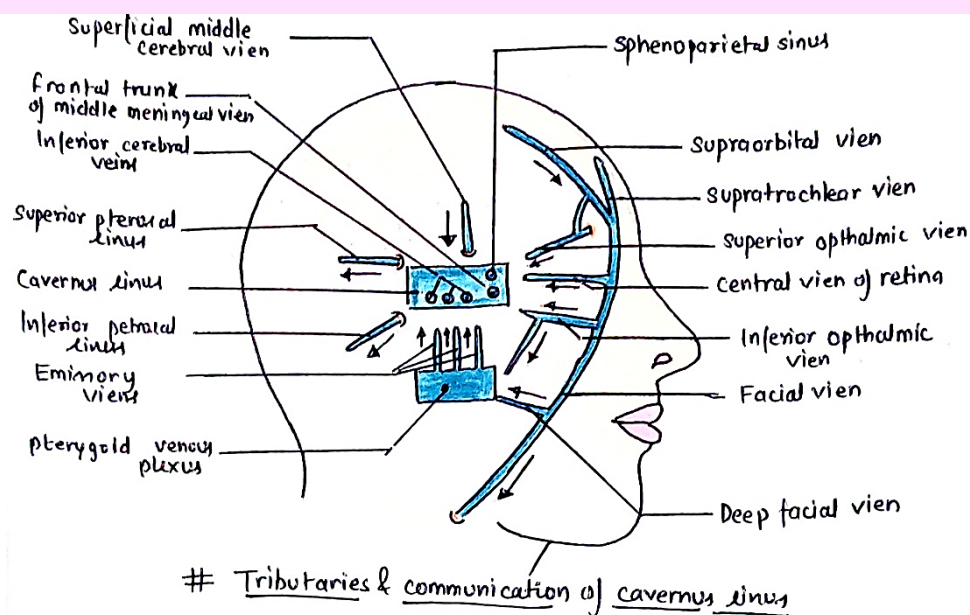
DRAINING CHANNEL -

- TRANSVERSE SINUS - THROUGH → SUPERIOR PETROSAL SINUS
- INTERNAL JUGULAR VEIN → INTERNAL CAROTID ARTERY
- PTERYGOID PLEXUS -> EMISSARY VEIN
- FACIAL VEIN -> SUPERIOR OPHTHALMIC VEIN
- RIGHT AND CAVERNOUS SINUSES → ANTERIOR & POSTERIOR → INTERCAVERNOUS SINUSES

CLINICAL ANATOMY

CAVERNOUS SINUS THROMBOSIS -

- SEPTIC THROMBOSIS OF CAVERNOUS SINUS MAYBE CAUSED BY ITS NUMEROUS COMMUNICATION
- MOST COMMON CAUSE OF THROMBOSIS IS THE PASSAGE OF SEPTIC EMBOLI FROM THE DANGEROUS ARE AOF FACE THROUGH EMISSARY VEIN
- SIGN AND SYMPTOMS :
 - SEVERE PAIN IN EYE AND FOREHEAD, DUE TO INVOLVEMENT OF OPHTHALMIC NERVE
 - MARKED OEDEMA OF EYELIDS WITH EXOPHTHALMOS DUE TO CONGESTION OF ORBITAL VEIN FOLLOWING OBSTRUCTION OF OPHTHALMIC VEIN
 - PARALYSIS OF OCULAR MUSCLE DUE TO INVOLVEMENT OF 3RD, 4TH, 6TH CRANIAL NERVE





SOFT PALATE

- MOVABLE, MUSCULAR FOLD, SUSPENDED FROM - POSTERIOR BORDER OF HARD PALATE
- 2 SURFACE → ANTERIOR -> CONCAVE
 - POSTERIOR -> CONVEX FLOOR OF NASAL CAVITY
- 2 BORDER → SUPERIOR BORDER ATTACHED, POSTERIOR BORDER OF HARD PALATE
 - INFERIOR BORDER - FREE
 - CONICAL PROJECTION - "UVULA"
 - FROM EACH SIDE BASE OF UVULA, TWO CURVED FOLD EXTEND - Laterally downward
 - ANTERIOR FOLD - PALATOGLOSSAL ARCH
 - POSTERIOR FOLD - PALATOPHARYNEAL ARCH

STRUCTURE

- SOFT PALATE IS A FOLD OF MUCOUS MEMBRANE CONTAINING:-

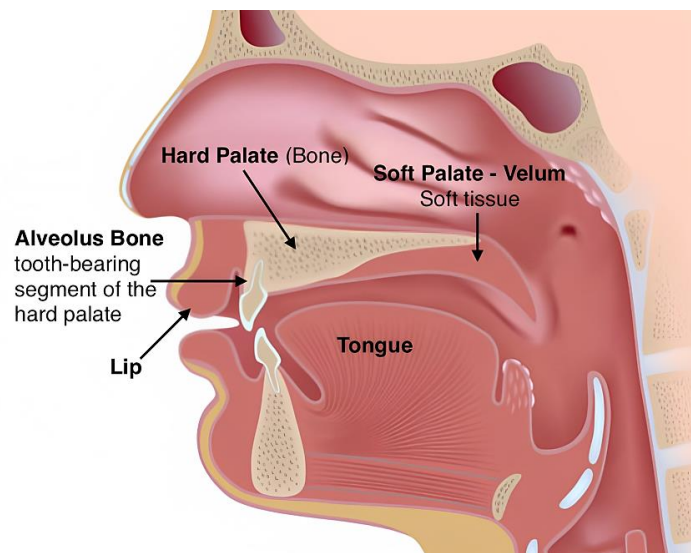
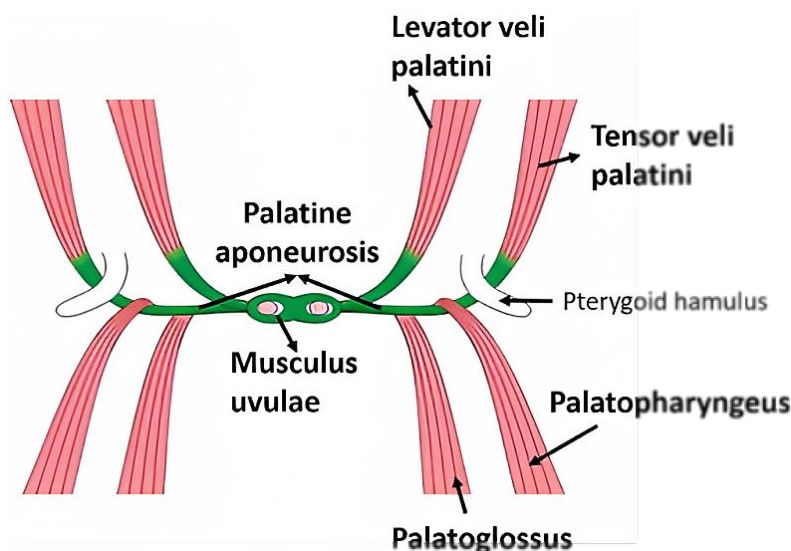
- 1) PALATINE APONEUROSIS - FLATTENED TENDON OF TENSOR VELI PALATINI
 - NEAR MEDIAN PLANE - APONEUROSIS SPLITS ENCLOSE - MUSCULUS UVULAE.
 - SUPERIOR SURFACE CONTAIN → LEVATOR VELI PALATINI → PALATOGLOSSUS
 - INFERIOR SURFACE -> PALATOGLOSSUS

2) NUMEROUS MUCOUS GLAND

- 3) MUSCLE OF SOFT PALATE 5
 - TENSOR PALATI
 - LEVATOR PALATI
 - MUSCULAR UVULAE
 - PALATOGLOSSUS
 - PALATO PHARYNGEUS

- BLOOD SUPPLY:** ARTERIES - GREATER PALATINE BRANCH MARTELY
- ASCENDING PALATINE FACIAL ARTERY
 - PALATINE BRANCH OF ASCENDING PHARYNGEAL

VEIN - TONSILLAR PLEXUSES OF VEIN





PALATINE TONSIL

- TWO PALATINE TONSIL, EACH TONSIL IS AN ALMOND SHAPED MASS OF SECONDARY LYMPHOID TISSUE SITUATED IN TRIANGULAR FOSSA (TONSILLAR FOSSA) OF LATERAL WALL OF OROPHARYNX

- OCCUPIES - TONSILLAR FOSSA B/W PALATOGLOSSAL AND PALATOPHARYNGEAL ARCHES
- ALMOND-SHAPED - 2 SURFACE - MEDIAL
 - LATERAL
- 2 BORDER - ANTERIOR
 - POSTERIOR
- 2 POLES - UPPER AND LOWER

1) SURFACE -

- MEDIAL SURFACE - COVERED BY STRATIFIED SQUAMOUS EPITHELIUM
 - SURFACE HAS - 12-15 CRYPTS
 - LARGEST OF THESE → INTRATONSILLAR CLEFT
- LATERAL SURFACE - COVERED BY SHEET OF FASCIA WHICH FORM HEMICAPSULE OF TONSIL
 - CAPSULE IS AN EXTENSION OF → PHARYNGOBASILAR FASCIA
 - TONSILLAR ARTERY - ENTER ---→ TONSIL
 - PARATONSILLAR VEIN → DESCEND → FROM PALATE IN LOOSE AREOLAR TISSUE ON LATERAL SURFACE OF CAPSULE

2) BORDER → ANTERIOR BORDER- PALATOGLOSSAL ARCH

- POSTERIOR BORDER - PALATOPHARYNGEAL ARCH

3) POLE - UPPER POLE - SOFT PALATE

LOWER POLE - TONGUE

BED OF TONSIL IS FORMED FROM WITHIN OUTWARDS BY :

- PHARYNGOBASILAR FASCIA
- SUPERIOR CONSTRUCTOR AND PALATO PHARYNGEUS MUSCLE
- BUCCOPHARYNGEAL FASCIA
- GLOSSOPHARYNGEAL NERVES
- LOWER PART OF STYLOGLOSSUS

BLOOD SUPPLY -

- MAIN -> TONSILLAR BRANCH OF FACIAL ARTERY(FA)
- ASCENDING PALATINE -> FA
- DORSAL LINGUAL BRANCH -> FA
- ASCENDING PHARYNGEAL BRANCH -> ECA
- GREATER PALATINE -> MAXILLARY A

VEIN -> 2-3 VEIN LEAVE LOWER PART OF TONSIL JOIN PALATINE, FACIAL VEIN

NERVE

- GLOSSOPHARYNGEAL NERVE
- LESSER PALATINE NERVE



CLINICAL ANATOMY

ACUTE TONSILLITIS -

- TONSILS ARE FREQUENT SITES OF ACUTE INFECTION ESPECIALLY IN SCHOOL GOING CHILDREN
- IT IS MOSTLY VIRAL INFECTION, IT IS RARE IN INFANTS AND PERSONS ABOVE 50 YEARS OF AGE

ACUTE FOLLICULAR TONSILLITIS

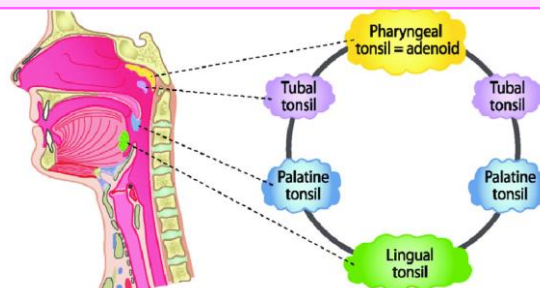
- IN THIS CONDITION, THE INFECTION SPREADS INTO CRYPTS, WHICH BECOME FILLED WITH PURULENT MATERIAL PRESENTING AT THE OPENING OF CRYPTS AS YELLOWISH SPOTS
- PERFORMED WHEN SPLEEN IS RUPTURED OR INADVERTENTLY NICKED AT OPERATION

WALDEYER'S RING -

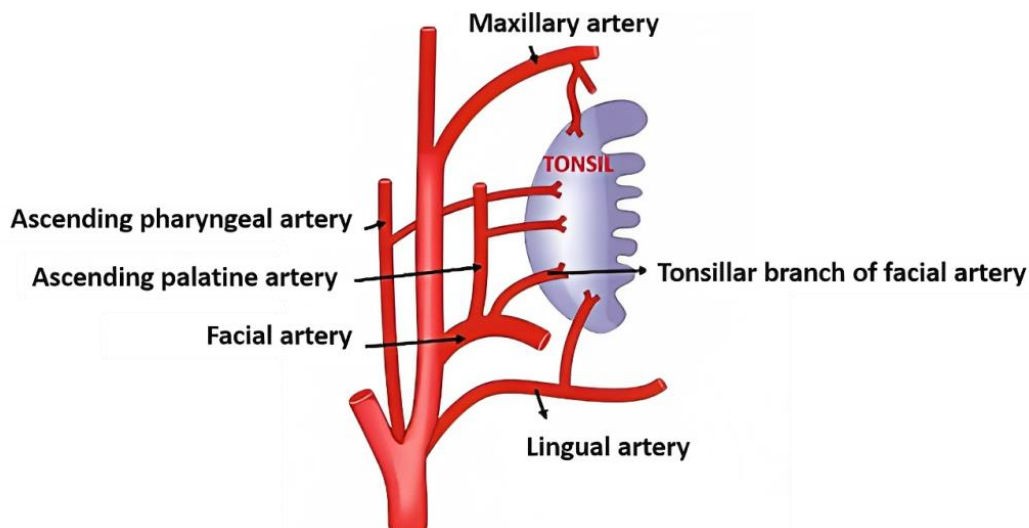
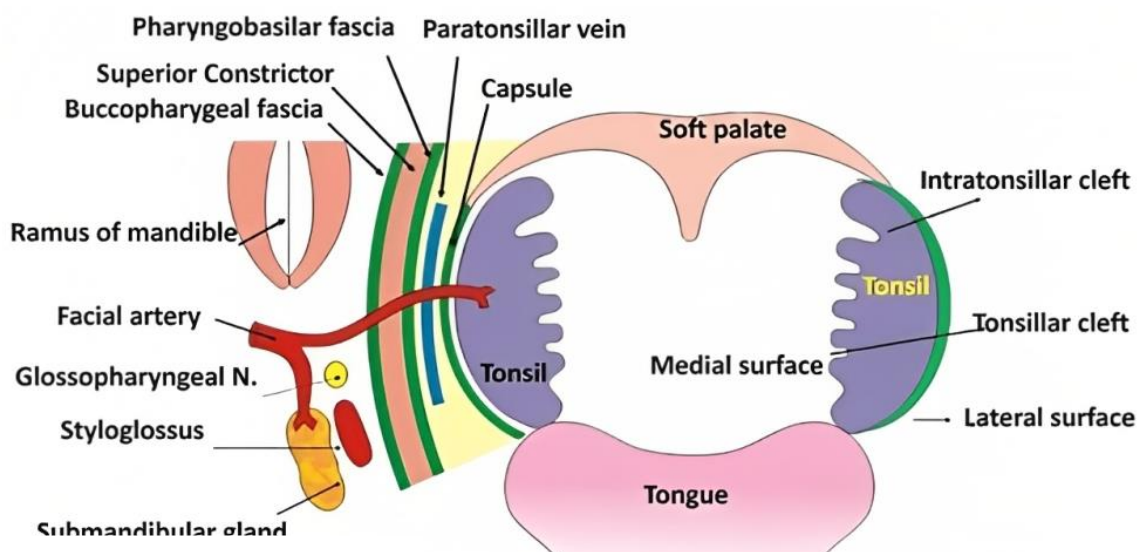
- AGGREGATION OF LYMPHOID TISSUE UNDERNEATH EPITHELIAL LINING OF PHARYNGEAL WALL CALLED TONSILS, SURROUND THE COMMENCEMENT OF AIR AND FOOD PASSAGE
- WALDEYER'S RING FORMED BY 1) PHARYNGEAL TONSIL 2) LINGUAL TONSIL ANTERIORLY 3) TUBAL AND PALATINE TONSILS LATERALLY



ACUTE TONSILLITIS



WALDEYER'S RING





TONGUE ANATOMY

MOBILE MUSCULAR ORGAN - SITUATED - FLOOR OF MOUTH

FUNCTION- TASTE, SPEECH, CHEWING AND DEGLUTITION

EXTERNAL FEATURES - ROOT

- TIP
- BODY

1) ROOT - ATTACHED → STYLOID PROCESS & SOFT PALATE - ABOVE
- HYOID BONE - BELOW

2) TIP - ANTERIOR FREE END → BEHIND UPPER INCISOR TEETH

3) BODY -

DORSUM - CONVEX IN ALL DIRECTION,

- ORAL PART - FLOOR OF MOUTH

- FREE MARGIN - IN CONTACT WITH GUMS AND TEETH

- SUPERIOR SURFACE - COVERED WITH PAPILLAE

- INFERIOR SURFACE - COVERED WITH SMOOTH MEMBRANE

- MEDIAN FOLD - FRENULUM

- LATERAL FOLD - PLICA FRENULUM

- PHARYNGEAL PART - LIE BEHIND PALATOGLOSSAL ARCHES

- BASE OF TONGUE

- MUCOUS MEMBRANE -> NO PAPILLAE BUT LYMPHOID FOLLICLE

- POSTERIOR MOST PART -> CONNECTED TO EPIGLOTTIS

-> 3 FOLDS OF MUCOSA MEMBRANE

-> 2 LATERAL GLOSSEPIGLOTTIC FOLD

-> MEDIAN GLOSSEPIGLOTTIC FOLD

MUSCLE OF TONGUE

MIDDLE FIBROUS SEPTUM → DIVIDES TONGUE INTO RIGHT & LEFT HALVES

EACH HALF CONTAIN -> 4 INTRINSIC MUSCLES

-> 4 EXTRINSIC MUSCLES

INTRINSIC MUSCLE -> OCCUPY UPPER PART OF TONGUE

-> ATTACHED -> SUBMUCOUS FIBROUS LAYER

1) **SUPERIOR LONGITUDINAL** - ARISES FROM FIBROUS TISSUE DEEP TO MUCOUS MEMBRANE

- ON DORSUM OF TONGUE

- **ACTION - SHORT TONGUE**

- **MAKE DORSUM CONCAVE**

2) **INFERIOR LONGITUDINAL** - ARISES FROM FIBROUS TISSUE → BENEATH MUCOUS MEMBRANE

- ON TIP OF TONGUE

-> **ACTION - SHORT TONGUE**

-> **MAKE DORSUM CONVEX**

**3) TRANSVERSE**

- LIE ON EITHER SIDE OF MID LINE
- ORIGIN- FIBROUS MEDIAL SEPTUM TO SUBMUCOUS FIBROUS TISSUE
- MAKE TONGUE NARROW

4) VERTICAL - FOUND AT BORDER OF ANTERIOR PART OF TONGUE
 - ACTION-FLATTED
EXTRINSIC MUSCLE**ACTION**

- 1) GENIOGLOSSUS → PROTRUDES
- 2) HYOGLOSSUS → DEPRESSES
- 3) STYLO GLOSSUS → RETRACTS
- 4) PALATOGLOSSUS → ELEVATES

PALATOGLOSSUS - ORIGIN - ORAL SURFACE OF PALATINE APONEUROSIS
 - INSERTION- SIDE OF TONGUE
 - NERVE - PHARYNGEAL PLEXUS

HYOGLOSSUS - ORIGIN - LATERAL PART OF HYOID BONE
 - INSERTION- SIDE OF TONGUE
 - NERVE- REST ALL BE MUSCLE HYPOGLOSSAL NERVE

STYLOGLOSSUS - ORIGIN - TIP OF STYLOID PROCESS
 - INSERTION- SIDE OF TONGUE

GENIOGLOSSUS - ORIGIN - UPPER GENITAL TUBERCLE OF MANDIBLE
 - INSERTION - UPPER FIBERS INTO TIP OF TONGUE

BLOOD & NERVE SUPPLY OF TONGUE

ARTERY → DERIVED FROM → LINGUAL ARTERY BRANCH - ECA
 - TIP ALSO SUPPLY BY - TONSILLAR ARTERY - FA

VENOUS DRAINAGE - DEEP LINGUAL VEIN -> LARGEST AND PRINCIPAL VEIN
 - INFERIOR SURFACE OF TONGUE
 - END IN INTERNAL JUGULAR VEIN THROUGH LINGUAL VEIN

LYMPHATIC DRAINAGE

- SUBMENTAL NODE
 (TIP) -----> FINALLY DRAIN OMOHYOID NODE
- SUB-MANDIBULAR NODE
 (RIGHT AND LEFT HALVES) -----> FINALLY DRAIN OMOHYOID NODE
- DEEP-CERVICAL NODE
 (POSTERIO MOST) -----> FINALLY DRAIN OMOHYOID NODE

**NERVE SUPPLY**

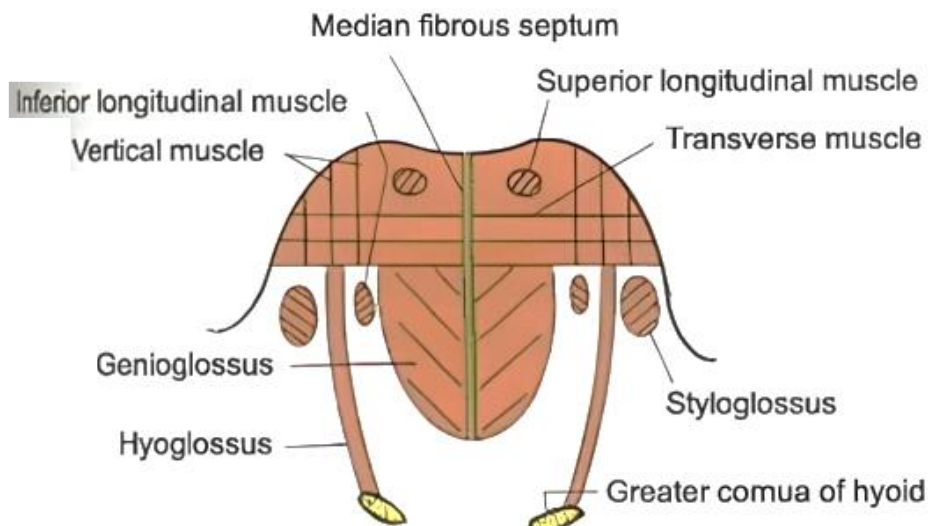
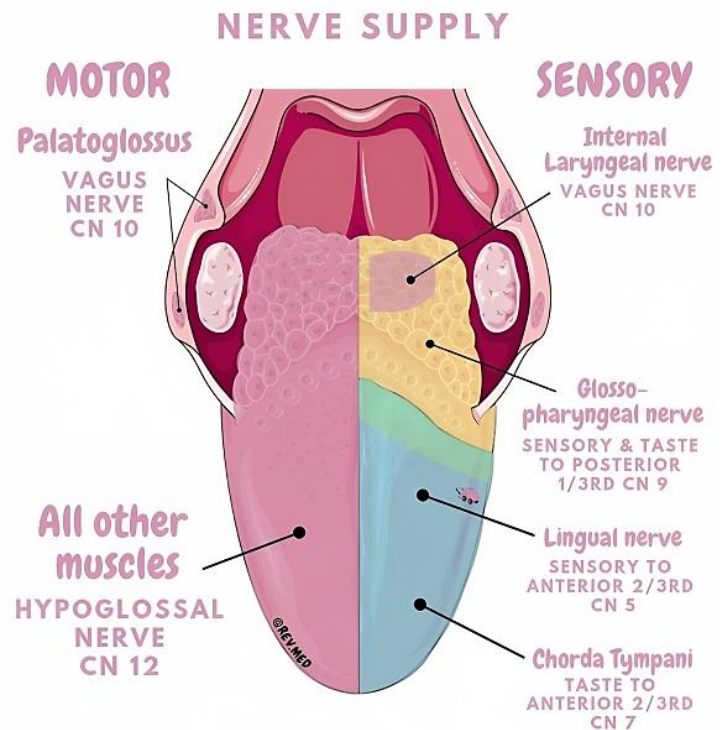
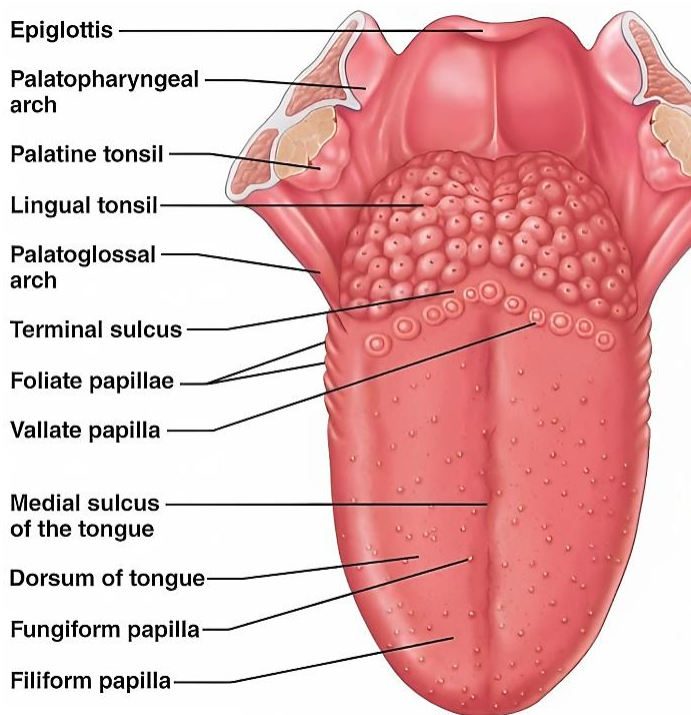
- MOTOR - ALL MUSCLE- HYPOGLOSSAL NERVE
EXCEPT - PALATOGLOSSUS - PHARYNGEAL PLEXUS
- SENSORY - ANTERIOR 2/3 - LINGUAL NERVE
 - CHORDA - TYMPANI NERVE
- POSTERIOR 1/3 - GLOSSOPHARYNGEAL NERVE

CLINICAL ANATOMY**CARCINOMA OF TONGUE**

- TONGUE IS COMMON SITE OF CARCINOMA
- IT MOSTLY INVOLVE LATERAL MARGINS OF ANTERIOR TWO - THIRD OF TONGUE

TONGUE TIE

- IF FRENULUM EXTENDS TOO FAR TOWARDS THE TIP OF TONGUE
- IT INHIBITS THE NORMAL MOVEMENT OF TONGUE AND INTERFERE WITH NORMAL SPEECH

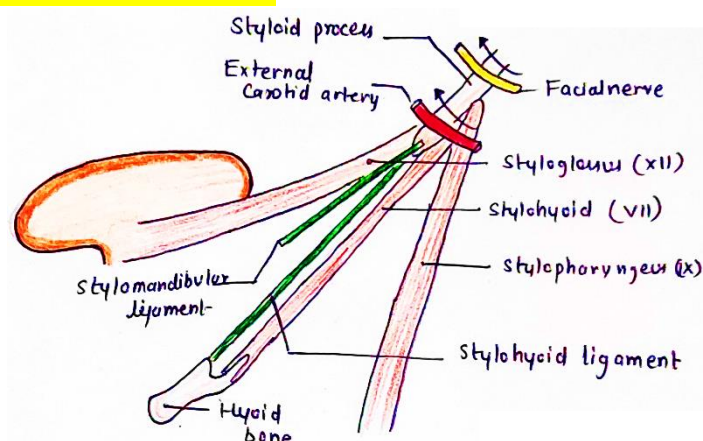




STYLOID APPARATUS

STYLOID PROCESS WITH ATTACHED STRUCTURE → STYLOID APPARATUS

- 3 MUSCLE - STYLOGLOSSUS
 - STYLOHYOID
 - STYLOPHARYNGEUS
- 2 LIGAMENTS - STYLOHYOID
 - STYLO MANDIBULAR



APPARATUS IS OF DIVERSE ORIGIN -

- STYLOHYOID MUSCLE AND LIGAMENT → 2RD BRANCHIAL ARCH
- STYLOPHARYNGEUS → 3RD BRANCHIAL ARCH
- STYLOGLOSSUS → OCCIPITAL MYOTOMES
- STYLOMANDIBULAR LIGAMENT → DEEP FASCIA OF NECK

STYLOID PROCESS

- LONG POINTED BONY PROCESS OF TEMPORAL BONE
- DOWNWARD, FORWARD, MEDIALY
- DESCENDS B/W EXTERNAL AND INTERNAL CAROTID ARTERY TO REACH SIDE OF PHARYNX

STYLOGLOSSUS

- > ARISES - ANTERIOR SURFACE OF STYLOID PROCESS
- > INSERT SIDE OF TONGUE

STYLOPHARYNGEUS

- ARISES -> MEDIAL SURFACE OF BASE OF STYLOID PROCESS.
- INSERT -> POSTERIOR BORDER OF THYROID CARTILAGE

STYLOHYOID

- ARISES -> POSTERIOR SURFACE OF STYLOID PROCESS
- INSERT -> HYOID BONE

STYLOMANDIBULAR LIGAMENT ATTACHED

- Laterally to styloid process -> ABOVE
- INSERT ANGLE OF MANDIBLE -> BELOW

STYLOHYOID LIGAMENT EXTEND FROM

TIP OF STYLOID PROCES TO LESSER CORNUA OF HYOID BONE

FEATURES

- EXTERNAL CAROTID ARTERY → TIP OF STYLOID PROCESS
- FACIAL NERVE CROSSES → BASE OF STYLOID PROCES



LARYNX

LARYNX IS THE UPPER EXPANDED PART OF LOWER RESPIRATORY TRACT, WHICH IS MODIFIED FOR PRODUCING VOICE, HENCE IT IS CALLED VOICE BOX/ORGAN OF PHONATION. IT IS ALSO AN AIR PASSAGE AND ACTS AS A SPHINCTER AT INLET OF LOWER RESPIRATORY PASSAGES.

SITUATION

LIE IN → ANTERIOR MIDLINE OF NECK

EXTENDING FROM → ROOT OF TONGUE TO TRACHEA

IN ADULT MALE → C3-C6 VERTEBRAE

IN ADULT FEMALE → C1 - C4

SIZE - LENGTH → 44MM IN MALE & 36MM IN FEMALE

CARTILAGES OF LARYNX -

THE LARYNX CONTAINS NINE CARTILAGES, OF WHICH THREE ARE UNPAIRED AND THREE ARE PAIRED.

UNPAIRED CARTILAGES

- 1 THYROID (GREEK SHIELD-LIKE)
- 2 CRICOID (GREEK RING-LIKE)
- 3 EPIGLOTTIS (GREEK LEAF-LIKE)

PAIRED CARTILAGES

- 1 ARYTENOID (GREEK CUP-SHAPED)
- 2 CORNICULATE (LATIN HORN-SHAPED)
- 3 CUNEIFORM (LATIN WEDGE-SHAPED)

INTRINSIC MUSCLES OF LARYNX

1. CRICOTHYROID
2. POSTERIOR CRICOARYTENOID TRIANGULAR
3. LATERAL CRICOARYTENOID
4. TRANSVERSE ARYTENOID
- 5,6. OBLIQUE ARYTENOID AND ARYEPIGLOTTIC
- 7,8. THYROARYTENOID AND THYROEPIGLOTTIC
9. VOCALIS

MUSCLES ACTING ON THE LARYNX

MOVEMENT	MUSCLE
1. ELEVATION OF LARYNX	- THYROID, MYLOHYOID
2. DEPRESSION OF LARYNX	- STERNOTHYROID, STERNOHYOID
3. OPENING INLET OF LARYNX	- THYROEPIGLOTTIC
4. CLOSING INLET OF LARYNX	- ARYEPIGLOTTIC
5. ABDUCTOR OF VOCAL CORDS	- POSTERIOR CRICOARYTENOID ONLY
6. ADDUCTOR OF VOCAL CORDS	- LATERAL CRICOARYTENOID, TRANS-VERSE AND OBLIQUE ARYTENOID
7. TENSOR OF VOCAL CORDS AND MODULATION OF VOICE	- CRICOTHYROID
8. RELAXOR OF VOCAL CORDS	- THYROARYTENOID AND VOCALIS

**BLOOD SUPPLY**

- UP TO VOCAL FOLD - BY SUPERIOR LARYNGEAL A.
- VEIN - DRAIN BY SUPERIOR LARYNGEAL VEIN
- BELOW THE VOCAL FOLD - BY INFERIOR LARYNGEAL A.
- VEIN - DRAIN BY INFERIOR LARYNGEAL VEIN

NERVE SUPPLY -**- MOTOR NERVE -**

- 1) RECURRENT LARYNGEAL NERVE - SUPPLIES ALL INTRINSIC MUSCLE
- EXCEPT - CRICOTHYROID

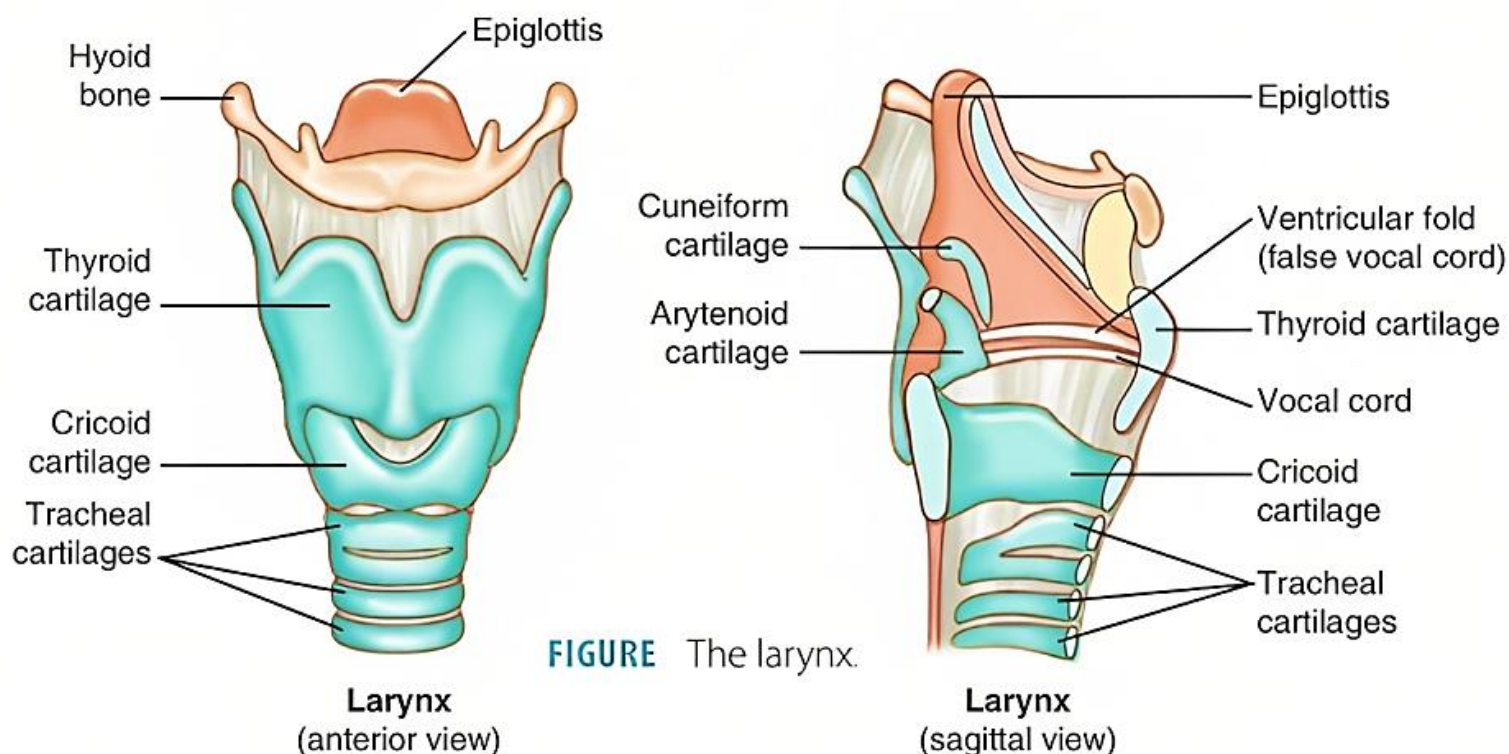
- 2) EXTERNAL LARYNGEAL NERVE - SUPPLIES CRICOTHYROID MUSCLE

- SENSORY NERVE -

- 1) INTERNAL LARYNGEAL NERVE - SUPPLIES - MUCOUS MEMBRANE UP TO LEVEL OF VOCAL FOLD
- 2) RECURRENT LARYNGEAL NERVE - SUPPLIES - MUCOUS MEMBRANE BELOW LEVEL OF VOCAL FOLD

CLINICAL ANATOMY**SAFETY MUSCLE OF LARYNX -**

- POSTERIOR CRICOARYTENOID MUSCLE ARE ONLY INTRINSIC MUSCLE OF LARYNX, WHICH ABDUCT THE VOCAL CORDS TO ALLOW ENTRY OF AIR THROUGH RIMA GLOTTIDIS IN RESPIRATORY TRACT BELOW IT





EXTRAOCULAR MUSCLE

EXTRAOCULAR MUSCLE ARE CLASSIFIED INTO TWO GROUPS : VOLUNTARY & INVOLUNTARY

THERE ARE 7 VOLUNTARY MUSCLE IN ORBIT

6 MUSCLE MOVE THE EYEBALL AND ONE MUSCLE MOVES THE UPPER EYELIDS

VOLUNTARY MUSCLE -

4X RECT - SUPERIOR RECTUS

- INFERIOR RECTUS

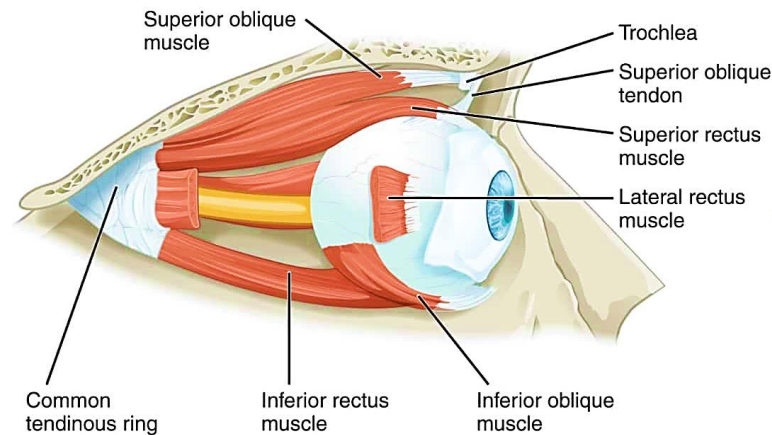
- MEDIAL RECTUS

- LATERAL RECTUS

2X OBLIQUE - SUPERIOR OBLIQUE

- INFERIOR OBLIQUE

LEVATOR PALPEBRAE SUPERIORIS



Lateral view of the right eye

INVOLUNTARY MUSCLE -

1) **SUPERIOR TARSAL MUSCLE** - DEEPER PORTION OF LPS

- INSERTED-UPPER MARGIN OF SUPERIOR TARSUS

- ELEVATE UPPER EYELID

2) **INFERIOR TARSAL MUSCLE** - EXTEND- FASCIAL SHEATH OF INFERIOR RECTUS

- DEPRESSES THE LOWER EYELID

3) **ORBITALIS BRIDGE** - THE INFERIOR ORBITAL FISSURE

VOLUNTARY MUSCLE -

ORIGIN -

- 4 RECTI - COMMON ANNULAR TENDON - RING ATTACHED - SUPERIOR ORBITAL FISSURE

- LATERAL RECTUS ADDITIONAL ORIGIN → GREATER WING OF SPHENOID BONE

- SUPERIOR OBLIQUE ARISES → LESSER WING OF SPHENOID BONE

- INFERIOR OBLIQUE ARISES → ORBITAL SURFACE OF MAXILLA

- LEVATOR PALPEBRAE SUPERIOR → LESSER WING OF SPHENOID BONE

INSERTION

- RECTI INSERTED → SCLERA (POSTERIOR TO LIMBUS)

- SUPERIOR OBLIQUE - PASSES THROUGH → FIBRO-CARTILAGE PULLY - ATTACHED TO TROCHLEAR FOSSA OF FRONTAL BONE

- INSERTION -> SCLERA BEHIND EQUATOR OF EYEBALL

- **INFERIOR OBLIQUE MUSCLE INSERTED → CLOSE TO SO.**



- NERVE** - RECTUS X 3 = CN=3/OCCULOMOTAR NERVE
 - SUPERIOR OBLIQUE = CN=4 / TROCHLEAR NERVE
 - LATERAL RECTUS - CN=6 ABDUCENT NERVE

ACTION

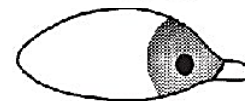
- 1) UPWARD / ELEVATION - SUPERIOR RECTUS
 - INFERIOR OBLIQUE
- 2) DOWNWARD / DEPRESSOR - INFERIOR RECTUS
 - SUPERIOR OBLIQUE
- 3) MEDIAL ROTATION / ADDUCTION - MEDIAL RECTUS
 SUPERIOR RECTUS
 INFERIOR RECTUS
- 4) LATERAL ROTATION / ABDUCTION - LATERAL RECTUS
 SUPERIOR OBLIQUE
 INFERIOR OBLIQUE
- 5) TORSION - SUPERIOR OBLIQUE
 - SUPERIOR RECTUS
- 6) EXTORSION - INFERIOR OBLIQUE
 - INFERIOR RECTUS



Supraduction



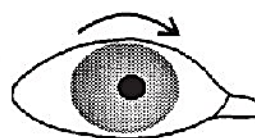
Infraduction



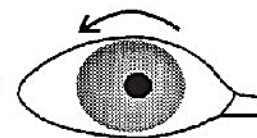
Adduction



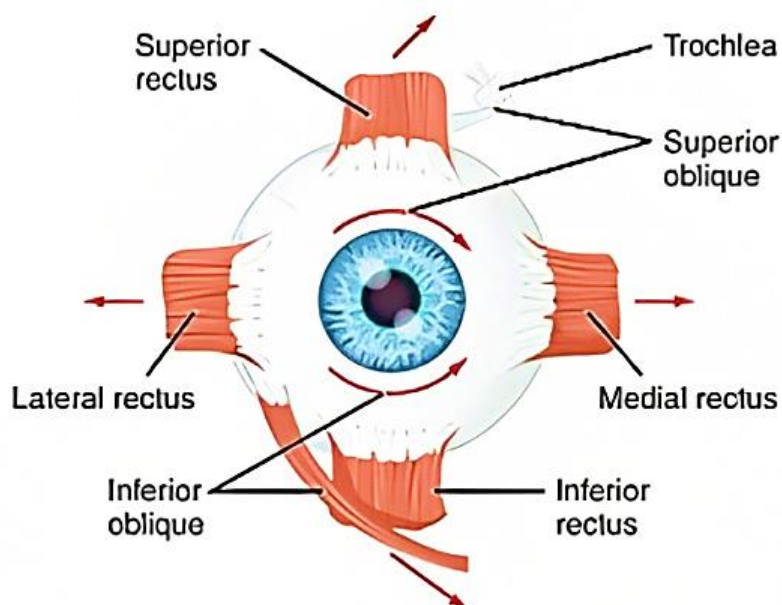
Abduction



Intorsion



Extorsion

**CLINICAL ANATOMY****SQUINT -**

UNILATERAL PARALYSIS OF AN INDIVIDUAL MUSCLE DUE TO INVOLVEMNT OF NERVE PRODUCE SQUINT

PARALYSIS OF LEVATOR PALPEBRAE SUPERIORIS

PARALYSIS OF LPS DUE TO INVOLVEMENT OF OCULOMOTOR NERVE LAD TO COMPLETE PTOSIS (DROOPING OF UPPER EYELID)



NASAL SEPTUM

THE NASAL SEPTUM IS A MIDIAN OSSEOCARTILAGINOUS PARTITION BETWEEN THE TWO NASAL CAVITIES.

BONEY PART FORMED BY

- 1) PERPENDICULAR PLATE OF ETHMOID, WHICH FORMS THE POSTEROSUPERIOR PART OF THE SEPTUM AND
- 2) VOMER, WHICH FORMS THE POSTEROINFERIOR PART OF THE SEPTUM.

CATILAGINOUS PART IS FORMED BY

- 1) SEPTAL CARTILAGE, WHICH FORMS THE MAJOR ANTERIOR PART OF THE SEPTUM AND FITS IN THE ANGLE BETWEEN THE VOMER AND PERPENDICULAR PLATE OF ETHMOID
- 2) SEPTAL PROCESSES OF THE TWO MAJOR ALAR CARTILAGES.

COLUMELLAR SEPTUM

SEPTAL PROCESS OF TWO MAJOR ALAR CARTILAGE ARE UNITED TOGETHER IN MIDLINE BY FIBROUS TISSUE TO FORM COLUMELLA ALSO CALLED COLUMELLAR SEPTUM

MEMBRANOUS SEPTUM

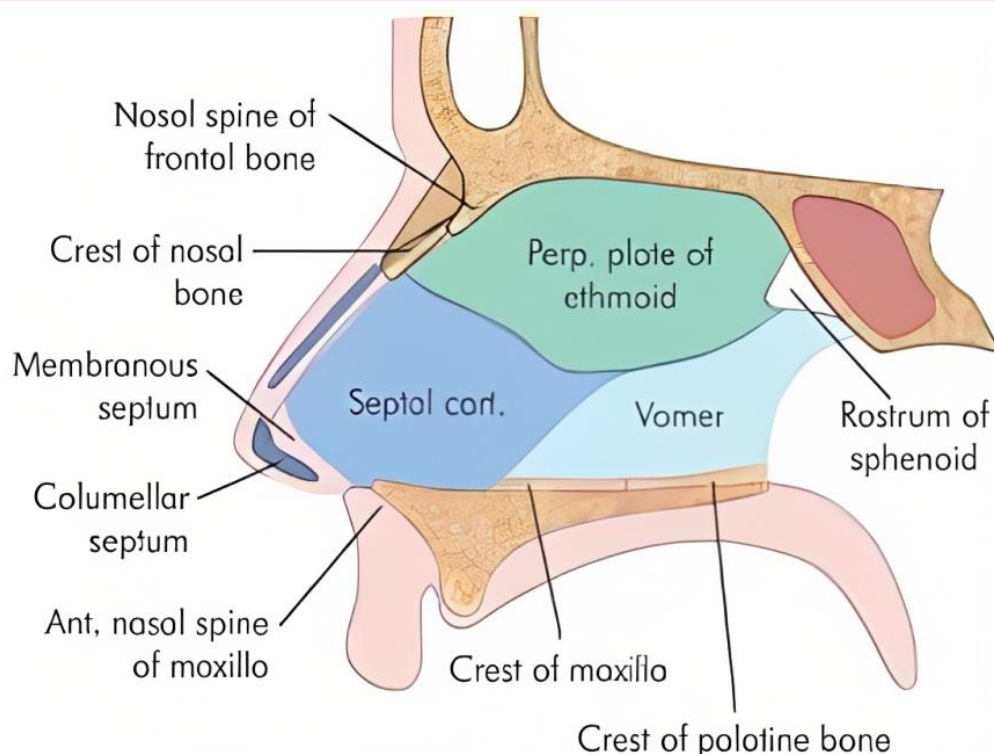
BETWEEN THE COLUMELLA AND CAUDAL BORDER OF SEPTAL CARTILAGE A SMALL PORTION OF SEPTUM IS MADE UP OF DOUBLE LAYER OF THE SKIN WITH NO BONY OR CARTILAGE SUPPORT THIS PART IS REFERRED TO A MEMBRANOUS SEPTUM

BOTH COLUMELLAR AND MEMBRANOUS SEPTUM ARE FREELY MOVEABLE FROM SIDE TO SIDE

CLINICAL ANATOMY

DEVIATED NASAL SEPTUM (DNS) -

- DNS IS NOT UNCOMMON AND CAUSE NASAL OBSTRUCTION
- CORRECTED BY SUBMUCOUS RESECTION AND SEPTOPLASTY





LATERAL WALL OF NOSE

LATERAL WALL OF NOSE → IRREGULAR OWING → PRESENCE OF 3X SHELF LIKE BONE PROJECTION CALLED CONCHAE

CONCHAE - INCREASE SURFACE AREA OF NOSE
- FOR EFFECTIVE AIR-CONDITIONING OF INSPIRED AIR

SEPARATE THE NOSE - FROM ORBIT ABOVE
- MAXILLARY SINUS BELOW
- FROM LACRIMAL SAC AND NASOLACRIMAL DUCT FRONT

SUB-DIVIDED INTO 3X PART - ANTERIOR - VESTIBULE
MIDDLE - ATRIUM OF MIDDLE MEATUS
POSTERIOR - MEATUSES

SKELETON OF LATERAL WALL IS PARTLY BONY, PARTLY CARTILAGINOUS AND PARTLY MADE UP OF SOFT TISSUE

- BONY PART - NASAL
 - FRONTAL PROCESS OF MAXILLA
 - LACRIMAL
 - LABYRINTH OF ETHMOID
 - INFERIOR NASAL CONCHA
 - PERPENDICULAR PLATE OF PALATINE BONE
 - MEDIAL PTERYGOID PLATE
- CARTILAGINOUS PART - SUPERIOR NASAL CARTILAGE
 - INFERIOR NASAL CARTILAGE
 - 3-4 SMALL CARTILAGES OF ALA
- CUTICULAR LOWER PART → FORMED BY FIBROFATTY → COVERED WITH SKIN

CONCHAE AND MEATUSES

NASAL CONCHAE -> CURVED BONE PROJECTION
-> DIRECTED DOWNWARD AND MEDIALY

- INFERIOR CONCHA - INDEPENDENT BONE
- MIDDLE CONCHA - MEDIAL SURFACE OF ETHMOIDAL LABYRINTH
- SUPERIOR CONCHA - MEDIAL SURFACE OF ETHMOIDAL LABYRINTH

MEATUSE OF NOSE - PASSAGE BENEATH THE OVERHANGING CONCHAE

- 1) INFERIOR MEATUS - LARGEST OF THREE MEATUSES
 - NASOLACRIMAL DUCT OPEN INTO JUNCTION OF POSTERIOR 2/3 & ANTERIOR 1/3
- 2) MIDDLE MEATUS - ETHMOIDAL BULLA - ROUND ELEVATION
 - HIATUS SEMILUNARIS - DEEP SEMICIRCULAR SULCUS
 - OPENING OF FRONTAL AIR SINUS → ANTERIOR PART OF HS



- OPENING OF ETHMOIDAL AIR SINUS → BEHIND F.A
- OPENING OF MAXILLARY AIR SINUS → POSTERIOR PART OF HS

- 3) SUPERIOR MEATUS - SHORTEST AND SHALLOWEST OF MEATUSSES
- OPENING OF POSTERIOR ETHMOIDAL AIR SINUSES

- SPHENO ETHMOIDAL RECESS** - TRIANGLE FOSSA
- JUST ABOVE → SUPERIOR CONCHA
 - RECEIVES → OPENING OF SPHENOIDAL AIR SINUS

- ARTERIAL SUPPLY** -
- 1) ANTERIOR POSTERIOR ETHMOIDAL A. → ANTEROSUPERIOR QUADRANT
 - 2) SPHENOPALATINE A. → POSTEROSUPERIOR QUADRANT
 - 3) FACIAL A. → ANTEROINFERIOR QUADRANT
 - 4) GREATER PALATINE A. → POSTEROINFERIOR QUADRANT

- VENOUS DRAINAGE** - VEIN FROM A PLEXUS WHICH DRAINS -
- ANTERIORLY → FACIAL VEIN
 - MIDDLE → PTERYGOID PLEXUS VEIN
 - POSTERIORLY → PTERYGOID PLEXUS VEIN

- NERVE SUPPLY** -
- 1) ANTERIOR ETHMOID NERVE → ANTEROSUPERIOR QUADRANT
 - 2) LATERAL POSTERIOR NASAL BRANCH NERVE → POSTEROSUPERIOR QUADRANT
 - 3) ANTERIOR SUPERIOR ALVEOLAR NERVE → ANTEROINFERIOR QUADRANT
 - 4) ANTERIOR PALATINE NERVE → POSTEROINFERIOR QUADRANT

CLINICAL ANATOMY

LITTLE AREA OF NOSE -

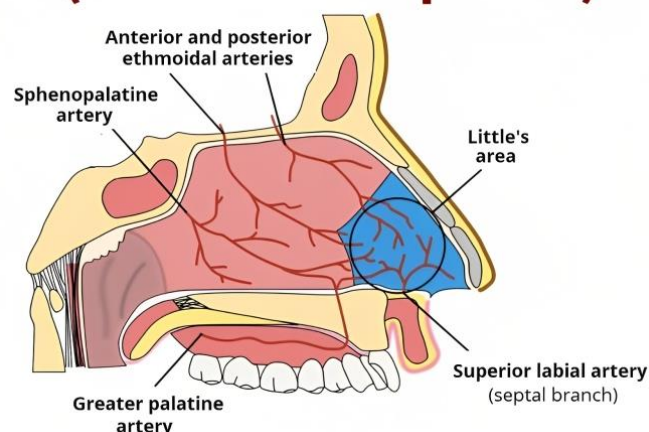
- > IT IS AN ANTEROINFERIOR PART OF NASAL SEPTUM JUST ABOVE THE VESTIBULE
- > HERE SEPTAL BRANCH OF ANTERIOR ETHMOIDAL SPHENOPALATINE ARTERY, GEATER PALATINE AND SUPERIOR LABIAL ARTERY ANASTOMOSE TO FORM A VASCULAR PLEXUS CALLED KIESELBACH'S PLEXUS
- > THIS AREA OF NASAL SEPTUM IS COMMON SITE OF EPISTAXIS

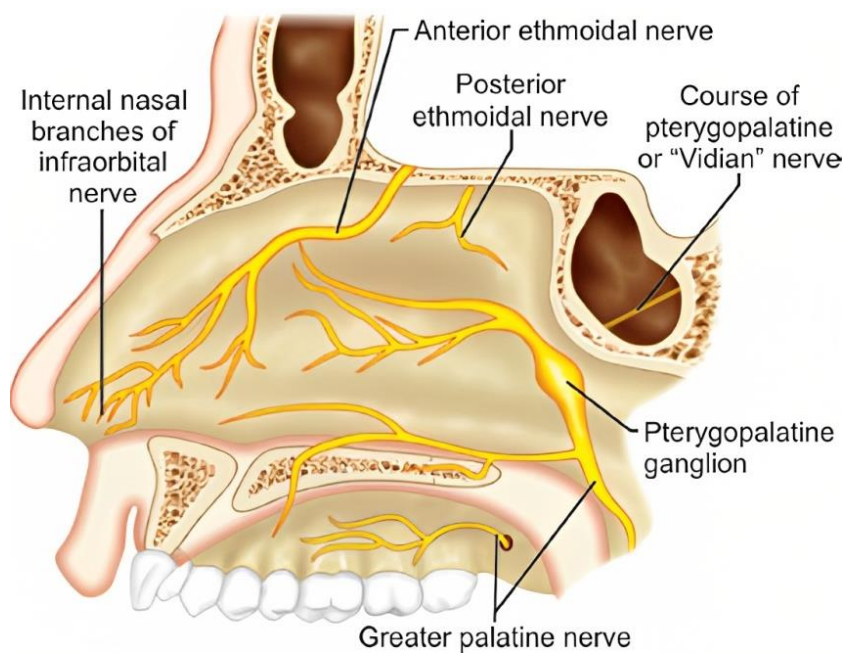
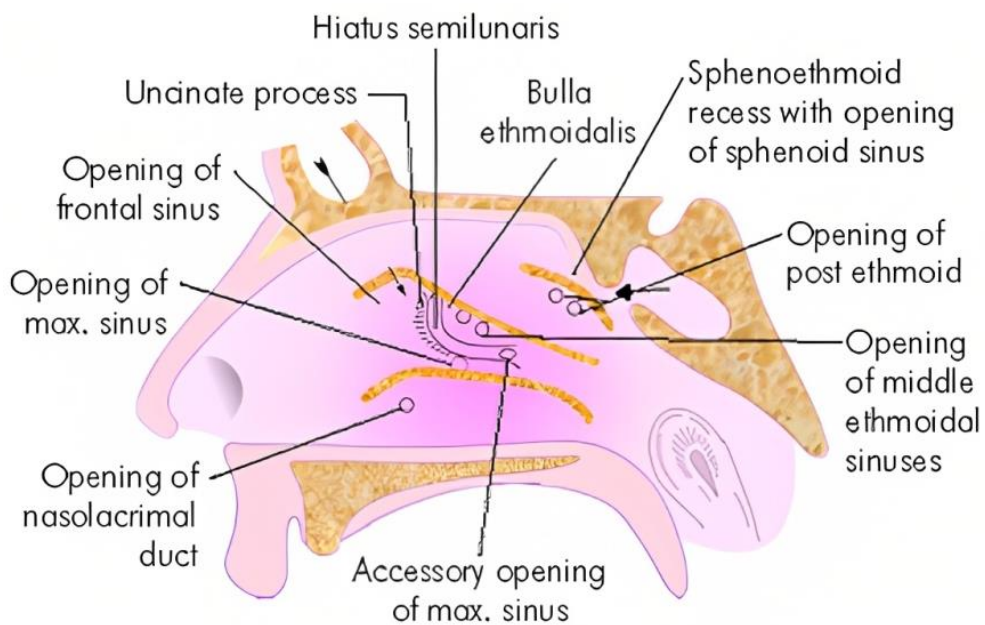
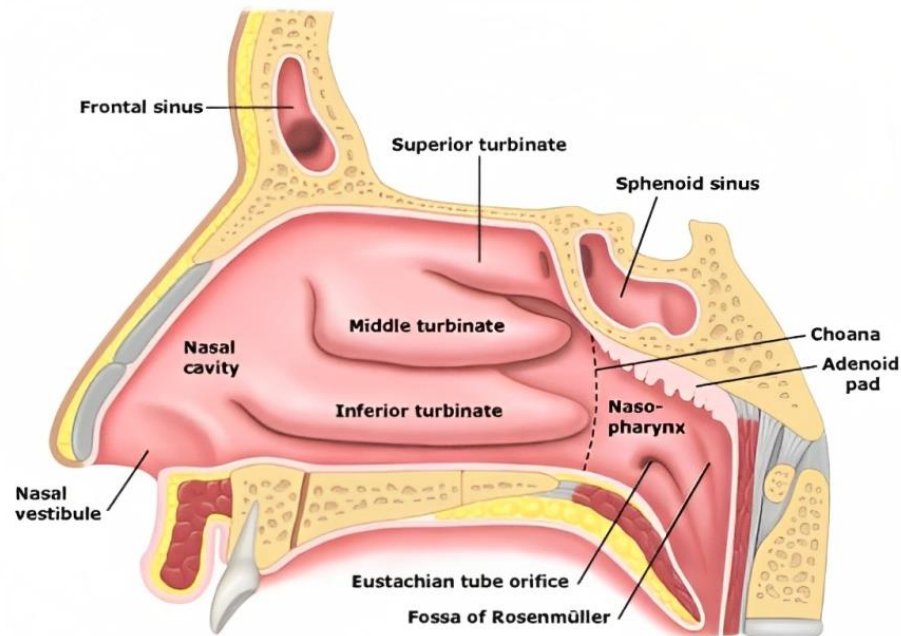
RHINITIS-

INFLAMMATION OF MUCUS MEMBRANE LINING THE NASAL CAVITY

HYPERTROPHY OF MUCOSA OVER INFERIOR CONCHA IS COMMON FEATURE OF ALLERGIC RHINITIS

Little's Area (Kiesselbach's plexus)







TYMPANIC MEMBRANE

THIN, TRANSLUCENT PARTITION BETWEEN EXTERNAL ACOUSTIC MEATUS AND MIDDLE EAR

OVAL IN SHAPE

PLACED - OBLIQUELY AT AN ANGLE OF 55 DEGREE WITH FLOOR OF MEATUS

FACE - DOWNWARD, FORWARD AND Laterally

- 2 SURFACE → OUTER SURFACE - LINED BY THIN SKIN

- CONCAVE

→ INNER SURFACE - PROVIDE ATTACHMENT TO HANDLE OF MALLEUS

- INNER CONVEX

- POINT OF MAX. CONVEXITY LIE → AT TIP OF HANDLE OF MALLEUS CALLED UMBO

- MEMBRANE THICKENED AT CIRCUMFERENCE → WHICH FIXED TYMPANIC SULCUS OF TEMPORAL PLATE

- SUPERIOR SULCUS DEFICIENT → HERE MEMBRANE ATTACHED TO → TYMPANIC NOTCH

- FROM END OF NOTCH - 2 BAND - ANT. & POST. MALLEOLAR FOLD PROLONGED

- GREATER PART OF T.M IS → TIGHTLY STRETCHED → PARS TENSA

- PART BETWEEN 2 MALLEOLAR FOLD OS LOOSE → PARS FLACCIDA

STRUCTURE

- TYMPANIC MEMBRANE IS COMPOSED OF FOLLOWING 3 LAYER

- OUTER CUTICULAR LAYER - SKIN

- MIDDLE FIBROUS LAYER - SUPERFICIAL RADIATING FIBERS

- INNER MUCOUS LAYER - LINED BY LOW CILIATED COLUMNAR EPITHELIUM

BLOOD

OUTER SURFACE → DEEP AURICULAR A. BRANCH OF MAXILLARY ARTERY

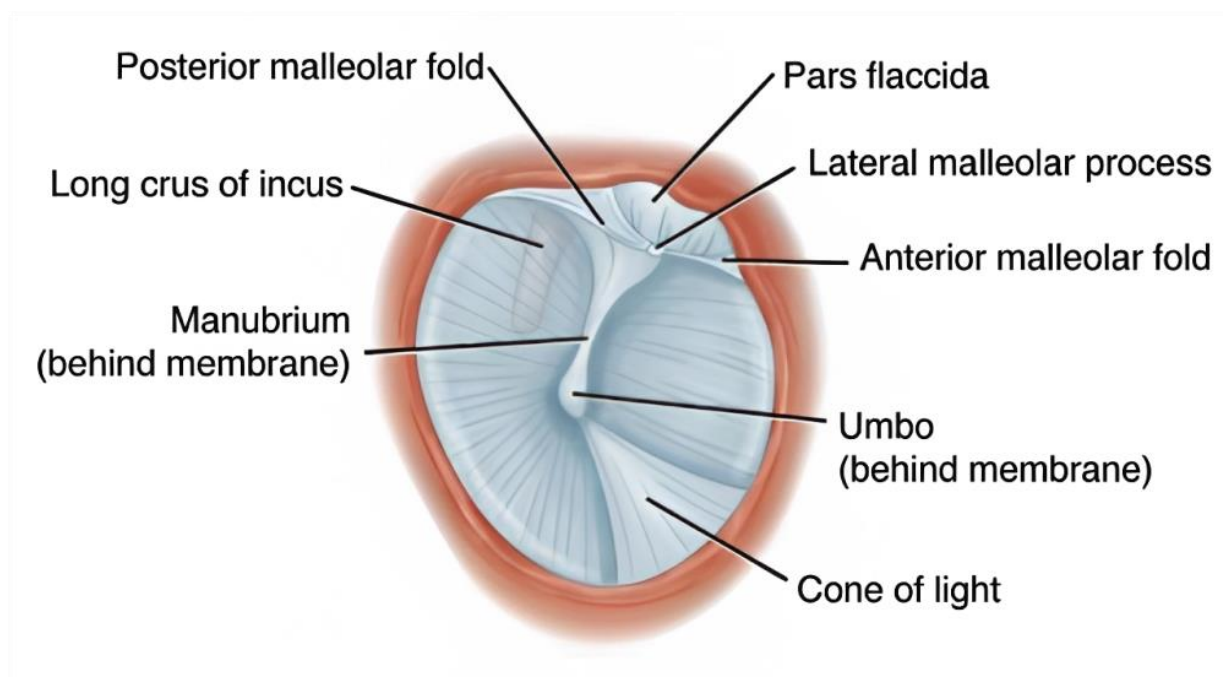
INNER SURFACE → ANTERIOR TYMPANIC BRANCH - MAXILLARY A.

→ POSTERIOR TYMPANIC BRANCH - POSTERIOR AURICULAR A.

NERVE

OUTER SURFACE → AURICULOTEMPORAL NERVE

INNER SURFACE → TYMPANIC BRANCH → GLOSSOPHARYNGEAL NERVE





MIDDLE EAR

NARROW AIR FILLED SPACE - SITUATED IN PETROUS PART OF TEMPORAL BONE BETWEEN EXTERNAL & INTERNAL EAR

- MIDDLE EAR SHAPED, LIKE CUBE - LATERAL AND MEDIAL WALL - LARGE
 - OTHER WALL - NARROW
- SUB-DIVIDED - TYMPANIC CAVITY PROPER -> OPPOSITE THE TYMPANIC MEMBRANE
 - EPITYMPANIC RECESS -> LIE ABOVE TYMPANIC MEMBRANE
- COMMUNICATION → ANTERIORLY -> NASOPHARYNX -> THROUGH AUDITORY TUBE
 - POSTERIORLY -> MASTOID ANTRUM -> ADITUS

BOUNDARIES -

1) ROOF -> THIN PLATE BONE → TEGMEN TYMPANI

2) FLOOR -> THIN PLATE BONE OF TEMPORAL SEPARATE → SUPERIOR BULB OF INTERNAL JUGULAR VEIN
-> GLOSSOPHARYNGEAL NERVE

3) ANTERIOR WALL -

UPPER MOST -> TENSOR TYMPANI

MIDDLE MOST -> AUDITORY TUBE

INNER MOST -> THIN PLATE OF BONE

↓ WHICH

FORM POSTERIOR WALL OF CAROTID CANAL

- PLATE SEPARATED INTERNAL CAROTID ARTERY

4) POSTERIOR WALL -

- SUPERIORLY - ADITUS THROUGH WHICH EPITYMANIC RECESS COMMUNICATE TYMPANIC ANTRUM
- CONICAL PROJECTION CALLED PYRAMID LIE - NEAR JUNCTION OF POSTERIOR & MEDIA WALL
- OPENING → FOR PASSAGE OF TENDON OF "STAPEDIUS"
- POSTERIOR EDGE OF TYMPANIC MEMBRANE IS POSTERIOR CANALICULUS FOR CHORDA TYMPANI NERVE

5) LATERAL WALL - SEPARATE MIDDLE EAR FROM EXTERNAL ACOUSTIC MEATUS

- TYMPANIC MEMBRANE ALONG → TYMPANIC RING AND SULCUS
- PARTLY SQUAMOUS TEMPORAL BONE IN EPITYMPANIC RECESS

6) MEDIAL WALL - SEPARATE MIDDLE EAR FROM INTERNAL EAR

- PROMONTORY -> FIRST TURN OF COCHLEA

- FENESTRA COCHLEAE - ROUND OPENING
 - POSTERO INFERIOR → PROMONTORY
- FENESTRA VESTIBULI - OVAL OPENING



- POSTERO SUPERION → PROMONTORY

- SEMICIRCULAR CANAL → ABOVE FACIAL CANAL
- FACIAL CANAL - ABOVE FENESTRA VESTIBULI

CONTENTS

- 3X SMALL BONE - MALLEUS
INCUS
STAPE
- **LIGAMENT OF EAR OSSICLE**
- 2 MUSCLE - TENSAR TYMPANI
- STAPEDIUS
- **VESSELS SUPPLY AND DRAINING THE MIDDLE EAR**
- NERVE - CHORDA TYMPANI
- TYMPANIC PLEXUS

ARTERIAL SUPPLY

- ANTERIOR TYMPANIC BRANCH -> MAXILLARY ARTERY
- POSTERIOR TYMPANIC BRANCH POSTERIOR AURICULAR ARTERY
- PETROSAL AND SUPERIOR TYMPANIC BRANCH -> MIDDLE MENINGEAL ARTERY
- BRANCHES OF ASCENDING PHARYNGEAL ARTERY
- TYMPANIC BRANCHES -> ICA

VENOUS DRAINAGE

- DRAIN → INTO SUPERIOR PETROSAL SINUS & PTERYGOID PLEXUS

LYMPHATIC DRAINAGE

- PREAURICULAR & RETROPHARYNGEAL LYMPH NODE

NERVE SUPPLY

- DERIVED FROM - TYMPANIC PLEXUS → WHICH LIE OVER PROMONTORY
- PLEXUS FORMED BY - 1) TYMPANIC BRANCH OF GLOSSOPHARYNGEAL NERVE
2) SUP. & INF. CAROTICOTYMPANIC NERVE → ARISE FROM
SYMPATHETIC PLEXUS

INNER SURFACE -> TYMPANIC BRANCH → GLOSSOPHARYNGEAL NERVE

CLINICAL ANATOMY

OTOSCLEROSIS -

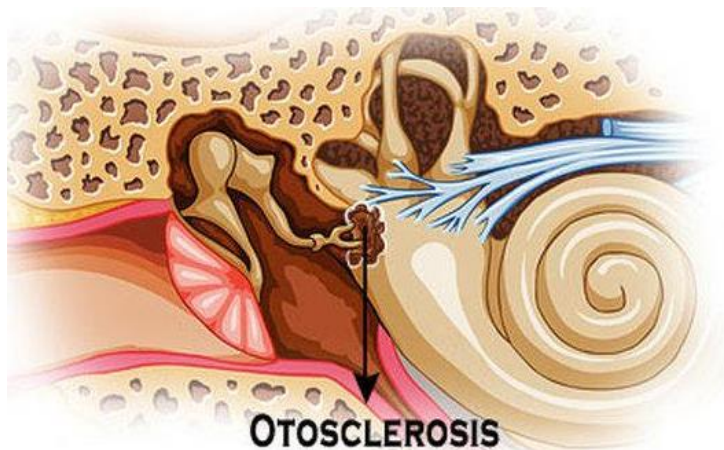
- ABNORMAL OSSIFICATION OF ANNULAR LIGAMENT, WHICH ANCHORS THE FOOTPLATE OF STAPES TO OVAL WINDOW, IS CALLED OTOSCLEROSIS
- THIS IMPEDES THE MOVEMENTS OF STAPES AND CAUSES DEAFNESS. THE OTOSCLEROSIS IS THE MOST COMMON CAUSE OF CONDUCTIVE DEAFNESS IN ADULT

INFECTION OF MIDDLE EAR

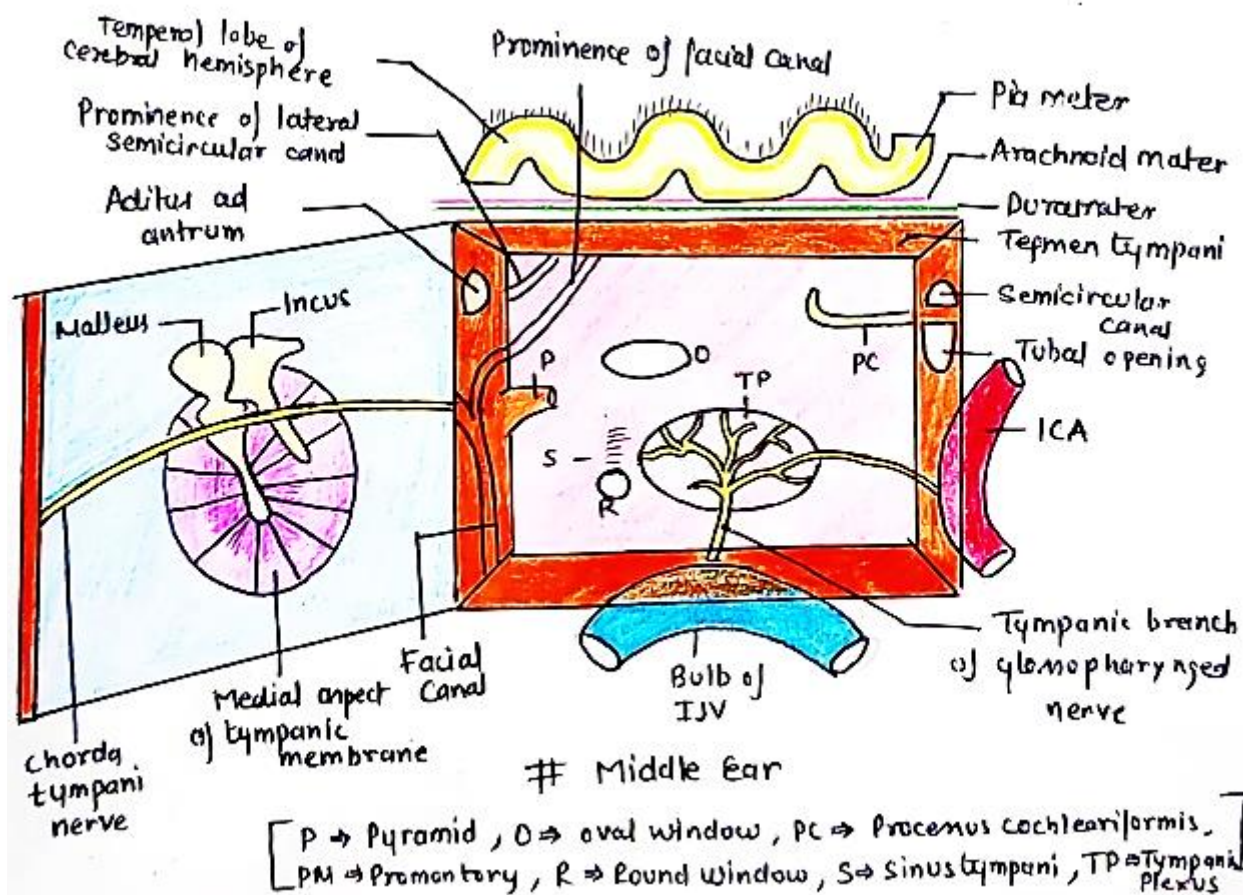
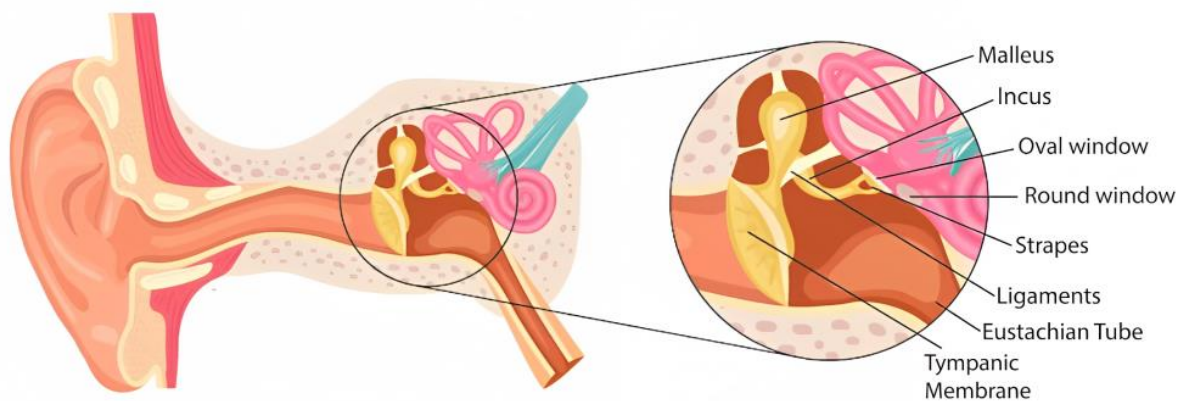
- IT IS COMMON ESPECIALLY IN INFANTS AND CHILDREN
- INFECTION AGENTS REACH THE MIDDLE EAR FROM THE UPPER RESPIRATORY TRACT THROUGH PHARYNGOTYMPANIC TUBE

MASTOID ABSCESS

IT IS A COMMON CONDITION, THE ANTRUM IS APPROACHED SURGICALLY THROUGH ITS LATERAL WALL



Middle ear anatomy





PREVIOUS YEAR UNIVERSITY QUESTIONS

LONG QUESTIONS - 20MARKS

- 1) CLASSIFY DURAL VENOUS SINUS & DESCRIBE CAVERNOUS SINUS IN DETAIL
- 2) DESCRIBE MIDDLE EAR UNDER FOLLOWING HEADINGS -
1.LOCATION 2.CONTENT 3.BOUNDARY & NERVE SUPPLY 4.APPLIED
- 3) DESCRIBE TONGUE UNDER THE FOLLOWING HEADINGS -
1.LOCATION & PARTS 2.NERVE SUPPLY & LYMPHATIC DRAINAGE 3.DEVELOPMENT
- 4) DESCRIBE ANTERIOR TRIANGLE & CAROTID TRIANGLE
- 5) DESCRIBE PALATINE TONSIL UNDER FOLLOWING HEADINGS -
1.EXTERNAL FEATURES 2.BLOOD SUPPLY 3.HISTOLOGY
- 6) DESCRIBE THYROID GLAND OR PAROTID GLAND UNDER FOLLOWING HEADINGS -
1.LOCATION 2.EXTERNAL FEATURE & RELATION 3.BLOOD & NERVE SUPPLY
- 7) DESCRIBE TEMPEROMANDIBULAR JOINT

SHORT QUESTIONS - 5MARKS

- 1) SCALP
- 2) LACRIMAL APPARATUS
- 3) POSTERIOR TRIANGLE
- 4) EXTERNAL CAROTID ARTERY
- 5) MAXILLARY ARTERY & MAXILLARY NERVE
- 6) MUSCLE MASTICATION
- 7) DEVELOPMENT OF SOFT PALATES
- 8) HISTOLOGY DIAGRAM OF PALATINE TONSIL
- 9) EXTRA OCULAR MUSCLE
- 10) LARYNX
- 11) OTIC GANGLION
- 12) SUBMANDIBULAR GLAND
- 13) LATERAL WALL OF NOSE



HEAD AND NECK ANATOMY IS COMPLETED !!

IT ALWAYS SEEMS IMPOSSIBLE UNTIL IT'S DONE

ALL THE BEST FOR YOUR EXAMS

DR.JOHARI

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