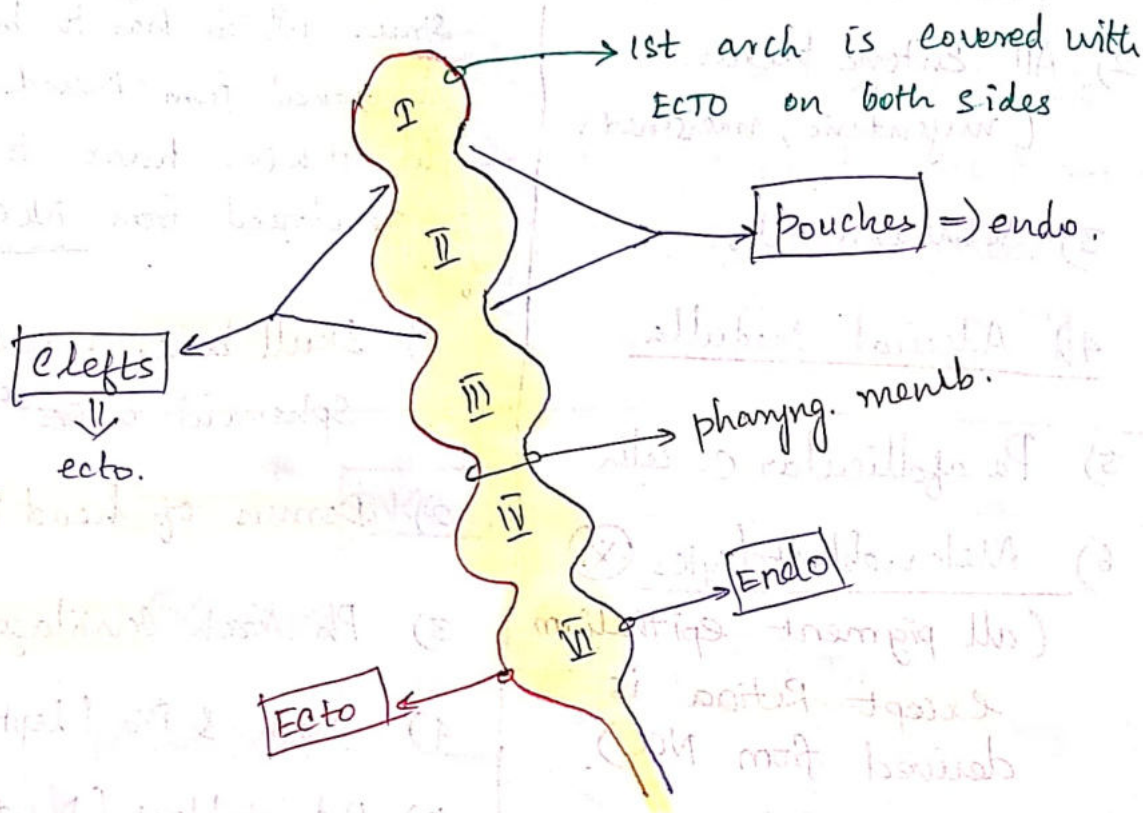
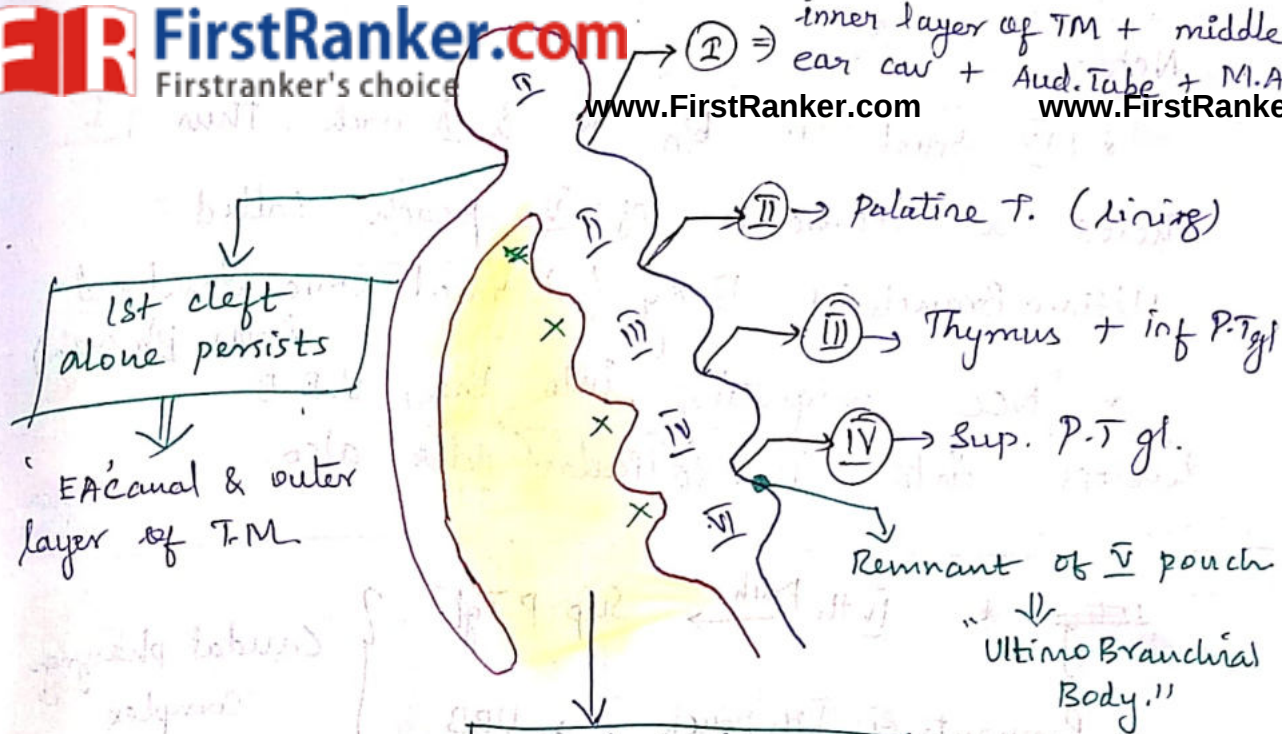


Pharyng. Arches:Note:

* Although Neck is developed from the ph. arches Neck reg. is smooth unlike in other animals such as fishes where gills are present

* This is bcoz mesoderm of IInd ph. arch overgrows & pushes the ectoderm of IInd down

(X) Cervical sinus is absorbed along with III, IV, Vth "CLEFTS", so only Ist cleft persists & we can see that only one opening in the side of H & N i.e) Ext. Aud. meatus and outer layer of TM (X)



clefts: only 1st cleft persists. all others are absorbed

pouches: all 4 are there.

Ist pouch → develops into inner layer of TM & middle ear cav. & its (A) & (P) extensions
 (A) → Mastoid Antrum
 (P) → Eustach. Tube

IInd pouch → lining epi of palatine Tonsil
 (# Remember lymph. of P.T is derived from "NCC").

IIIrd pouch → Thymus & Inf P.T. gl.

IVth pouch → Sup. P.T. gl.

there's a remnant of V pouch called
Ultimo Branchial Body (Ultimate struc. developed
from pharynx)

* "NCC" migrating into the U.B.B from ph. arch)
develops into parafollicular 'C' cells also.

* ~~IVth~~ * IVth Pouch → Sup. P. Tgl. } Caudal pharyng. Complex.
* Remnants of IVth pouch → UBB
NCC → Para-foll. 'C' cells

why ectopic P.T tissue is more likely to be from Inf. P.T gl.?

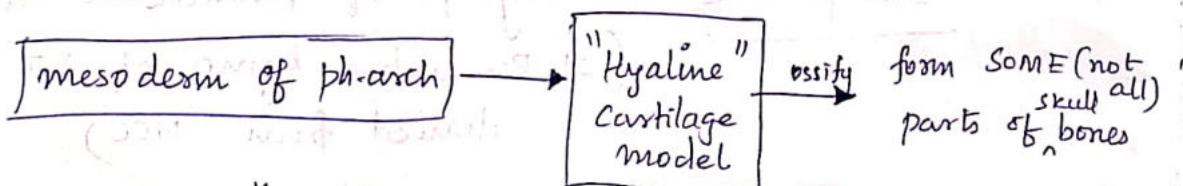
↳ Bcoz along with Thymus, inf P.T migrates, Sup P.T gl. doesn't migrate

CARTILAGE MODEL

1st arch (Mandib. arch) $\longrightarrow$ Meckel's Cartilage

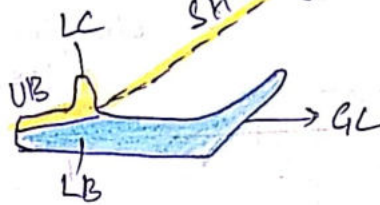
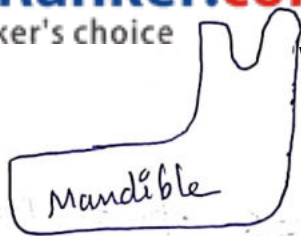
2nd arch (Hyoid arch) $\longrightarrow$ Reichert's cartilage.

Simply



- But all ^{skull} bones formed from mesenchyme of ph. arch

I

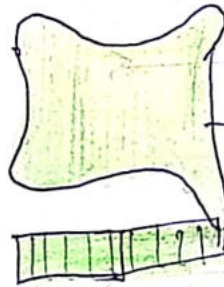


LC - Lesser Cornu

GC - Greater "

UB - Upper Body

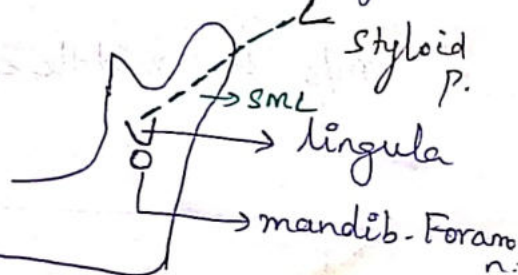
LB - Lower "

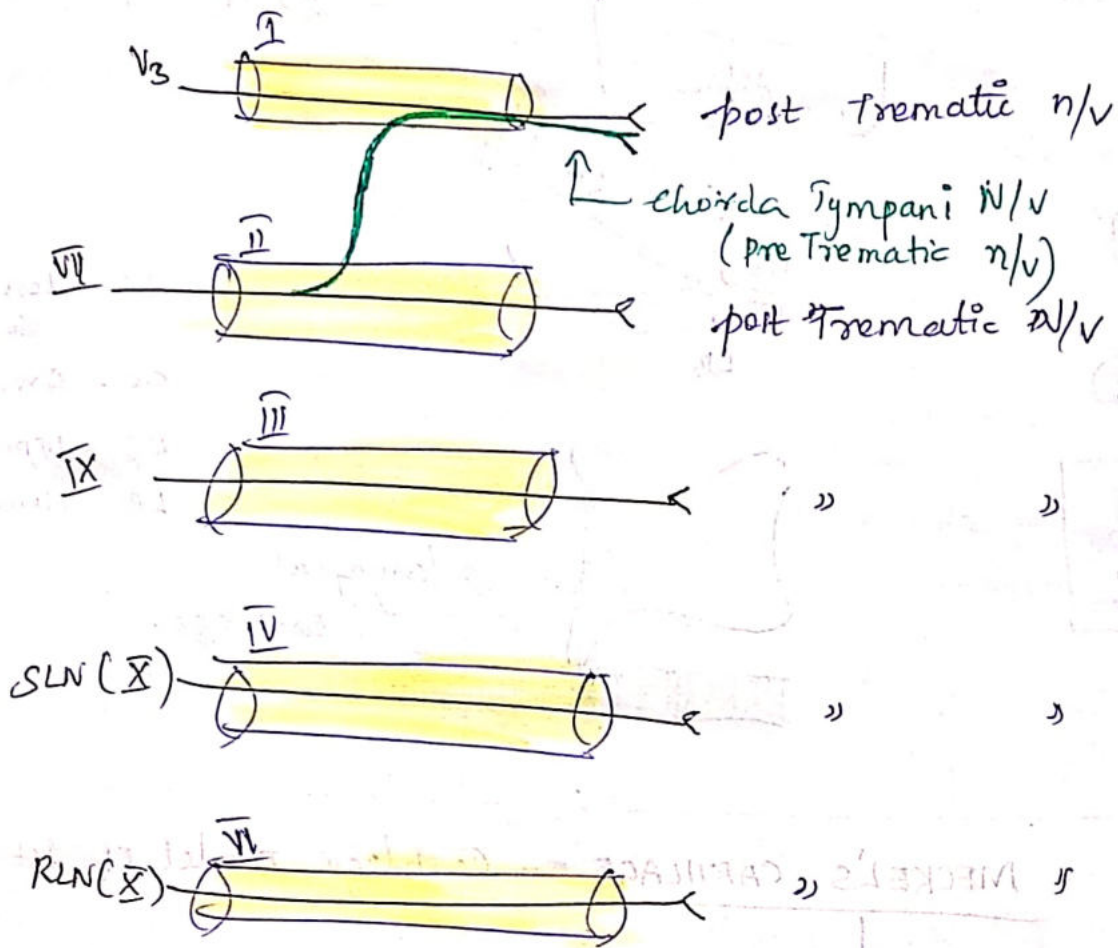


Laryngeal cartilages.

MECKEL'S CARTILAGE - Cartilage model of 1st Arch

- 1) most ant. part of mandible.
- 2) Lingula → proj. superior to mandib foramen
- 3) Sphenomandib lig.
- 4) Malleus.
- 5) Ant lig of Malleus.
- 6) Incus.





m/s of middle ear cav. $\Rightarrow$ PI & Stapedius
 $\downarrow$ $\downarrow$
 ph. arch I ph. Arch II

Arch	Nerve	Muscles	Cartilages/Bones	Arteries
I	V ₃ n/v Ch-Tymp.	masticat ⁿ m/s., TVP IT, (Ant belly of DG & MH.)	mandible, maxilla, zygomatic, sq. Temp sphenoid, malleus & incus.	Maxillary artery
II	VII n/v	Facial m/s, Stapedius, (post belly of DG, SH.) auricular m/s & occipitalis.	Stapes, Styloid process SH lig, UB & LC of Hyoid bone.	Stapedial artery & Hyoid a.
III	IX n/v	Stylopharyngeus.	Greater cornua & Lower body of Hyoid bone	CCA & ICA ⊗
IV	X n/v (SLN)	Cricothyroid, ⇒ ELN VAC/ph. plexus ⇒ * m/s of palate (except TVP). ⇒ V ₃ * m/s of pharynx (except ⇒ IX Stylopharyngeus and Cricopharyngeus). ⇒ RLN	All laryngeal cartilage except Cricoid & base of Arytenoid.	⊗ Arch of Aorta & Rt. Subcl. artery
VI	X n/v (RLN)	Cricopharyngeus & all m/s of larynx. except CRICOTHYROID ↓ (SLN)	Base of Aryt. & Cricoid.	⊗ pulm. art. & Ductus arteriosus
N/V of ph. arches are derived from "NCC"				