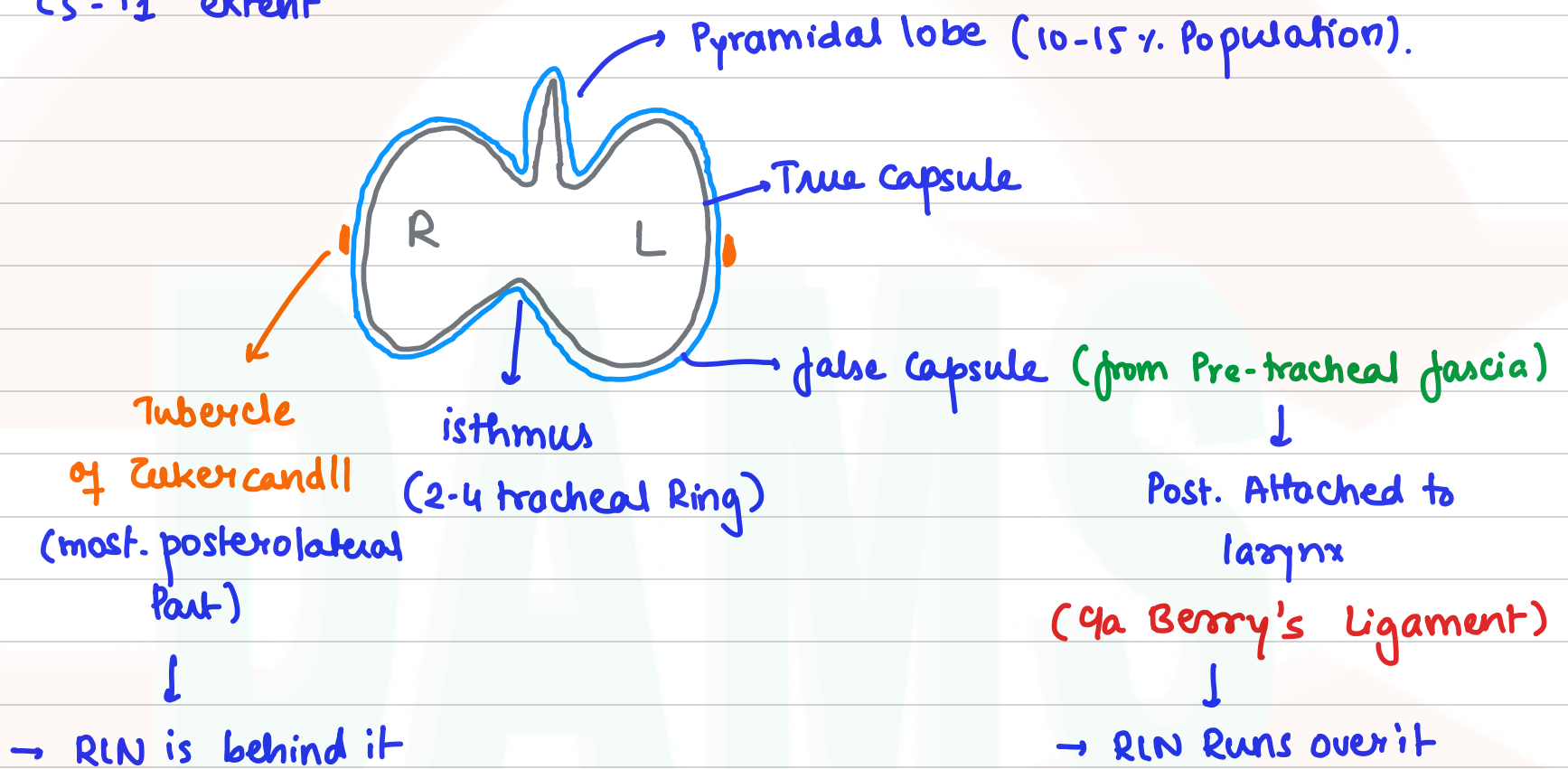


THYROID

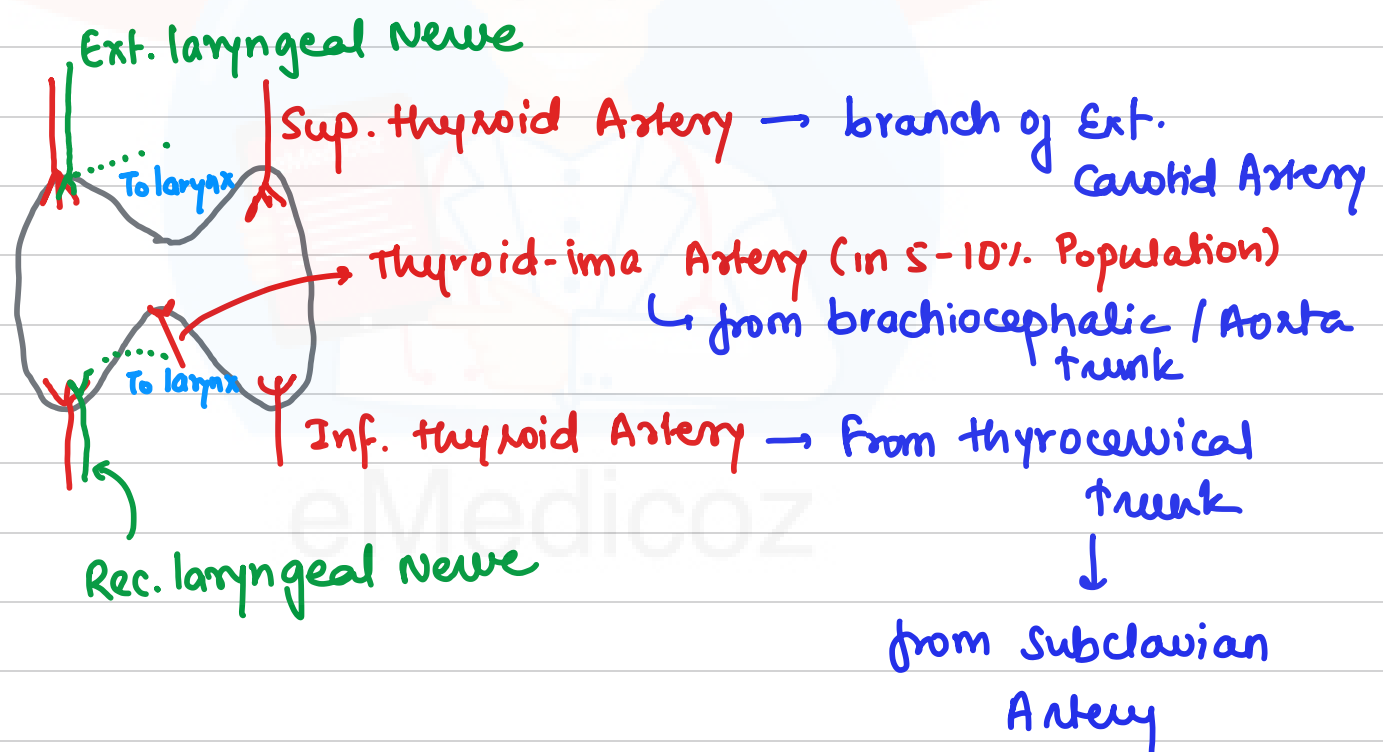
→ Thyroid = 'shield Shaped'.

→ 18-20 gm

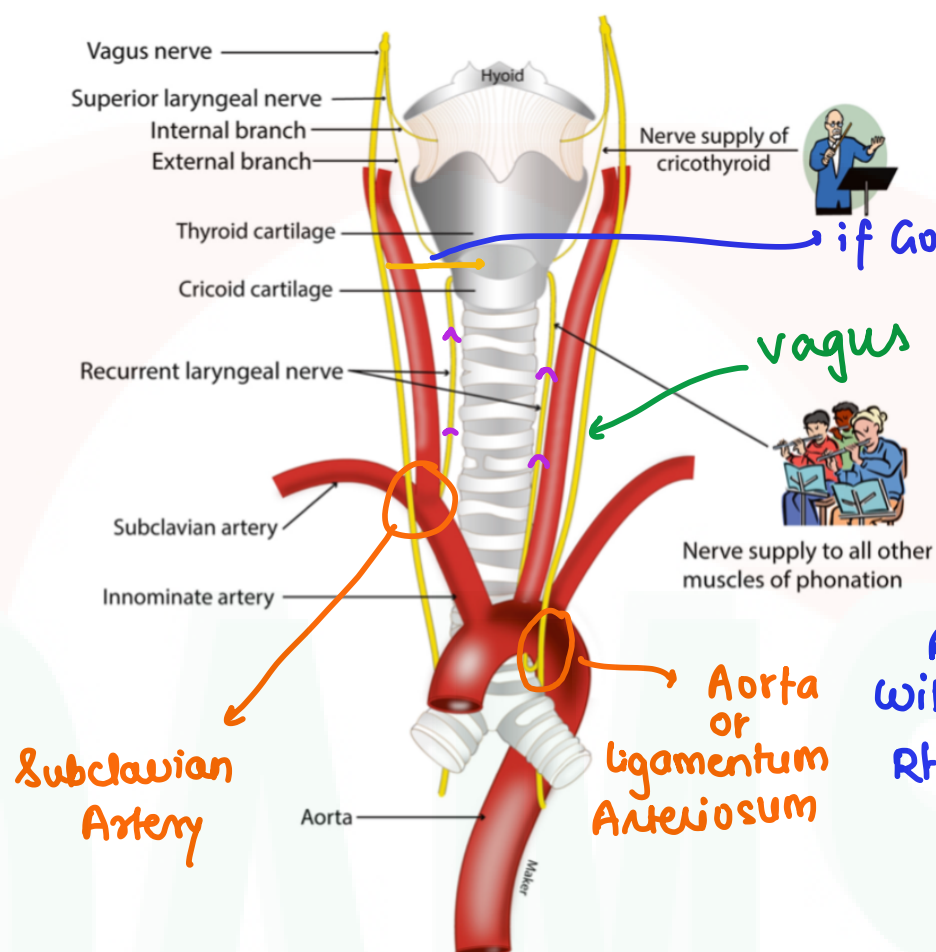
→ C5-T1 extent



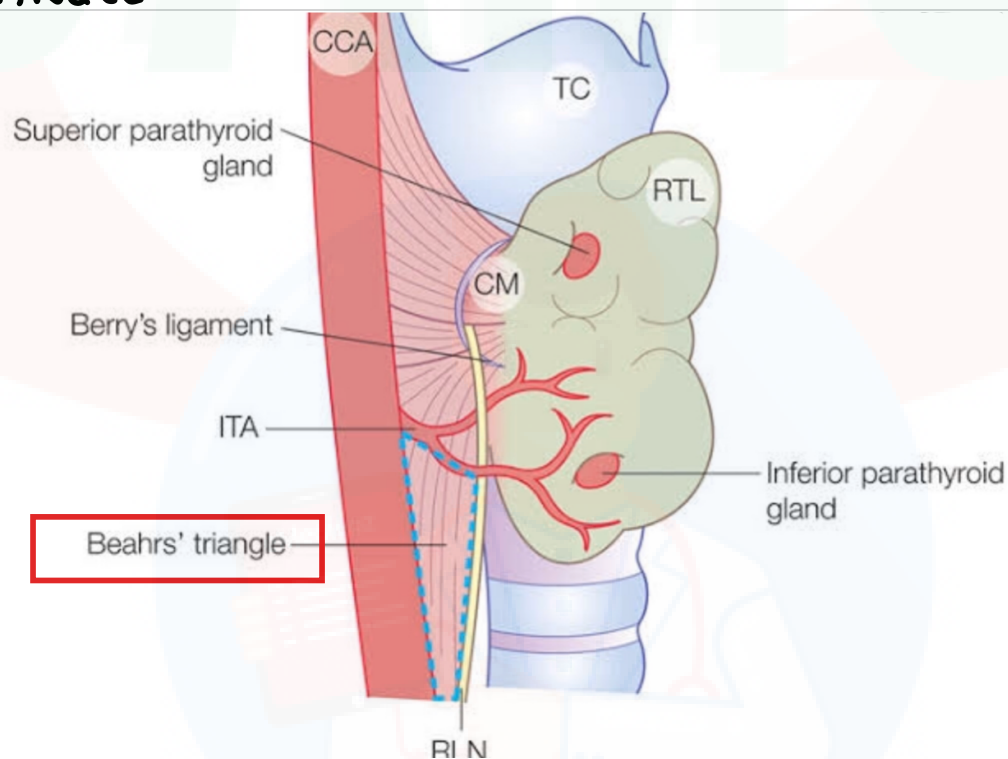
→ Blood Supply :-



Nerves of Speech

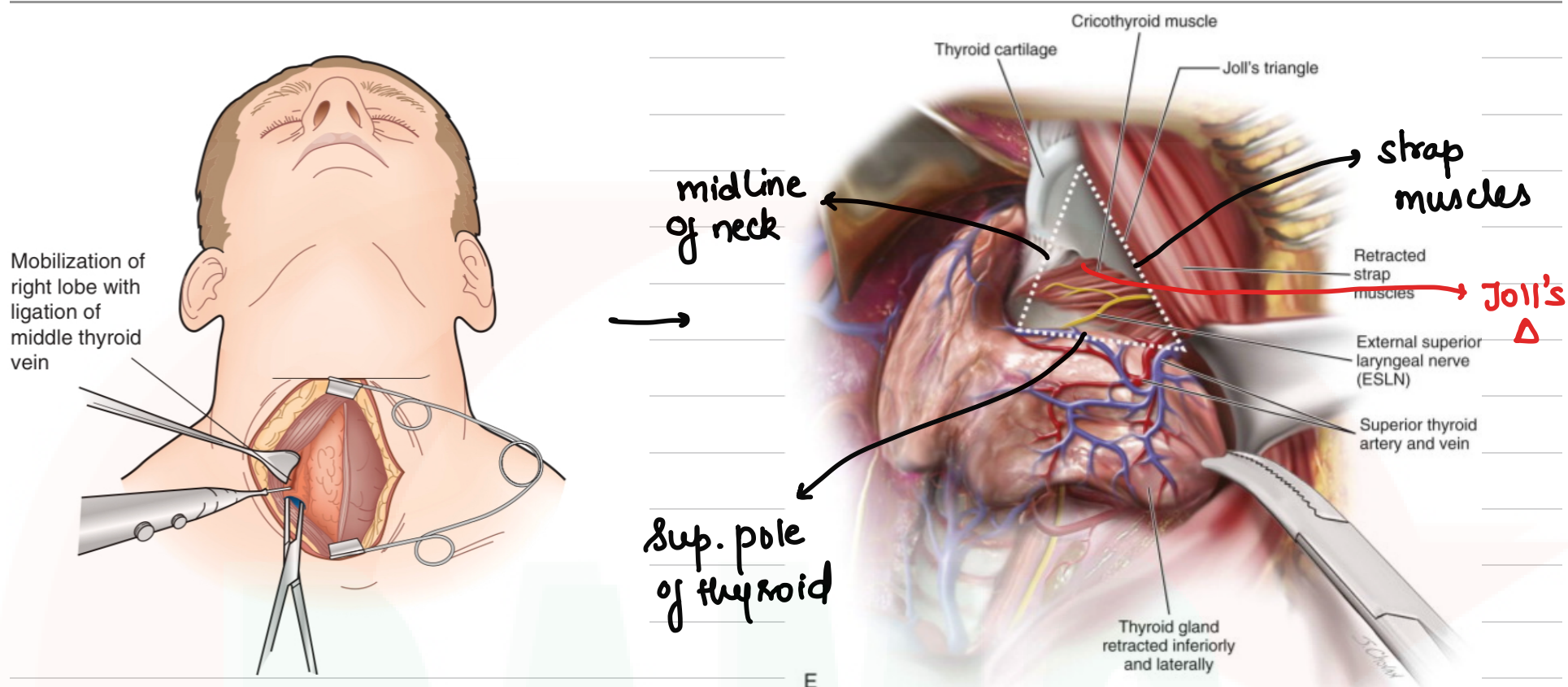


BEAHR'S TRIANGLE :



- Boundaries :-

- 1) Common carotid Artery
- 2) Inf. thyroid Artery
- 3) Rec. laryngeal nerve

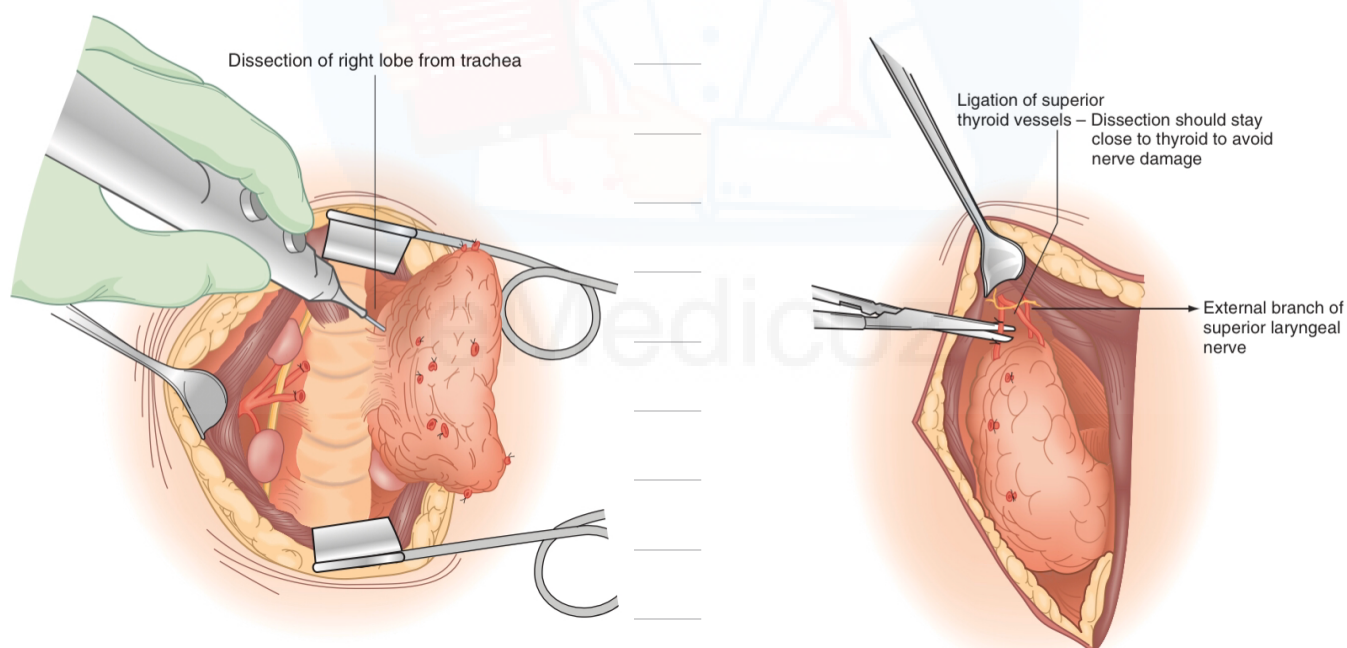


→ Rec. laryngeal nerve is content of Joll's triangle.

Note) main trunk of Sup. & Inf. thyroid Artery is not ligated in thyroid Sx.

↓
branches entering thyroid
should be ligated individually.

↓
Why ? ⇒ if we ligate main Arteries,
can cause PTH hypoxia & can cause
PTH insufficiency.

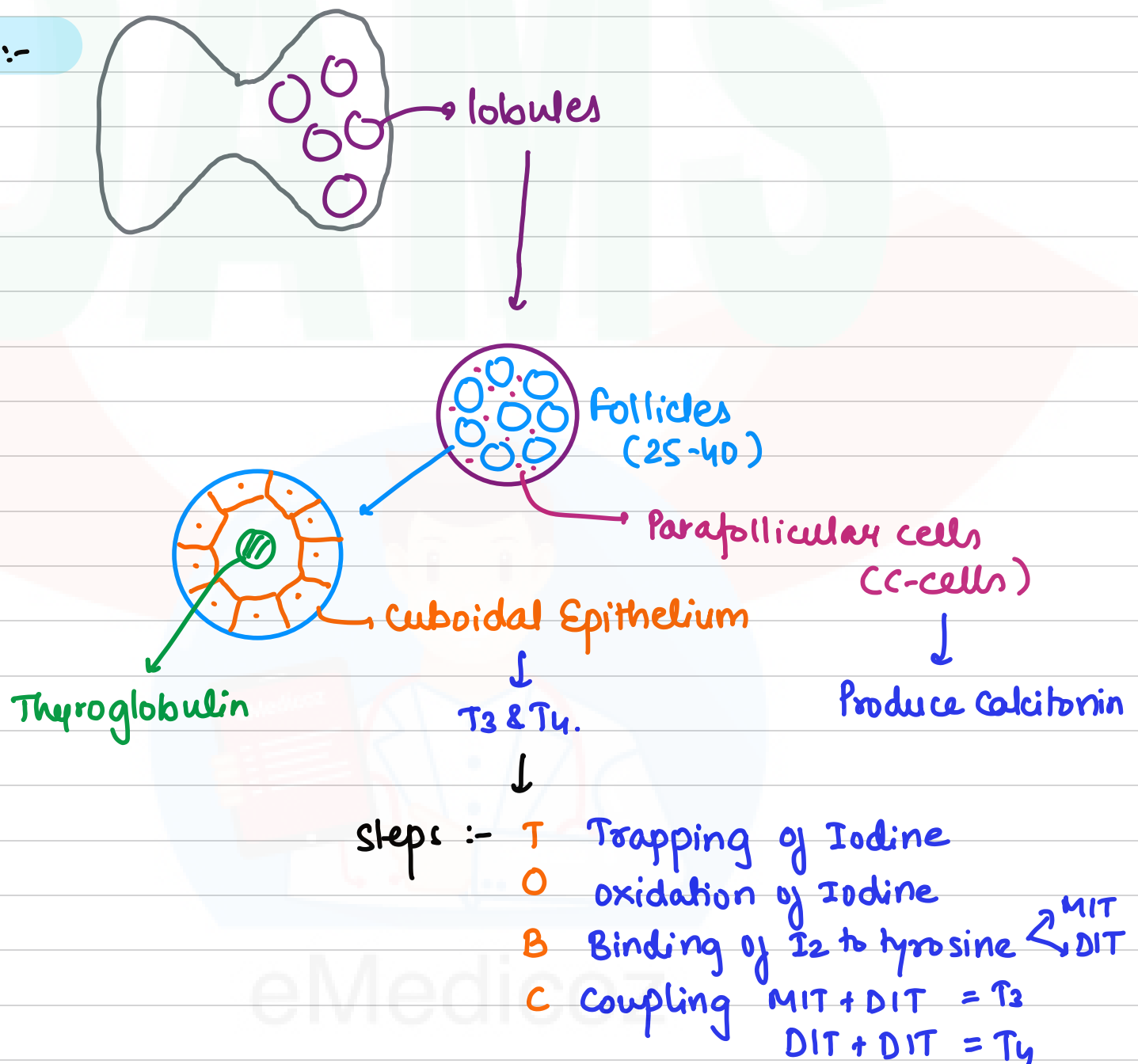


→ venous drainage :-

- Sup. thyroid vein } → drain to IJV.
- Mid. thyroid vein }
- Inf. thyroid vein } → drain to brachiocephalic vein
- vein of kocher (in 1% Population) } → drain to IJV.

→ Lymphatic Drainage :- level VI group of LN. (Pre/Para tracheal LN Pre/Para laryngeal LN)

→ Microscopy :-

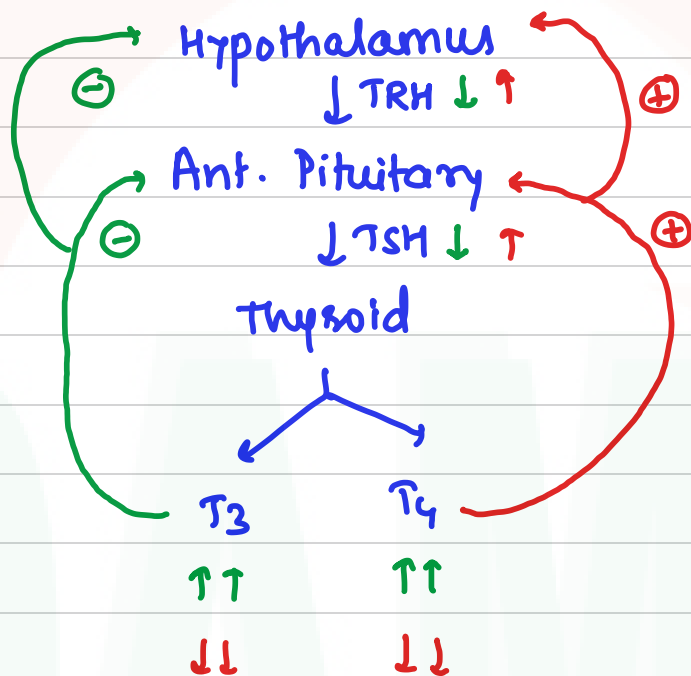


Peripheral Conversion :-



99.9% of T_4/T_3 → Bound form (Albumin, Pre-Albumin, TBG)
 0.1% → free → available to body.

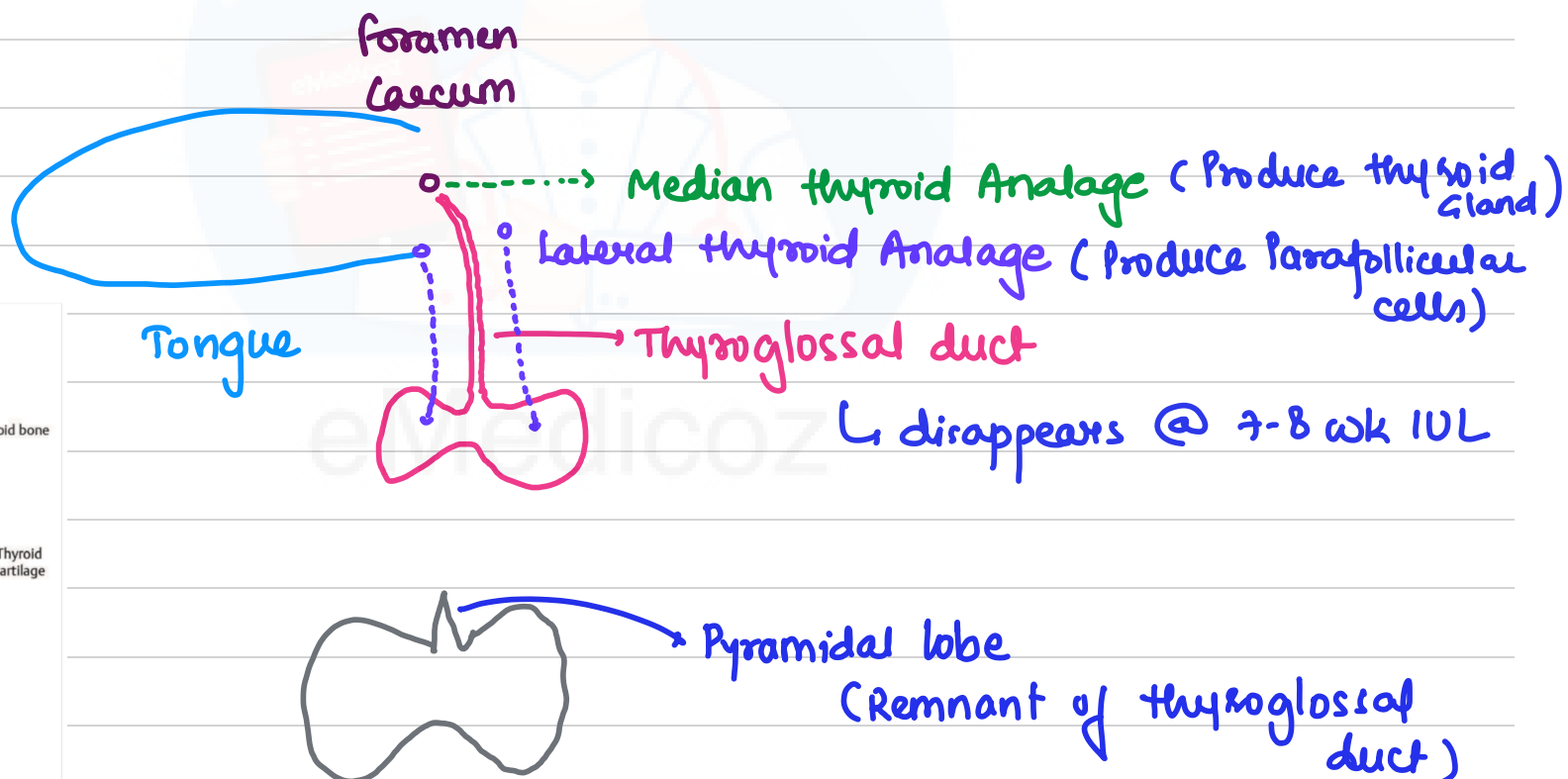
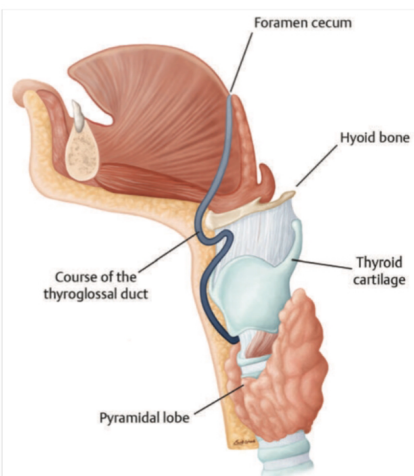
→ H-P Axis :-



Normal Sr. TSH = 0.5 - 5 mIU/L
 T_3 = 1.5 - 3.5 ng/L
 T_4 = 55 - 150 ng/L

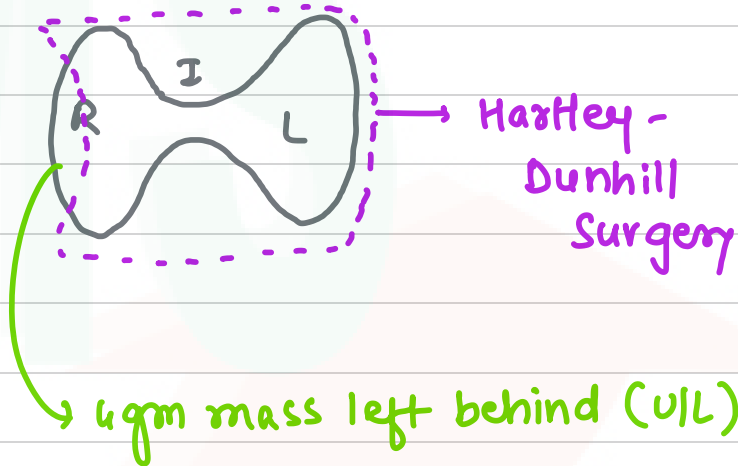
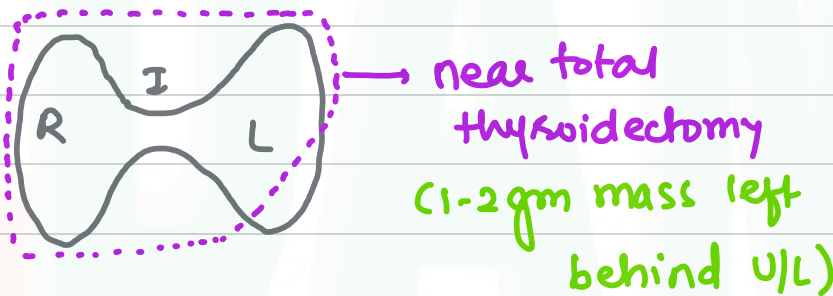
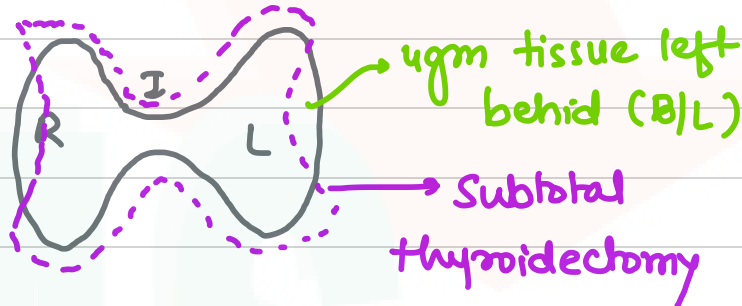
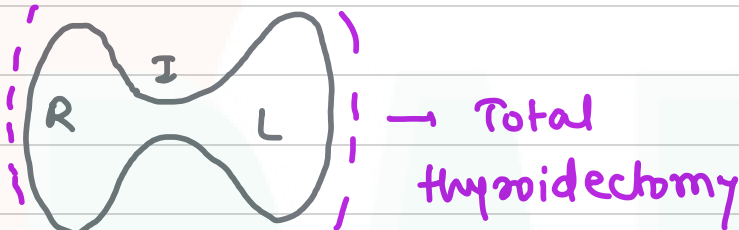
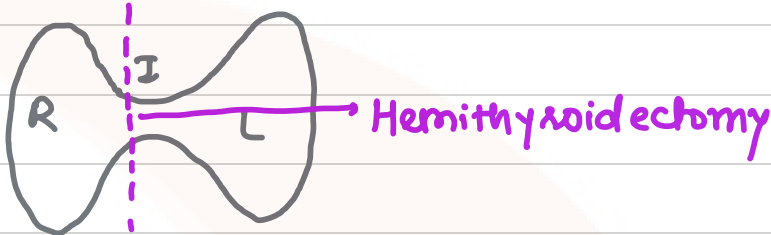
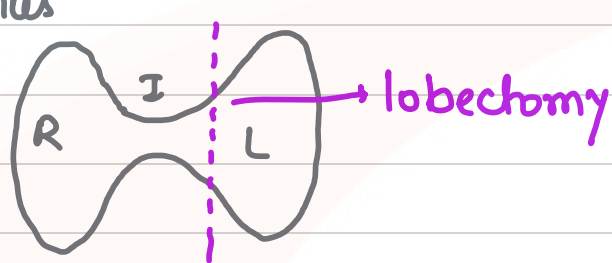
→ Development :-

Starts @ end of 3rd wk IUL.

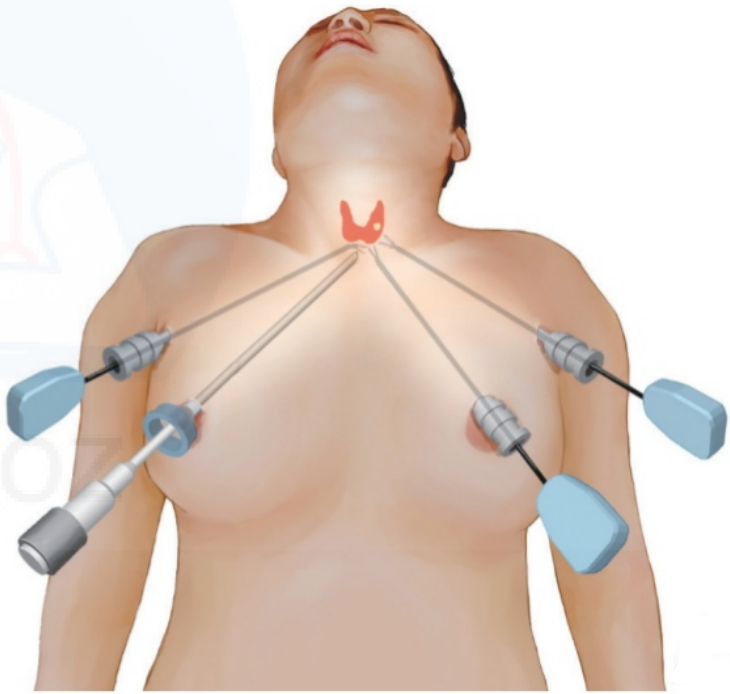
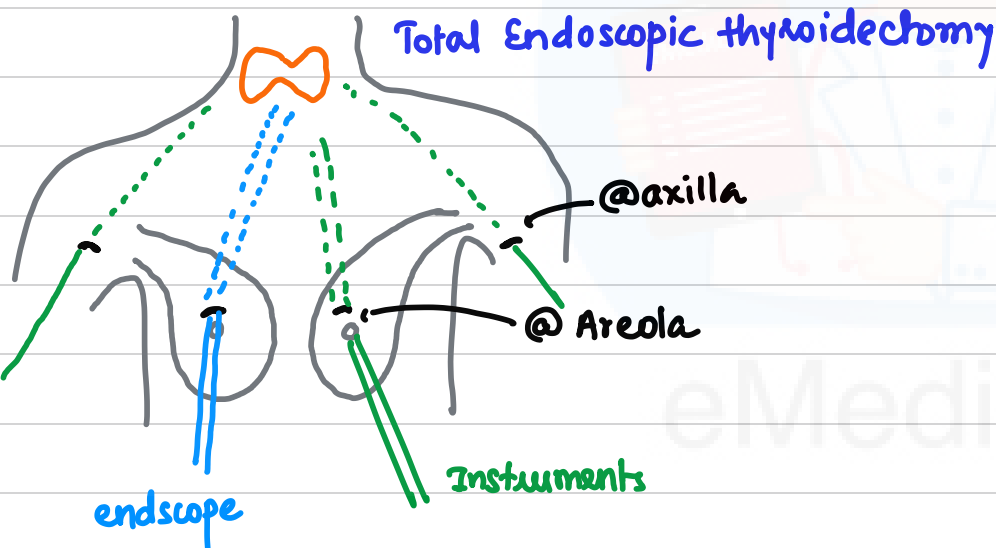


→ Surgeries in Thyroid :-

I = isthmus

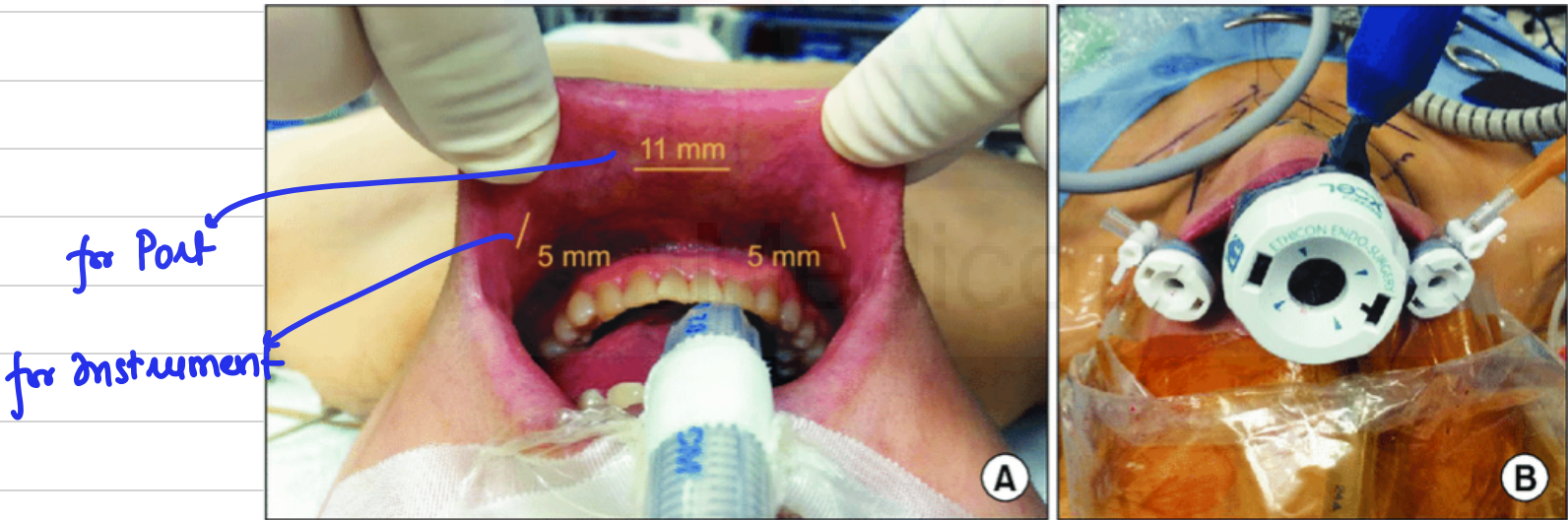
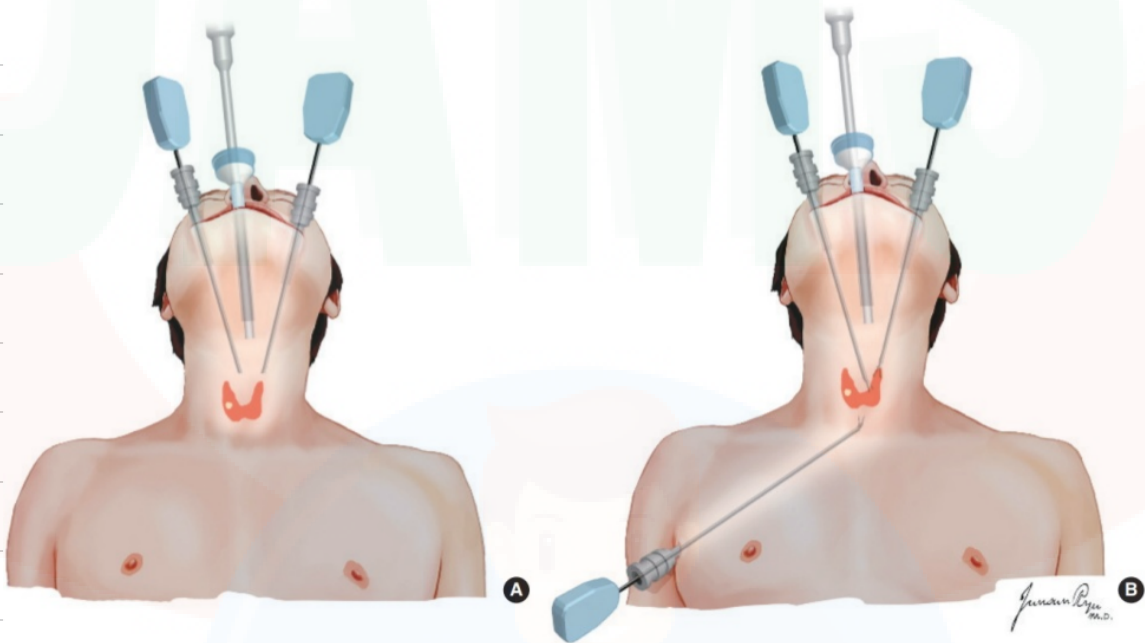


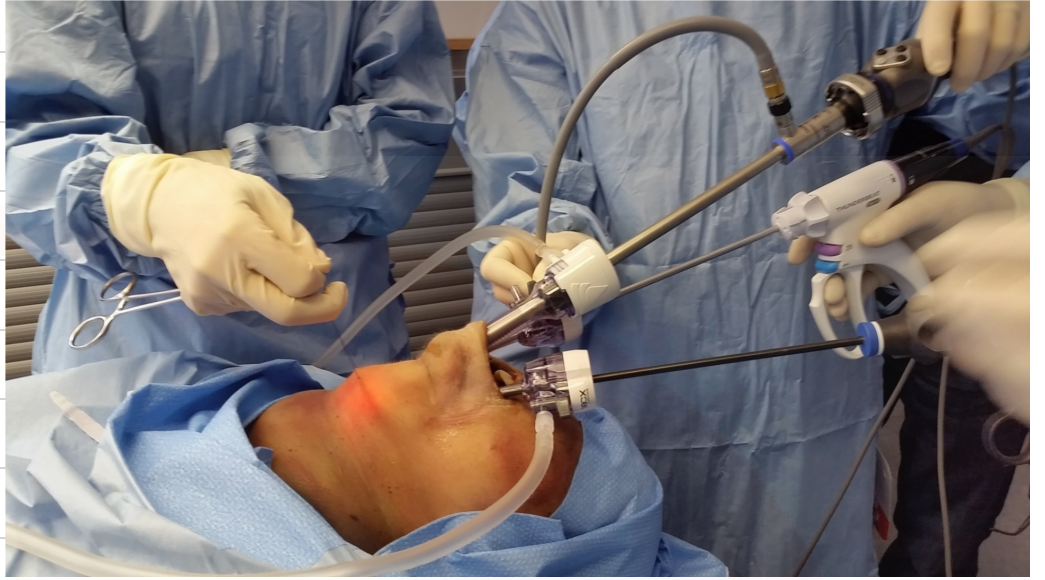
→ Minimal Invasive thyroidectomy :-





→ TOETVA :- trans-oral endoscopic thyroidectomy vestibular Approach

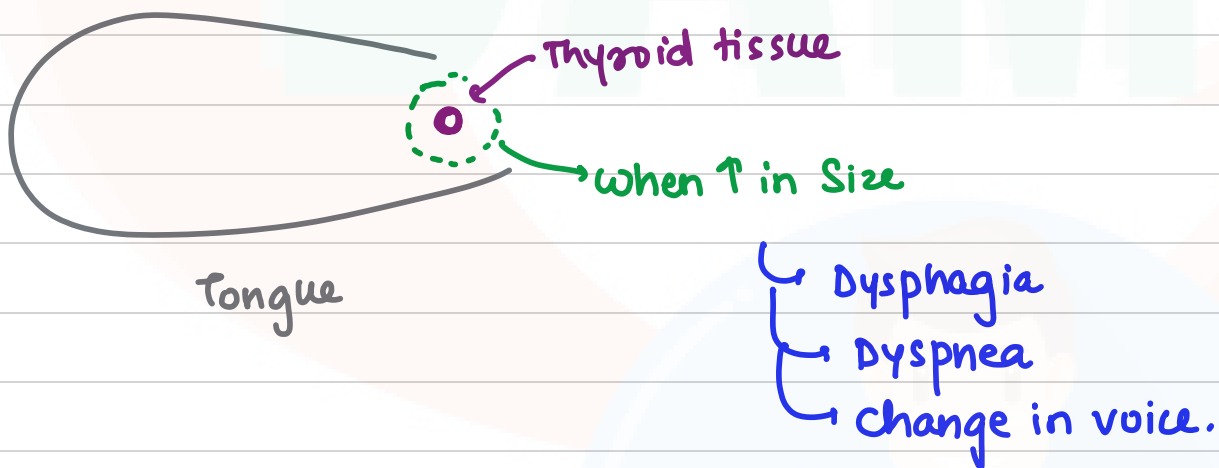




→ Congenital Anomalies :-

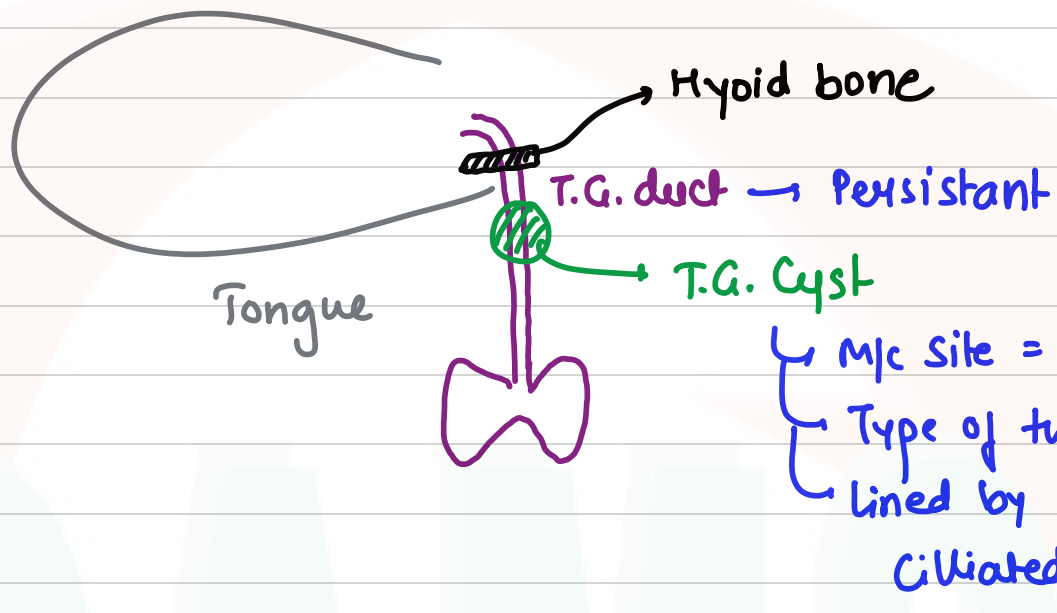
① Ectopic thyroid

- Site =
- 1) Tongue (lingual) (M/C)
 - 2) Cervical
 - 3) Mediastinum



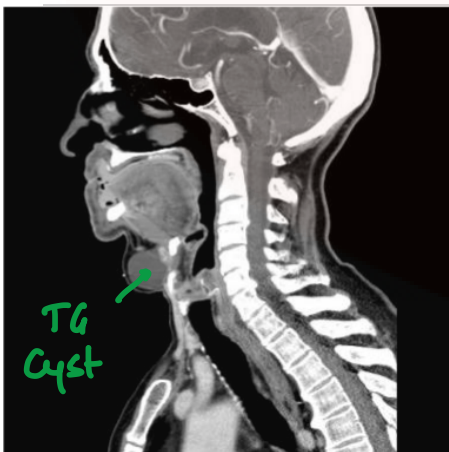
- (Rx) :
- 1) Thyroxine Supplementation
 - 2) RAI Supplementation
 - ↳ Radioactive Iodine Ablation (I^{131})
 - 3) Surgical excision.
 - ↳ Radioiodine scan must be done before Sx.
- ↓
- To see presence of thyroid tissue elsewhere in the body.

② Thyroglossal Cyst :-



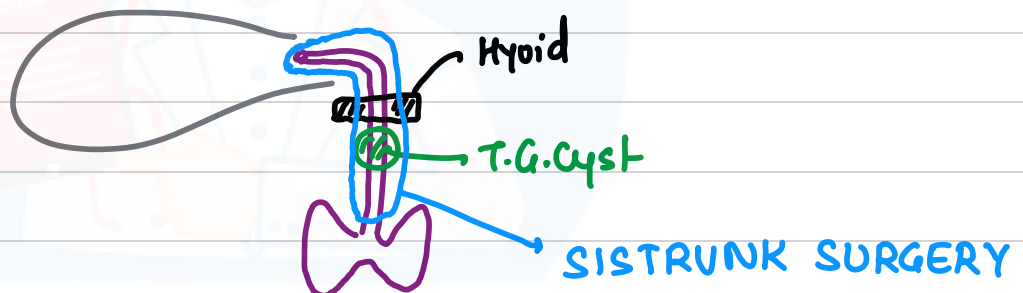
- C/F :-
- F > M
 - 5-20 yrs Age
 - Midline neck Swelling moves with deglutition.
 - Moves with protrusion of tongue.

- Complications :-
- Infections
 - Bleeding
 - Malignancy
 - ↳ M/c = Papillary thyroid Ca
 - ↳ least Common = Medullary thyroid Ca



MRI

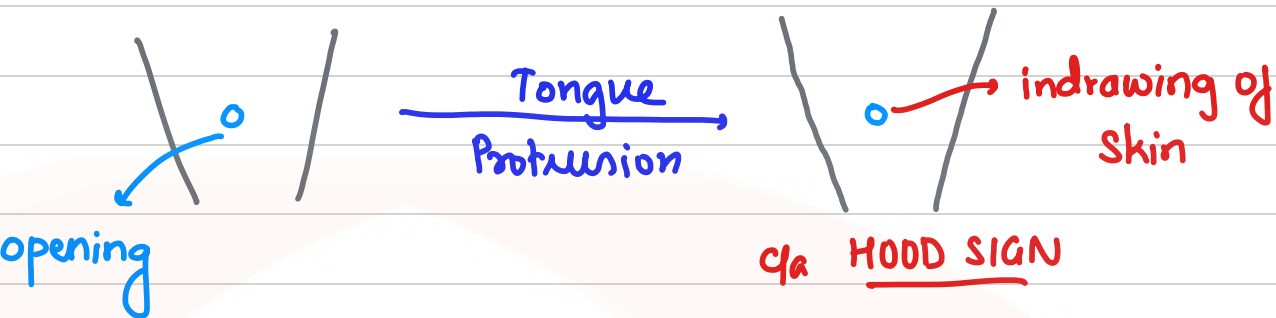
→ (Rx) :-



(TG Cyst, TG duct, A Part of Hyoid bone is Removed)

TG Cyst infection → (Wrong Rx) I & D done → Cause TG fistula (Acquired)

or Rupture →



Rx : SISTRUNK Sx.

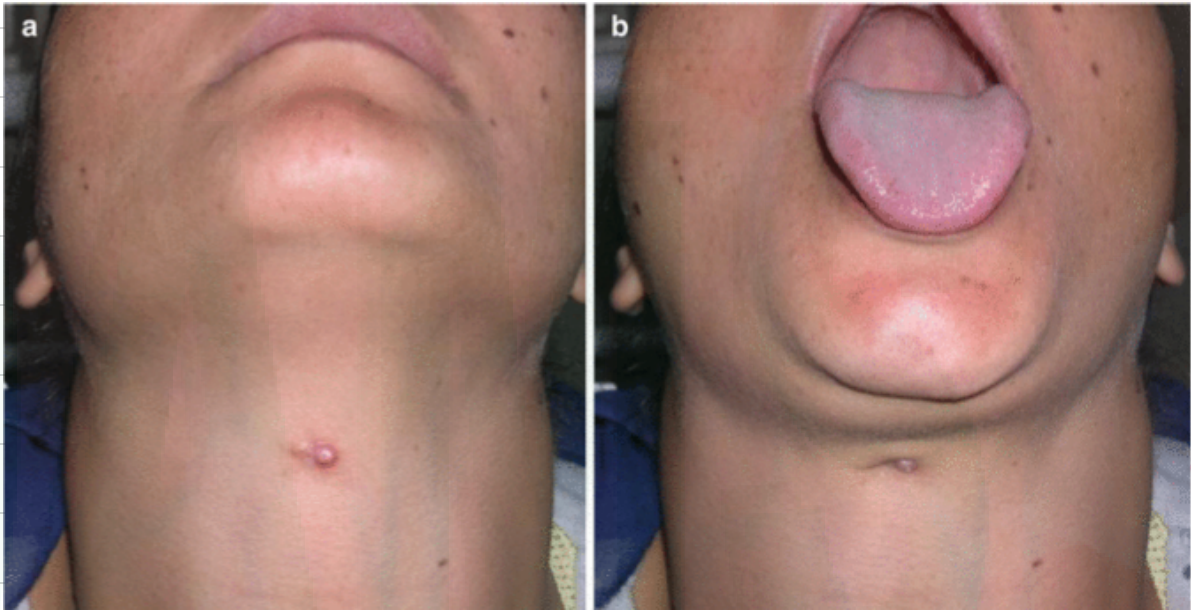


Figure 12.35 Outline of the incision and the clinically palpable mass overlying the thyrohyoid membrane.

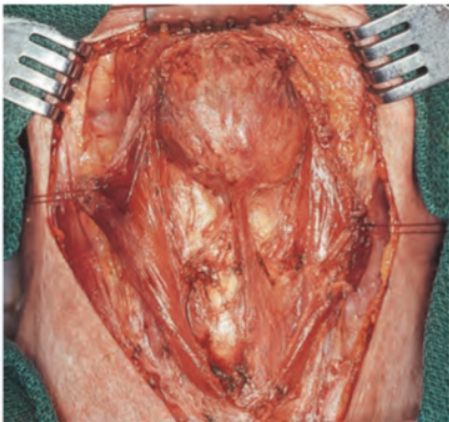


Figure 12.36 The soft tissues surrounding the cyst are carefully dissected.

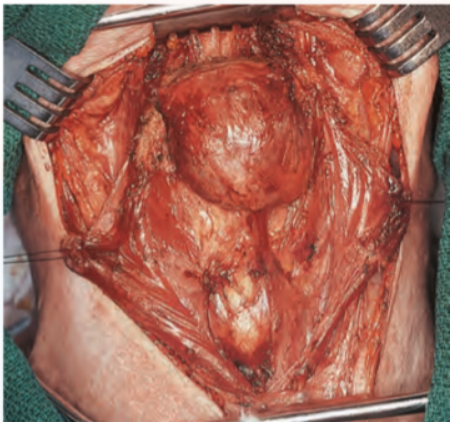


Figure 12.37 The infrahyoid strap muscles are divided.

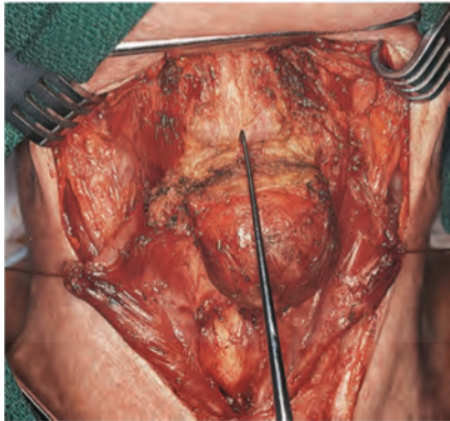


Figure 12.38 The mylohyoid and hyoglossus muscles are detached from the central third of the hyoid bone.

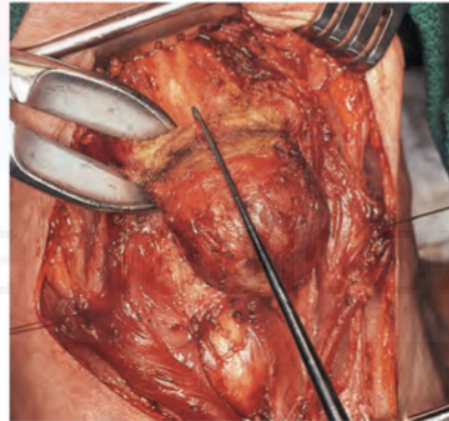


Figure 12.39 The hyoid bone is divided on both sides.

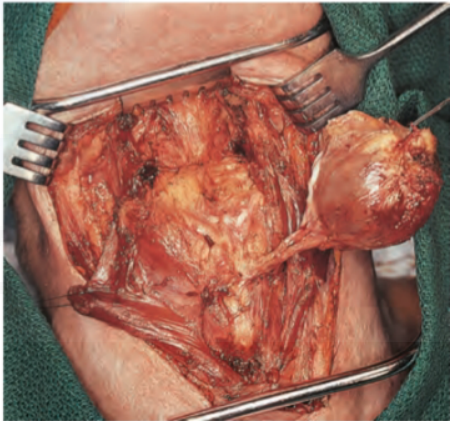
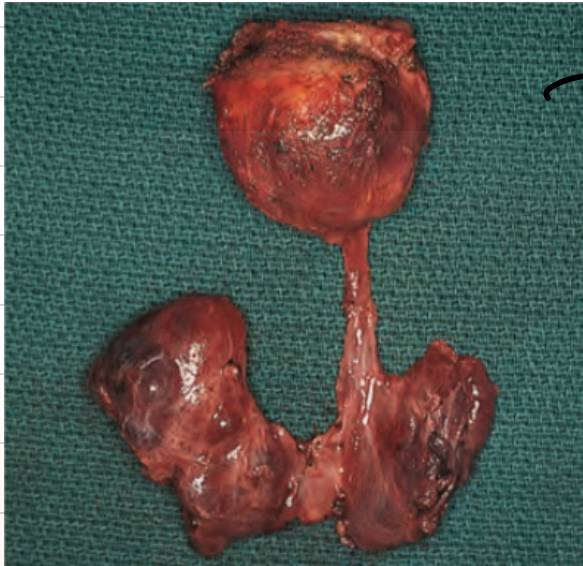


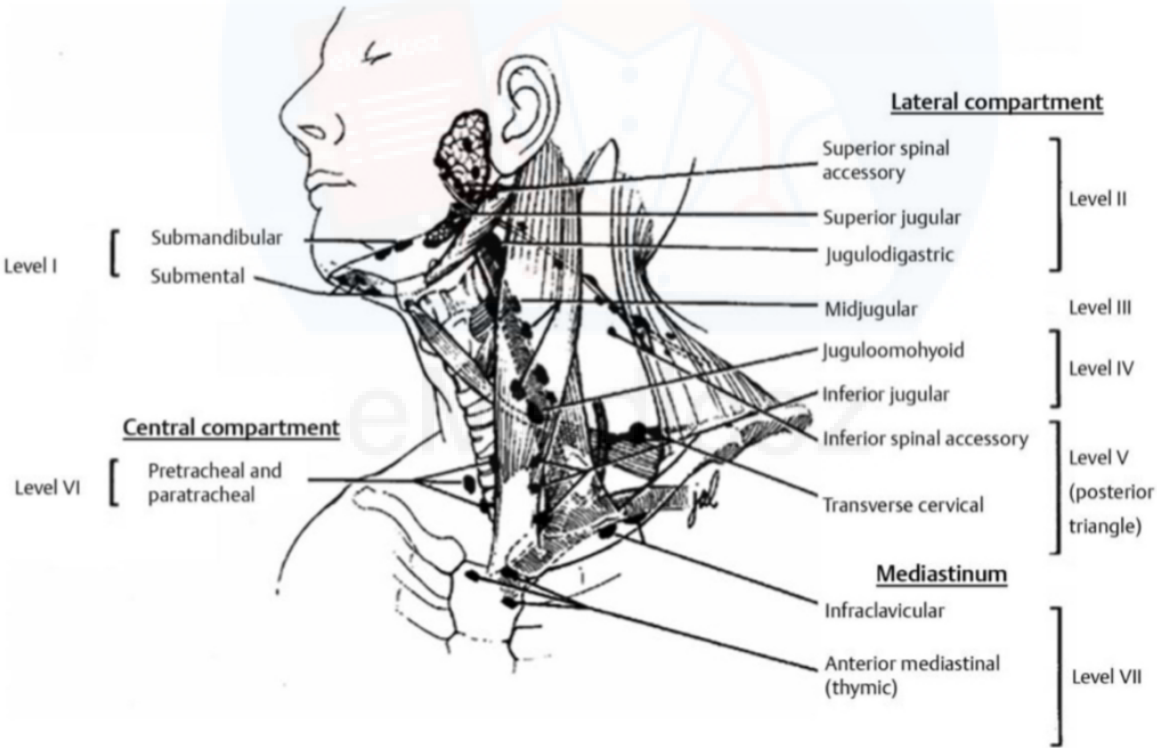
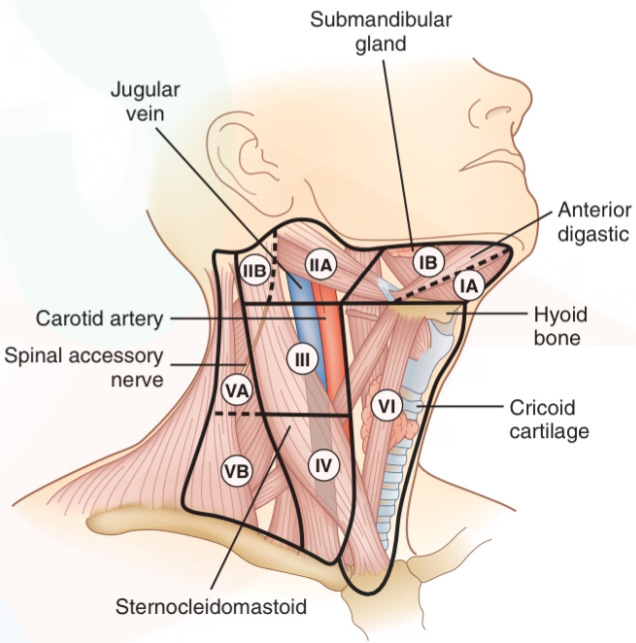
Figure 12.40 The cyst is retracted caudad.



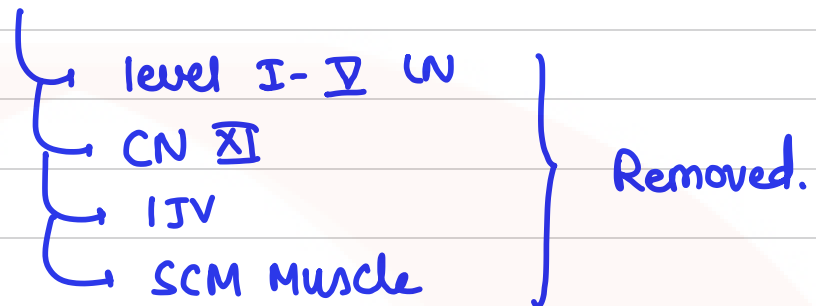
SISTRUNK Sx with total thyroidectomy.

CERVICAL GROUP OF LYMPH NODES

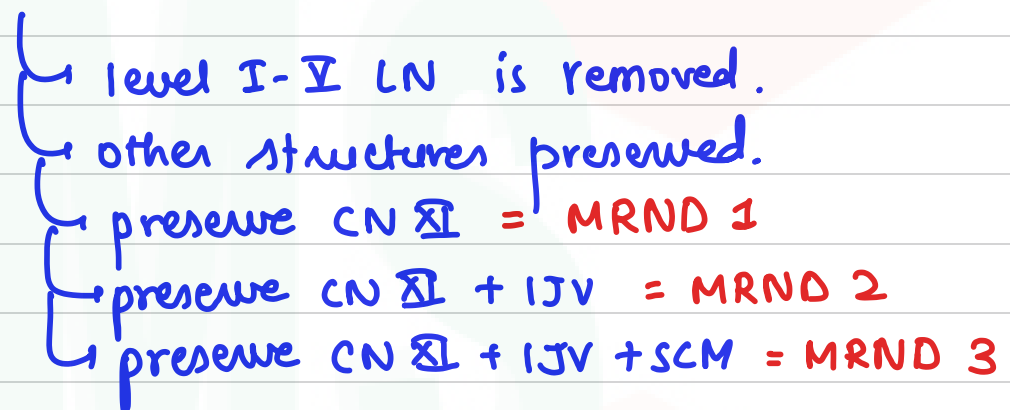
level	I	Submental/ Submandibular
	II	Upper Jugular
	III	Mid Jugular
	IV	lower Jugular
	V	Post. Δ of Neck
	VI	Pre/ Para tracheal & laryngeal
	VII	Upper mediastinal.



1905 = Cole → Radical Neck Dissection (RND)



1962 = Suarez → Modified Radical Neck Dissection (MRND)



* If LN +ve

- RND
- MRND 1/2/3
- Extended RND (if any other structure in neck is removed)

aka Comprehensive neck dissection

* If LN -ve

- Follow up
- Sentinel LN Biopsy
- selective Neck Dissection (Elective neck Dissection)

