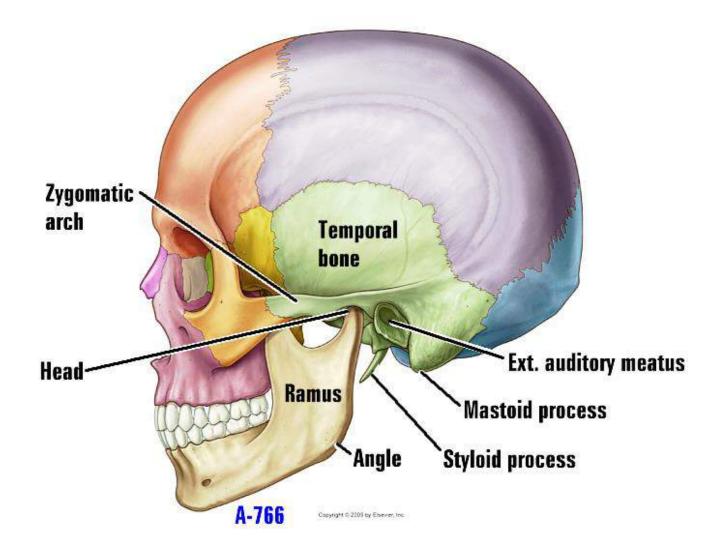


Dr. Amal Albtoosh

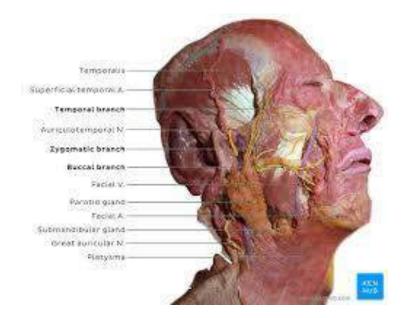
Lateral skull



THE PAROTID REGION

It includes:

- 1. The parotid salivary gland
- 2. The structures related to the gland



THE PAROTID GLAND

- **DEFINITION:** It is the largest of the salivary glands
- SHAPE: Pyramidal
- SITE: It lies <u>below</u> the auricle, occupying the region between ramus of mandible & mastoid process

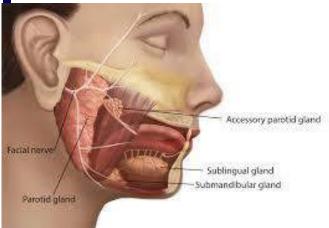
EXTENT:

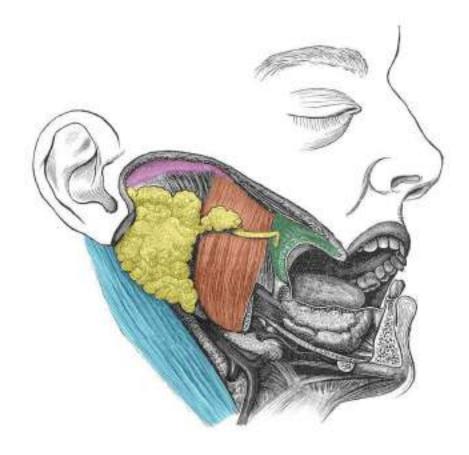
- 1. Superiorly: to zygomatic arch
- 2. Inferiorly: to angle of mandible
- 3. Anteriorly: to overlap posterior border of masseter
- 4. Posteriorly: to overlap anterior border of sternomastoid

THE PAROTID GLAND

• SUBDIVISIONS:

- 1. <u>Main gland</u>
- 2. <u>Accessory gland</u>: above parotid duct
- CAPSULE:
- 1. Derived from deep fascia of neck (cervical fascia)
- 2. Its superficial layer is attached to zygomatic arch & extends to cover masseter
- 3. Its deep layer is attached to mandible, styloid & mastoid processes
- 4. A thickening of deep fascia extends from styloid process to angle of mandible (stylomandibular ligament) & separates the capsule of parotid from that of submandibular gland
- 5. It is tense (swellings of parotid gland are painful)







Parotid gland and duct

Zygomatic arch (superior border)

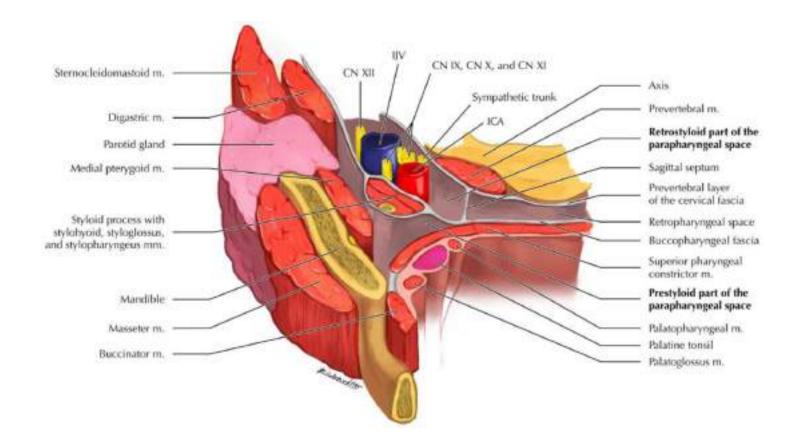


Masseter (anterior border)

Buccinator

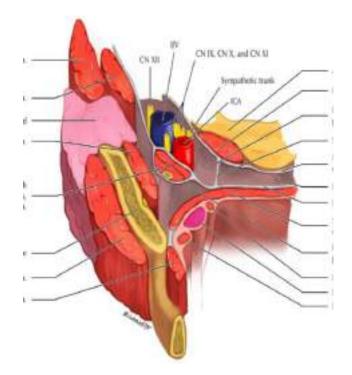


RELATIONS OF PAROTID GLAND



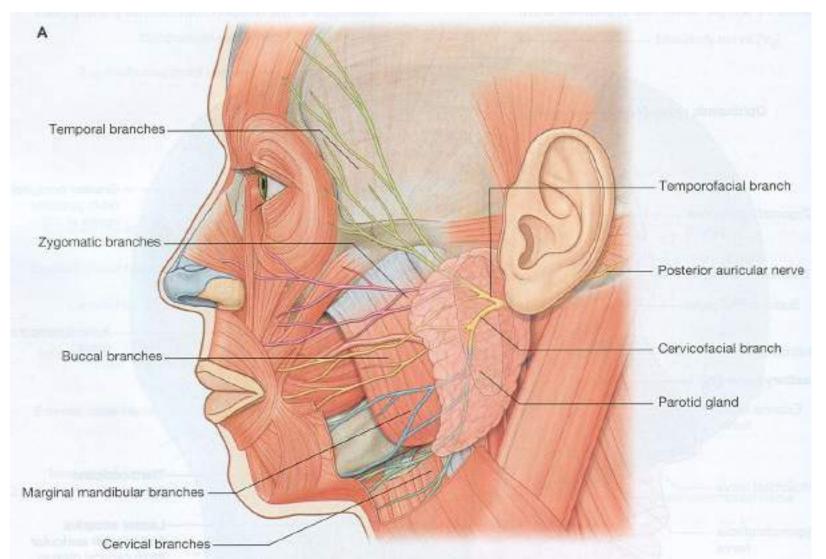
RELATIONS:

- 1. <u>Superficial:</u> skin, superficial fascia, great auricular nerve, superficial parotid (preauricular) lymph nodes
- 2. Anteromedial: posterior border of ramus of mandible + muscles attached to ramus (masseter, medial pteygoid)
- 3. Posteromedial: mastoid process + muscles attached to it (sternomastoid, posterior belly of digastric), styloid process + muscles attached to it (stylohyoid, styloglossus, stylopharyngeus), carotid sheath & its contents (internal jugular vein, internal carotid artery, 9th, 10th, 11th & 12th cranial nerves)
- 4. Medial: pharyngeal wall



STRUCTURES WITHIN THE PAROTID GLAND

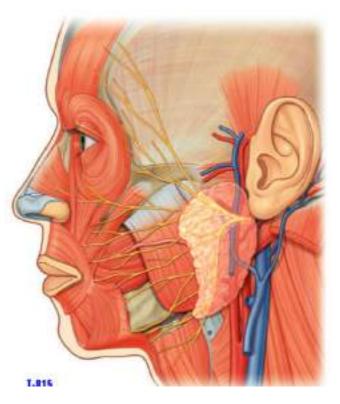
Termination of facial nerve & beginning of its five terminal motor branches : most superficial structures



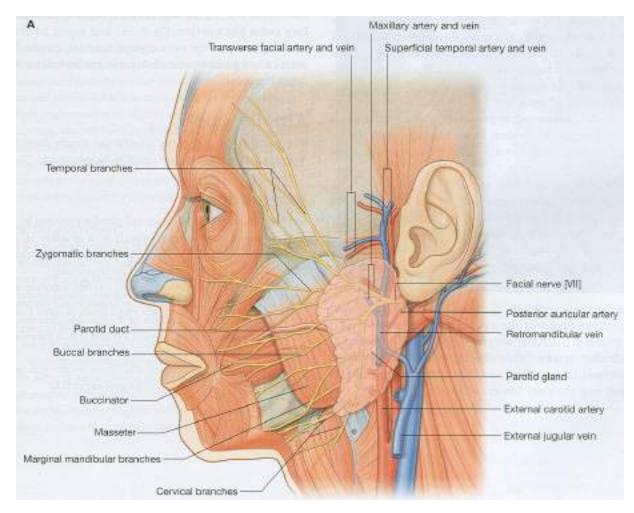
Terminations of superficial temporal & maxillary veins + the whole retromandibular vein + beginning of its two divisions (anterior & posterior

Termination of external carotid artery & beginning of its two terminal branches (superficial temporal & maxillary): deepest structures

Deep parotid lymph nodes: embedded within substance of the gland



ECA and retromandibular vein



ECA divides into terminal branches within parotid gland: RMV formed and then divides within gland

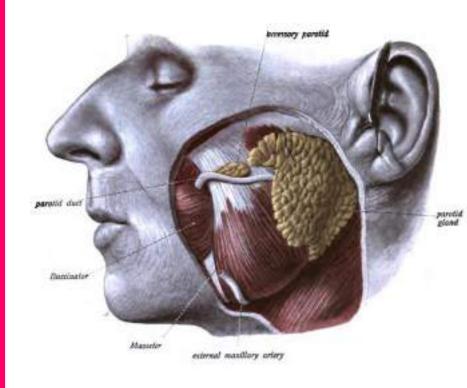
PAROTID DUCT

COURSE & RELATIONS:

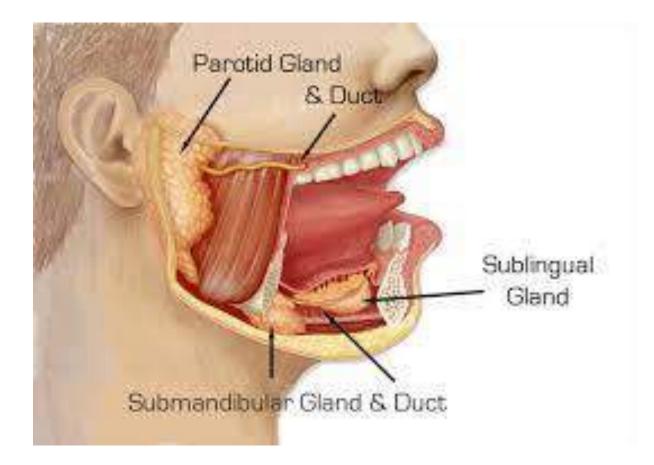
- Emerges from anterior border of gland
- 2. Runs obliquely forwards, superficial to masseter & below transverse facial artery & accessory parotid

TERMINATION:

- Pierces: buccal pad of fat, buccopharyngeal fascia, buccinator muscle & buccal mucosa
- 2. Opens: into the vestibule of mouth, opposite the crown of upper 2nd molar tooth



PAROTID DUCT

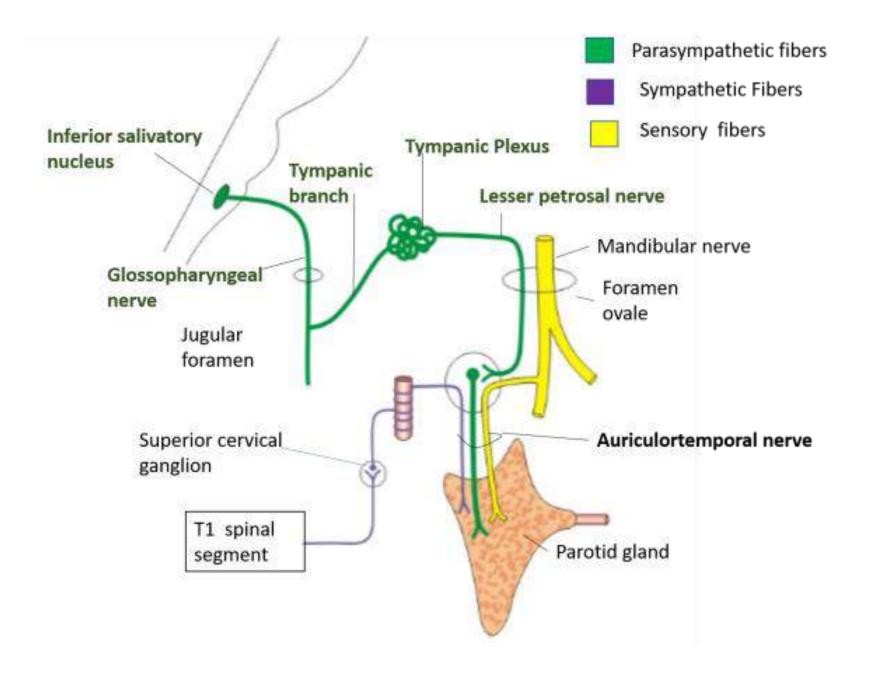


NERVE SUPPLY

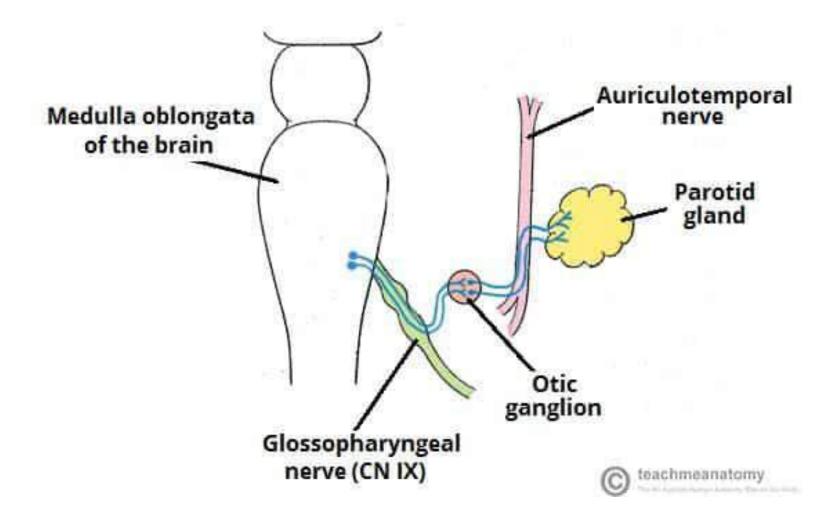
PARASYMPATHETIC (SECRETORY):

- 1. Origin: inferior salivary nucleus (medulla)
- 2. Preganglionic fibers: run along the lesser petrosal nerve (branch of tympanic of glossopharyngeal (9th cranial)
- **3. Ganglion:** fibers relay in the otic ganglion (infratemporal fossa)
- 4. Postganglionic fibers: reach the parotid gland along auriculotemporal nerve (branch of mandibular of trigeminal)

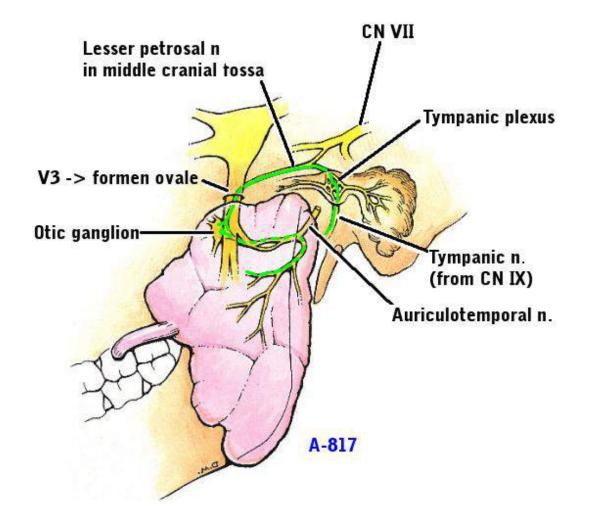
SYMPATHETIC: Postganglionic sympathetic fibers reach the gland as a plexus around external carotid artery



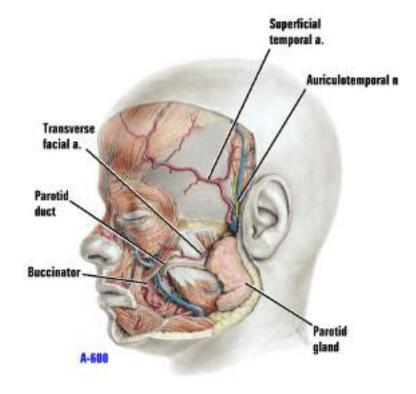
Parasympathetic supply to salivary glands



Parasympathetic innervation of parotid gland



Blood supply ARTERIES: External carotid VEINS: Retromandibular vein



Lymphatic drainage: Into superficial & deep parotid lymph nodes Finally into deep cervical lymph nodes

