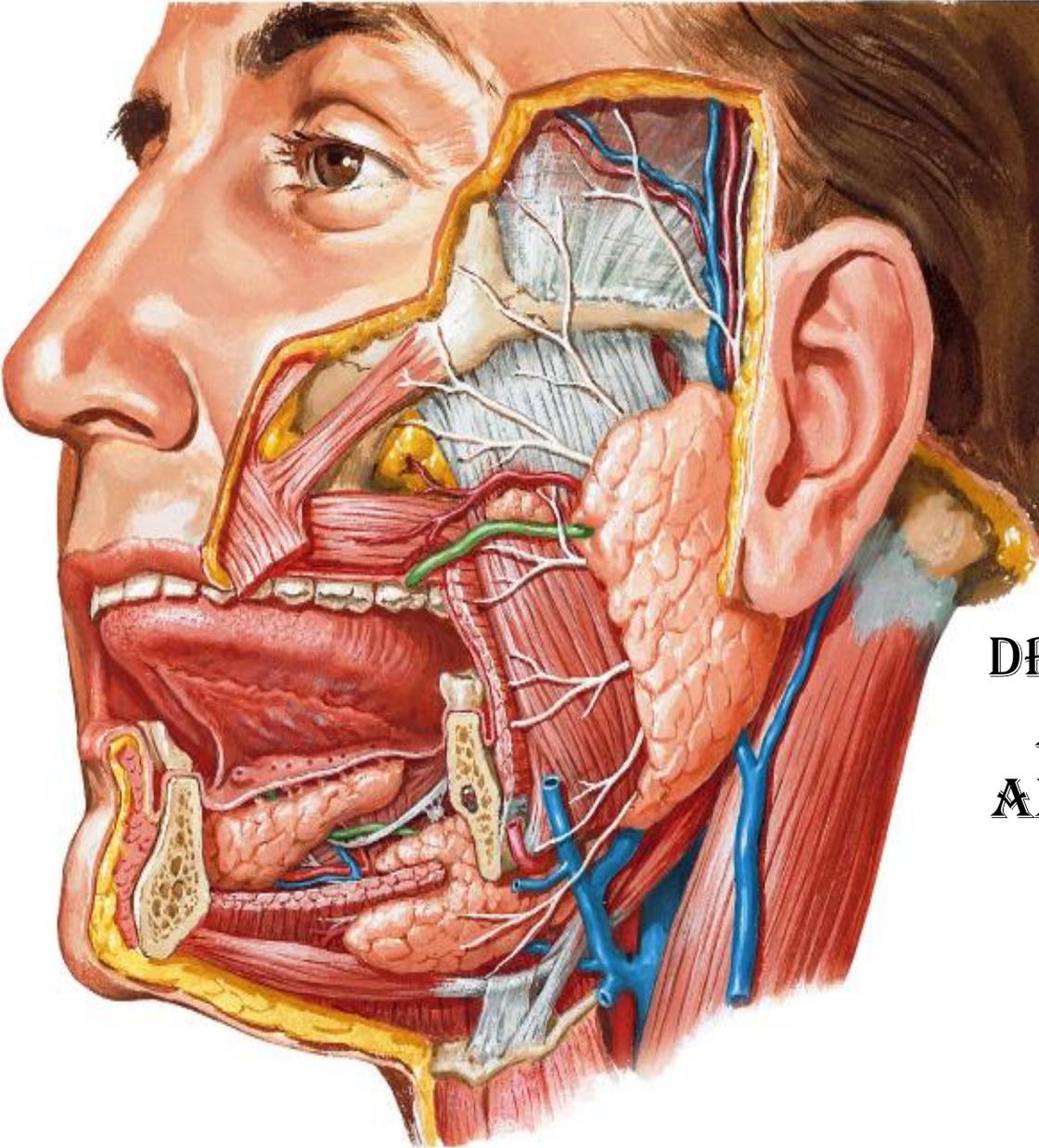


PAROTID GLAND



BY

DR ABULMAATY MOHAMED
ASSISTANT PROFESSOR
ANATOMY & EMBRYOLOGY
MUTAH UNIVERSITY

PAROTID GLAND

Def.: largest salivary gland (serous)

parts:

main part: will be discussed .

accessory part: small detached that lies in front the main part

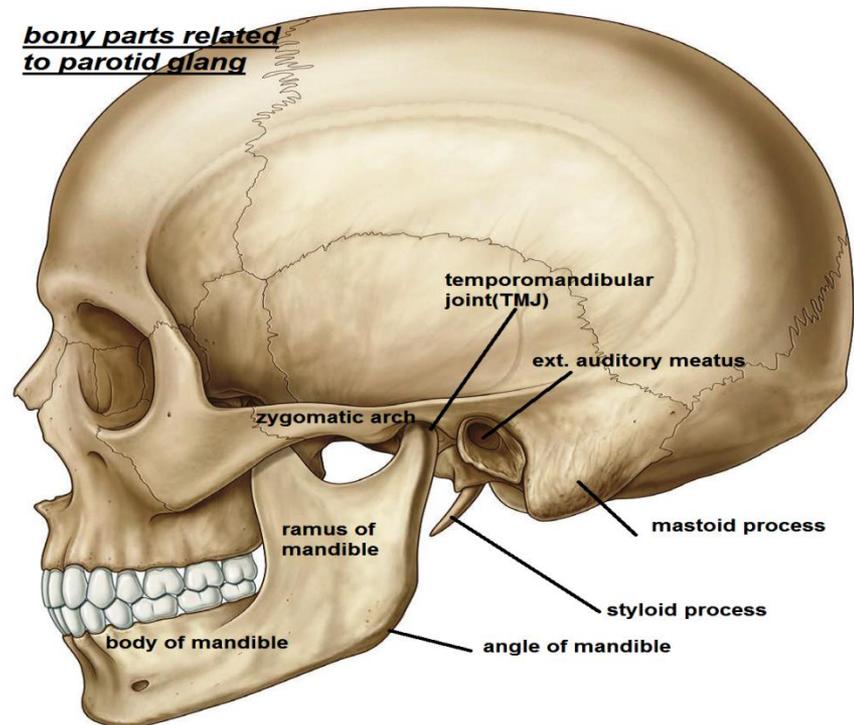
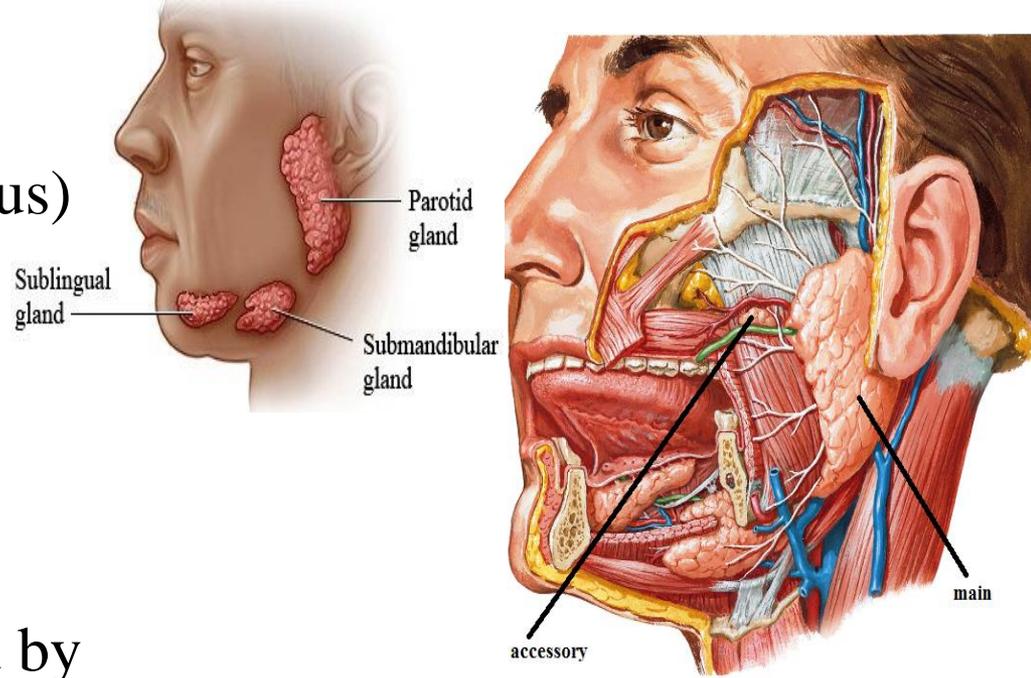
position: lies in the gap bounded by

above: ext. auditory meatus

ant.: ramus of mandible & its muscles

post. : mastoid process & its muscles

medial: styloid process & its muscles



PAROTID GLAND

shape: inverted 3 sided pyramid with

2 ends: upper(base):concave

lower(apex):rounded

3 surfaces: lateral (superficial)

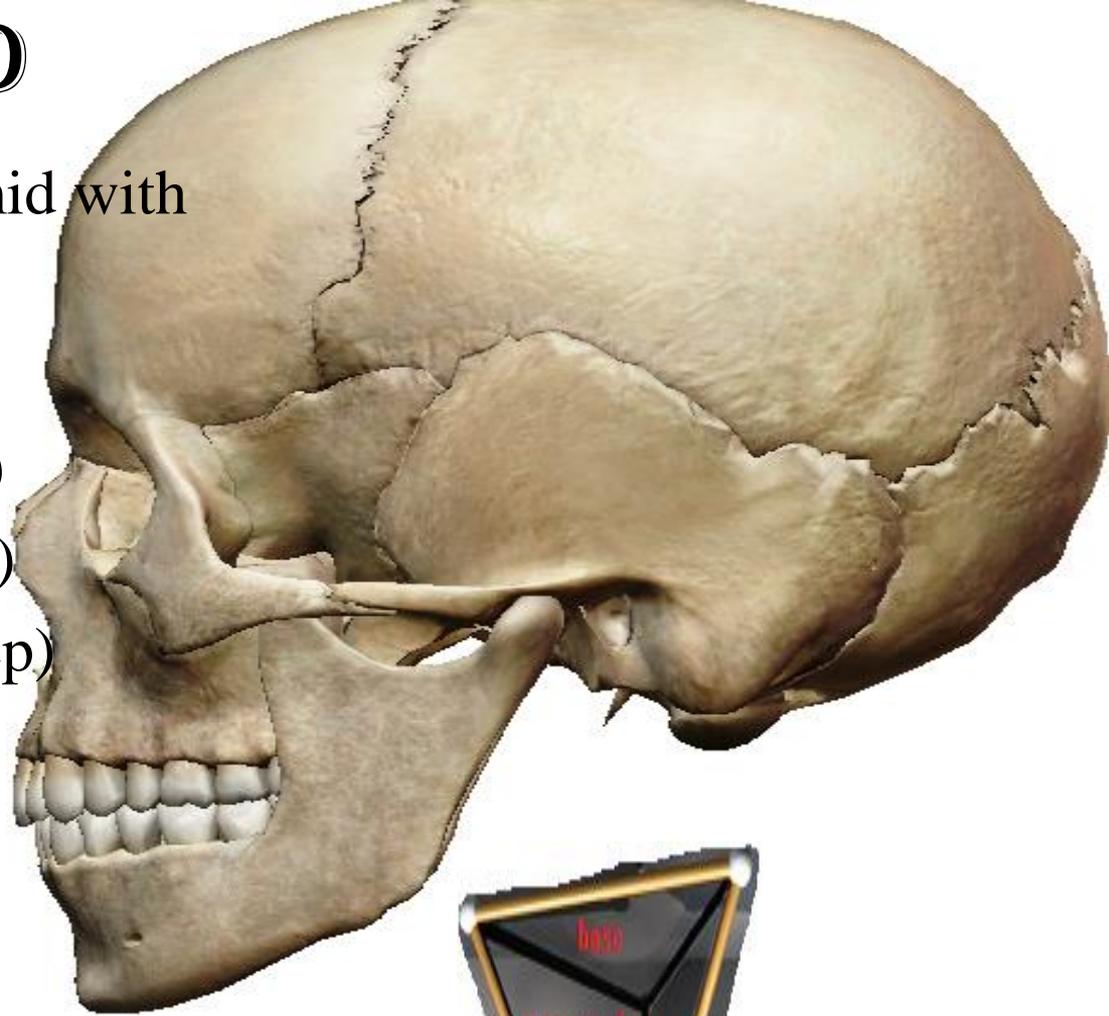
anteromedial (ant.)

posteromedial(deep)

3 borders: ant. :convex

post.

medial



PAROTID GLAND

relations:

structures inside:

1-ext. carotid art (deep).

-enter through posteromedial surface

-give 2 terminal brs

maxillary art. that emerge

from anteromedial surface

& **superficial temporal** gives **transverse**

facial a . then emerge from upper end

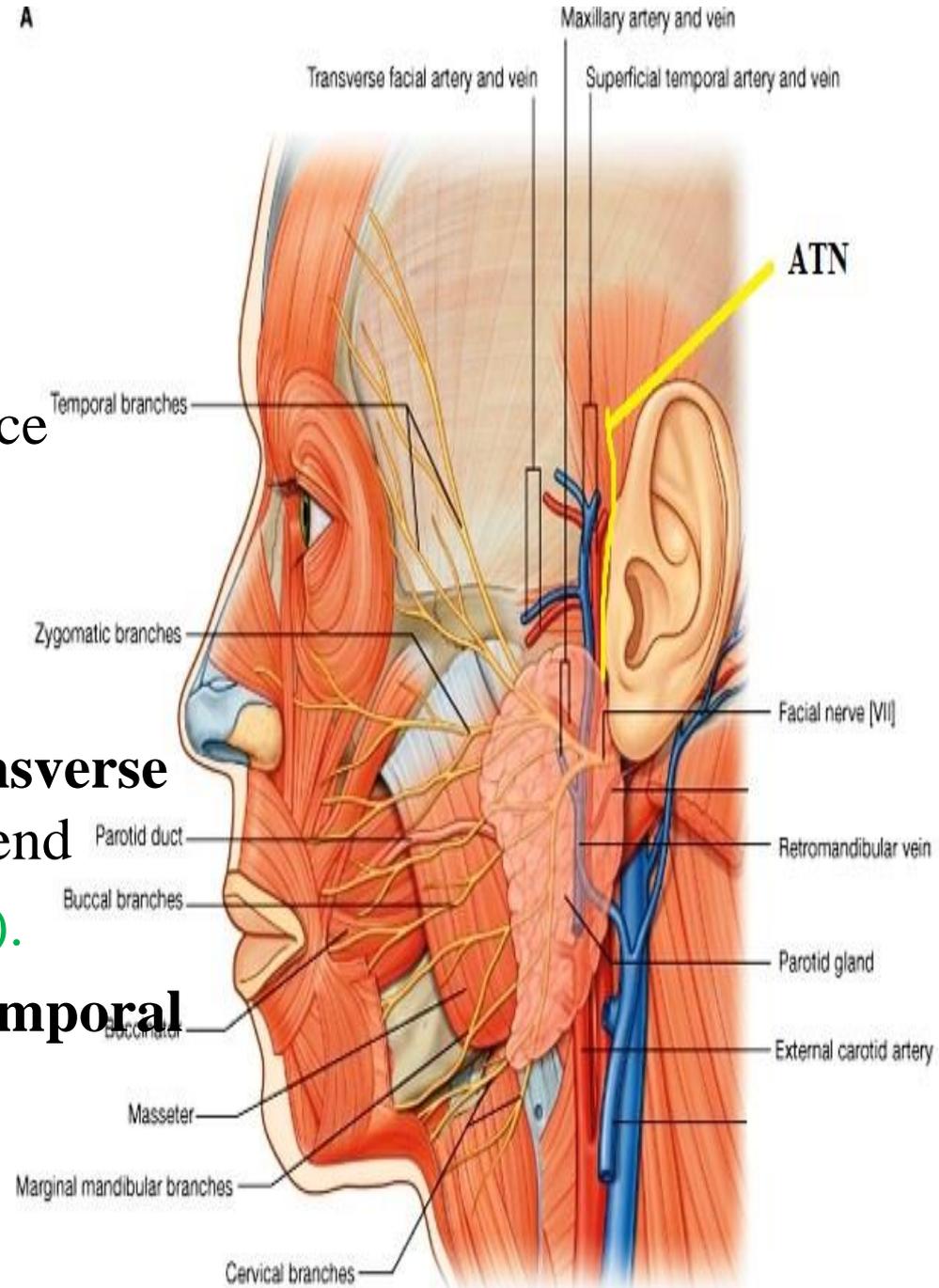
2- **retromandibular v. (intermediate).**

-formed by union of **superficial temporal**

with **maxillary veins**

-give ant.& post. Divisions

that emerge from lower end



PAROTID GLAND

relations:

structures inside:

3- facial n. (superficial).

-enter through posteromedial surface

-end in 5 terminal brs

(temporal , zygomatic ,

buccal , marginal mandibular ,

cervical) That emerge from

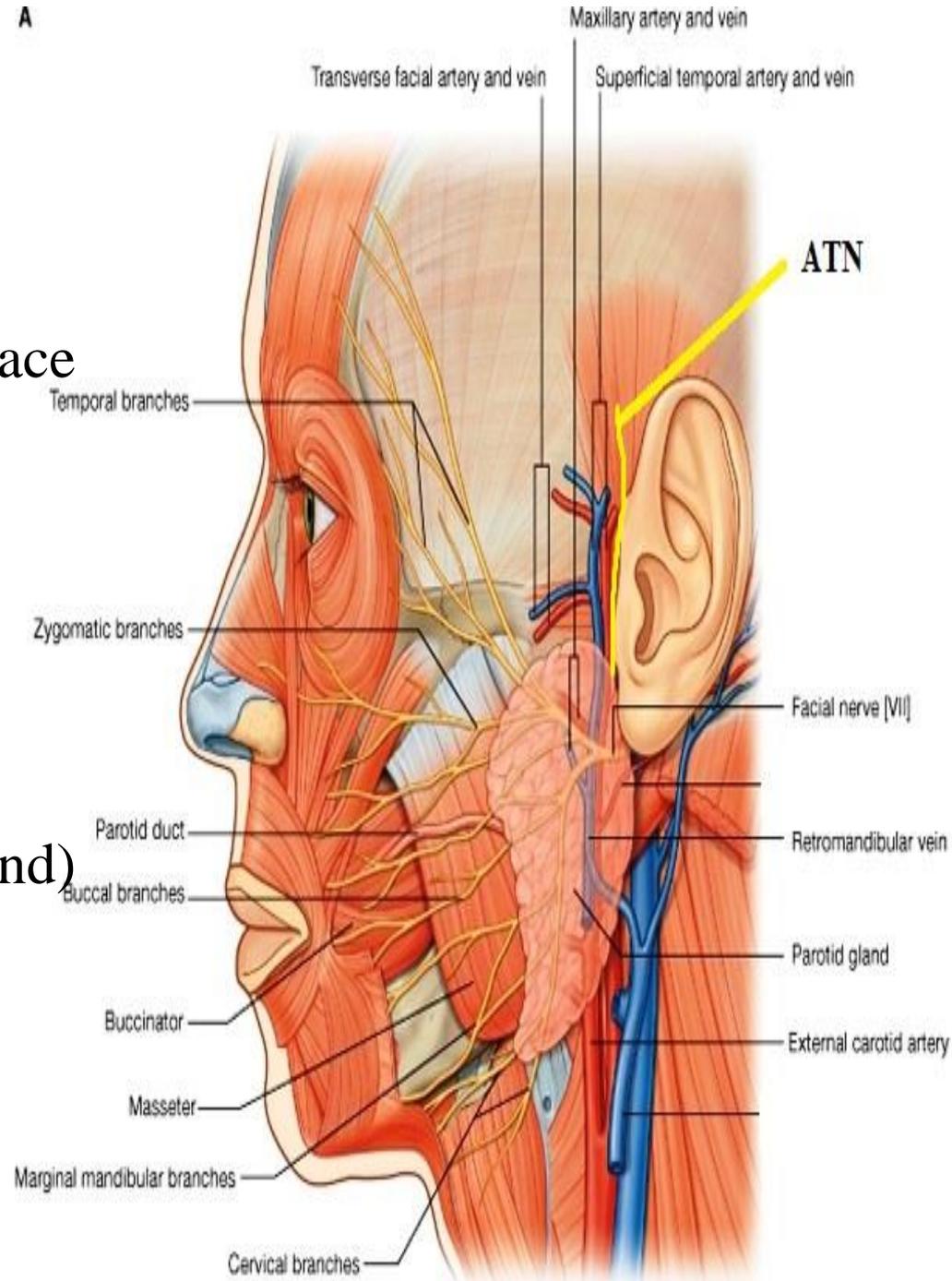
anterior border but

(cervical br emerge from lower end)

4- auriculotemporal n.

pass through the upper end

5- deep parotid L.Ns



PAROTID GLAND

relations:

post. border: related to sternomastoid

ant. border: related to: masseter.

give passage to.

temporal , zygomatic branches of facial n.

-transverse facial vessels

-parotid duct

-buccal , marginal mandibular of facial n.

upper end: related to: -ext. auditory meatus.

give passage to:

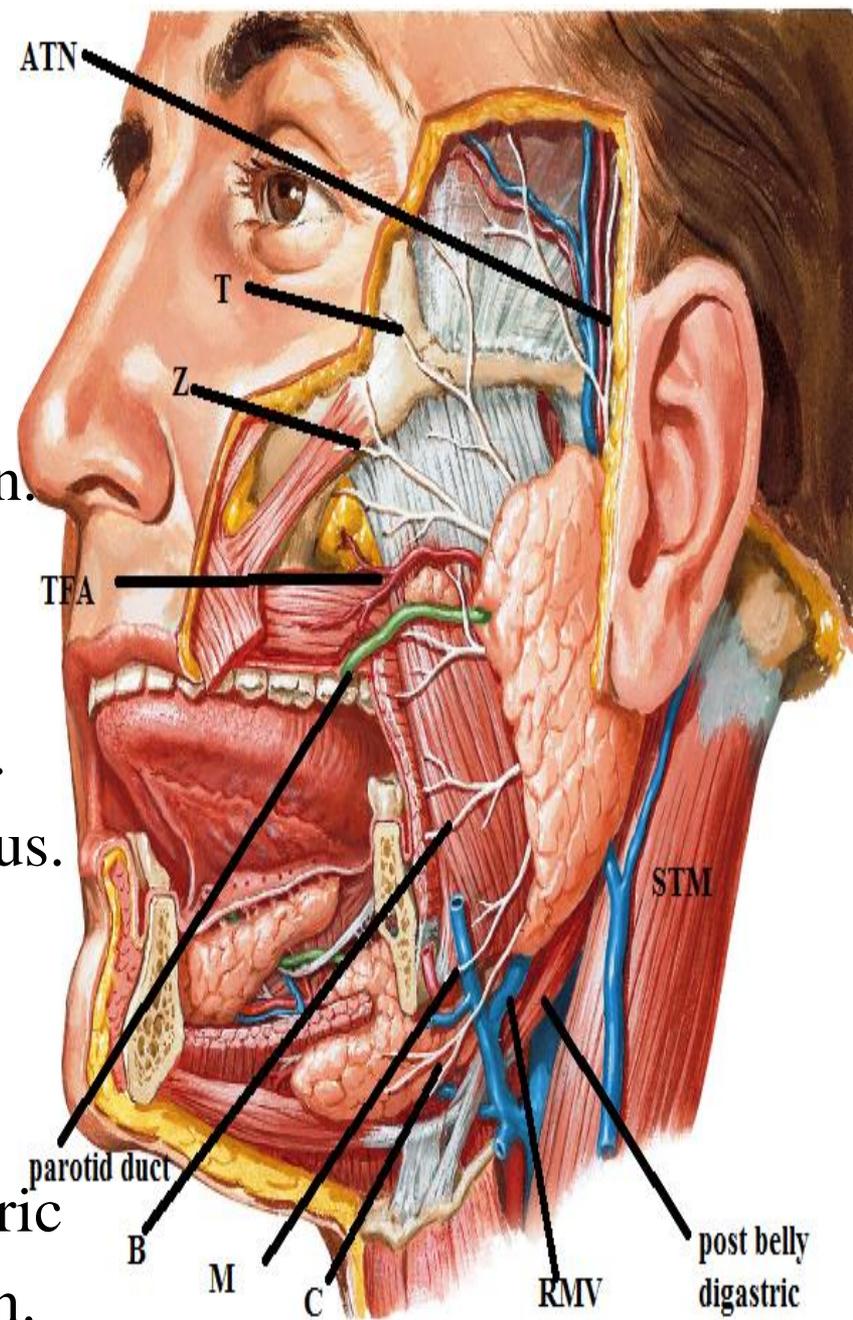
-auriculotemporal n.

-superficial temporal vessels (v.& art).

lower end: related to post. belly of digastric

give passage to cervical branch of facial n.

-ant. & post. divisions of retro mandibular v.



PAROTID GLAND

relations:

lateral surface:- related to

1-skin.

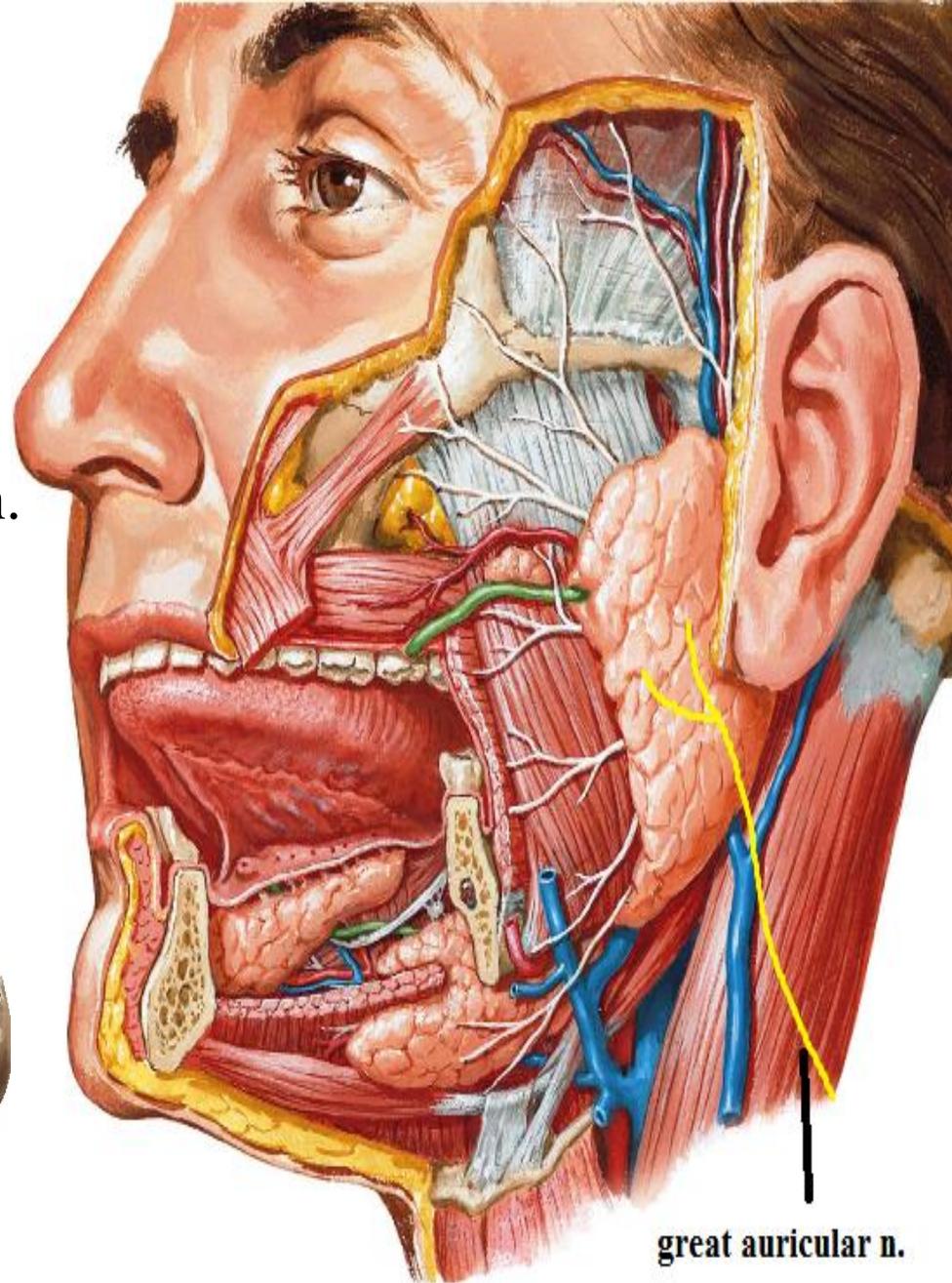
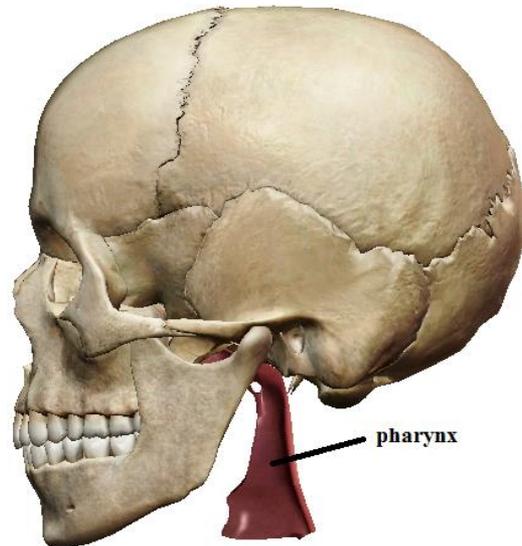
2-superficial fascia with:

-superficial parotid (preauricular) l.n.

-great auricular n.

-platysma.

medial border: related to pharynx



PAROTID GLAND

relations:

anteromedial surface:- related to

1-masseter. 2-ramus of mandible.

3-medial pterygoid

give passage to -maxillary vessels

posteromedial surface: related to

1-mastoid process &

-sternomastoid.-post belly of digastric.

2-styloid process & the attached structures

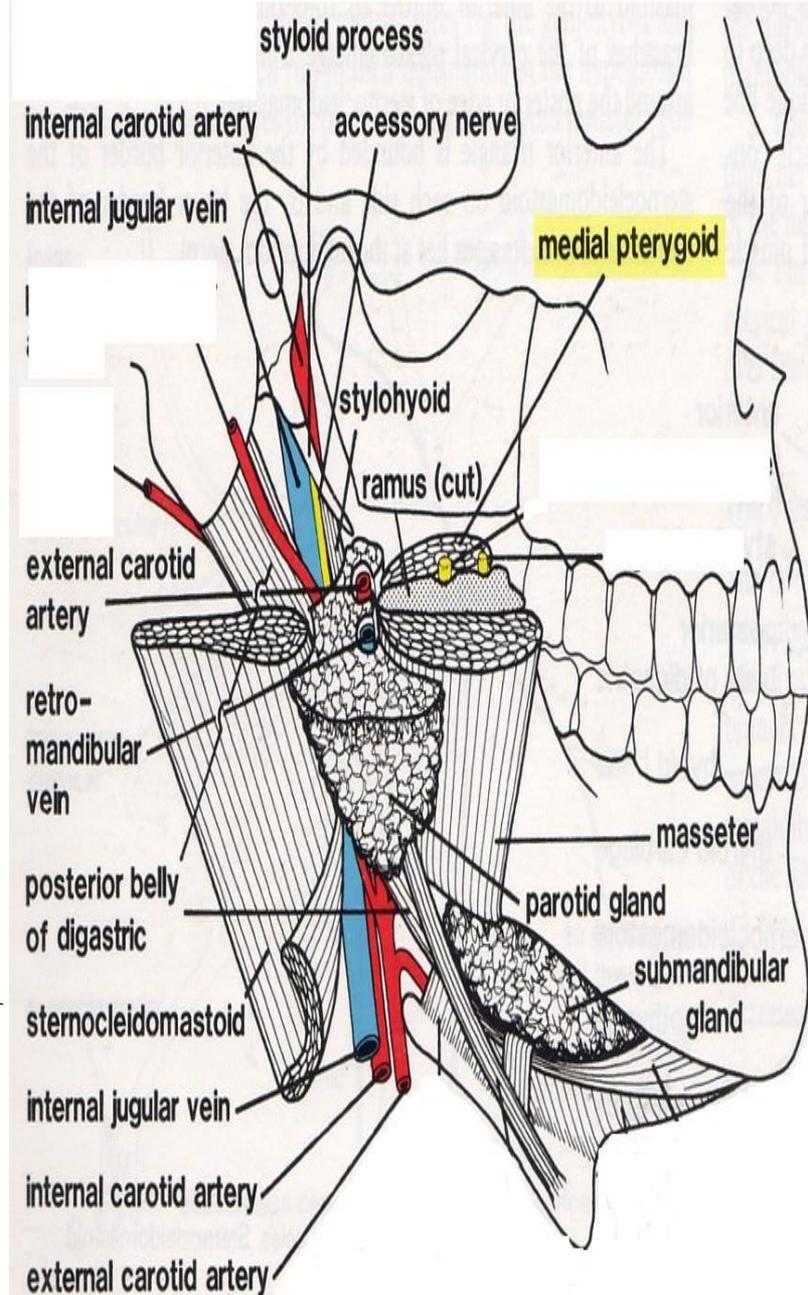
3-styloid process separate the surface from

Carotid sheath with:-int. carotid art.

-int jugular v.

Last 4 nerves:

gives passage to: -facial n. & -ext. carotid art.



PAROTID GLAND

parotid duct:

-5 cm

-emerge from middle of ant border.

-pass forward:

superficial to masseter

() the 2 buccal brs of facial n.

below accessory part of the gland

& tr. facial art.

-after crossing ant. border of masseter

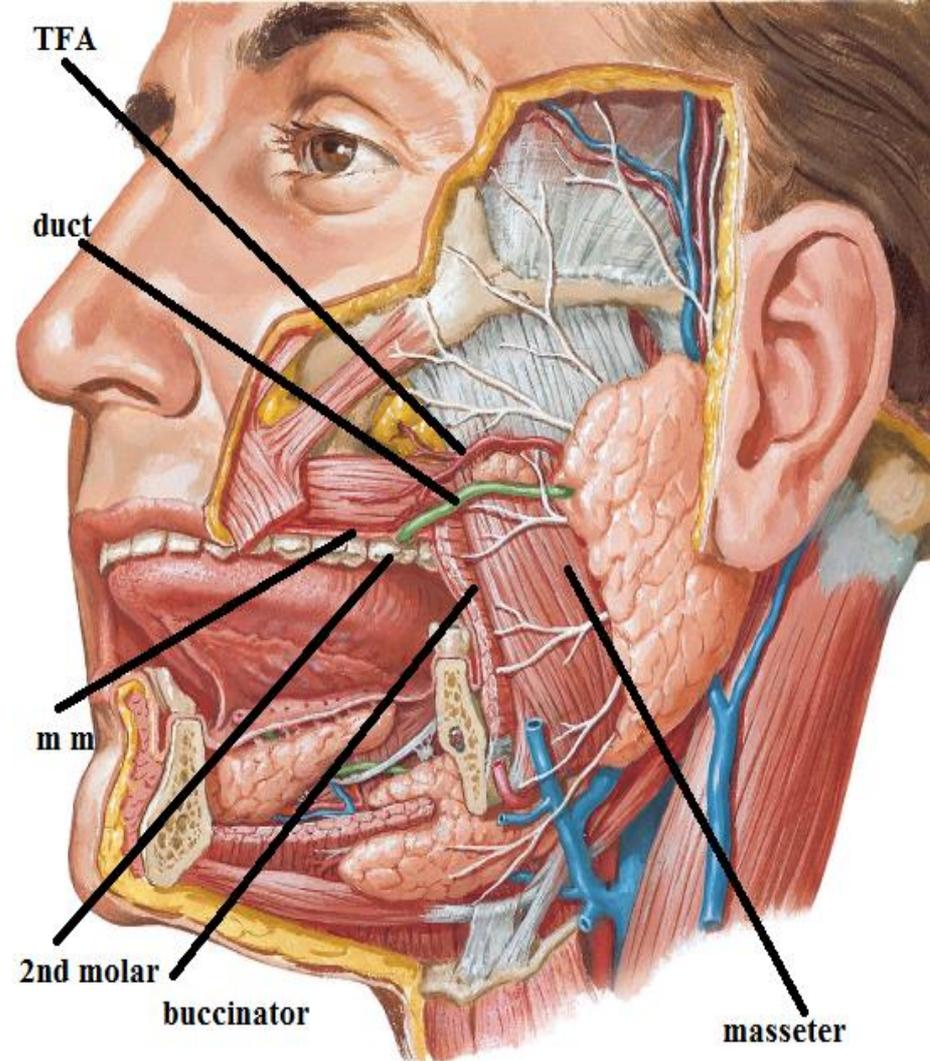
it curves medially piercing.

buccal pad of fat. buccopharyngeal fascia.

buccinator. buccal m.m

-open in vestibule of mouth opposite upper 2nd

molar.



PAROTID GLAND

capsule:

Inner capsule:- condensed fibrous tissue

Outer capsule

derived from: investing fascia of Neck

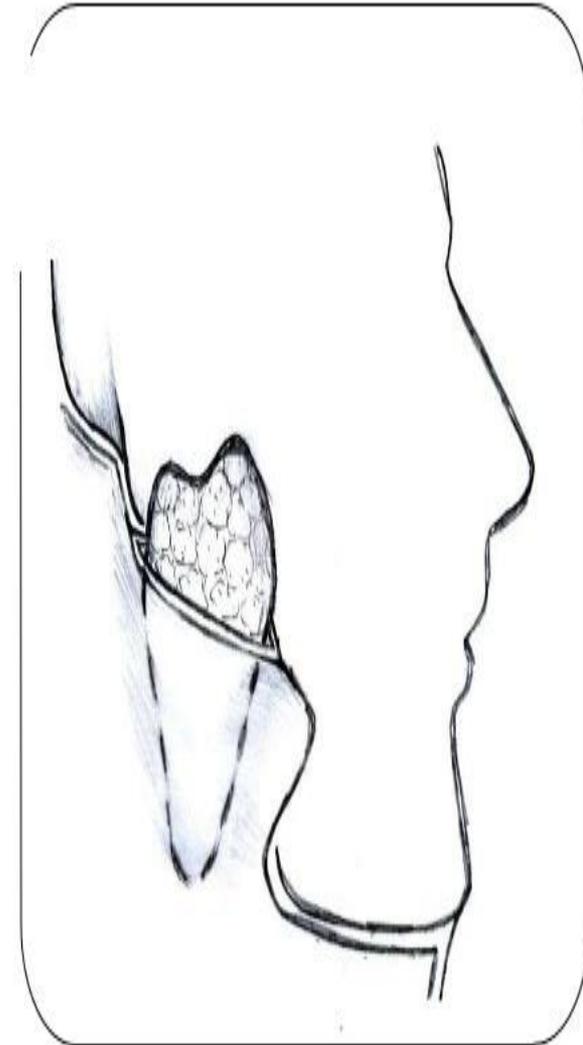
layers:

superficial:

on superficial surface. It attach to zygomatic arch

deep: on deep surface. It attach to styloid process and post. border of mandible. The part of this layer that extends () the the styloid process & angle of is thickened forming stylomandibular lig.

Capsule



PAROTID GLAND

Surface anatomy:

main part: 4 points:

1-at head of mandible in front tragus.

2-center of mastoid.

3-point below & behind angle of mandible by 2 cm

4-center of masseter.

upper end: Line Concave upward between 1 & 2.

post. border: Line between 2 & 3

lower end: 3

ant. border: line between 3,4 & 1

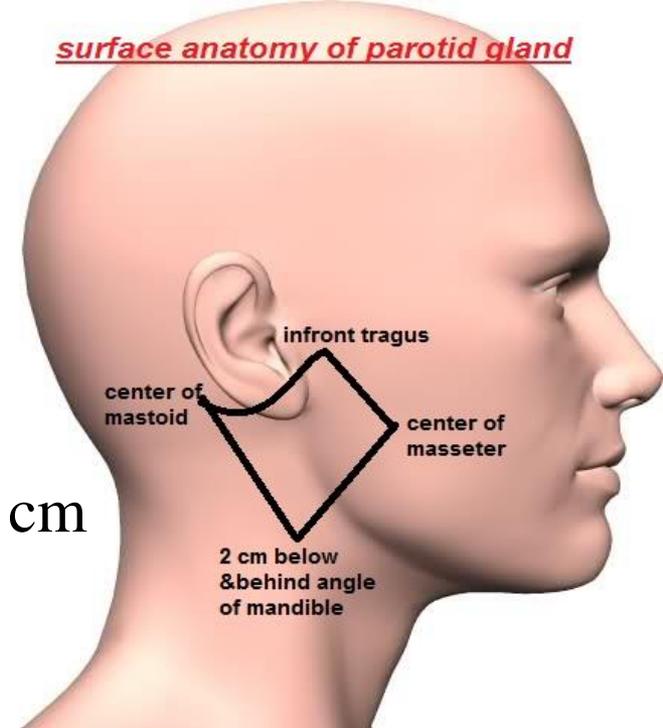
parotid duct:

middle 1/3 of line between

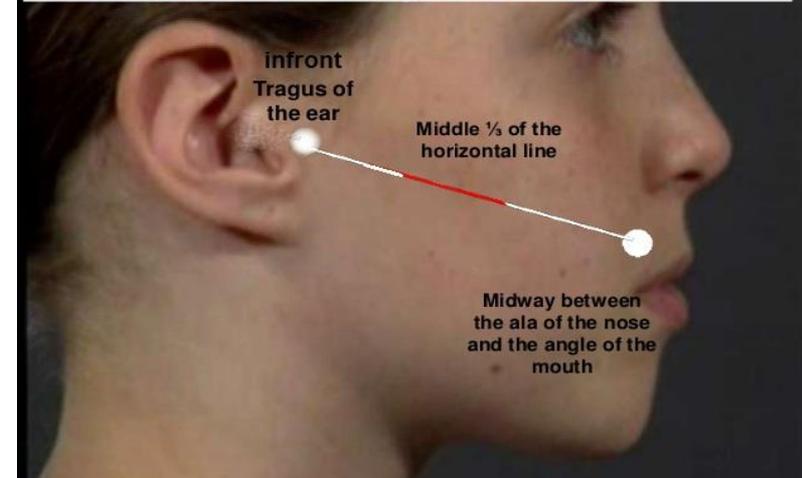
-tragus.

-point midway between ala of nose & angle of mouth.

surface anatomy of parotid gland



Surface Anatomy of Parotid Duct



PAROTID GLAND

arterial Supply:

ext. carotid art.

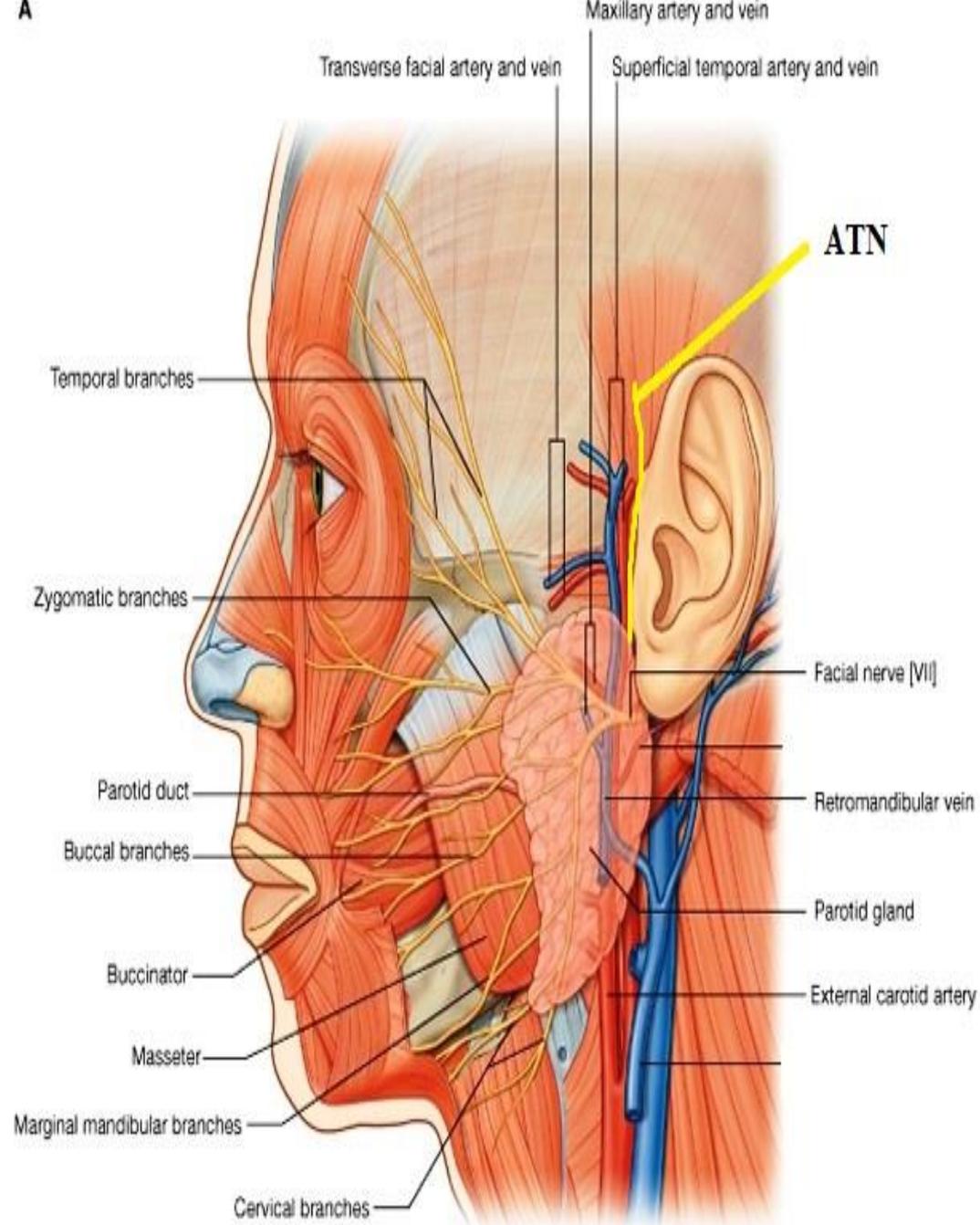
venous drainage:

retromandibular v.

lymphatic drainage:

superficial & deep parotid L.Ns.

deep cervical L.Ns



PAROTID GLAND

nerve supply:

branches from otic ganglion

these branches contain 3 types of fibers:

sensory: from auriculotemporal n.

sympathetic: from middle meningeal plexus

parasym. (secretomotor, secretory):

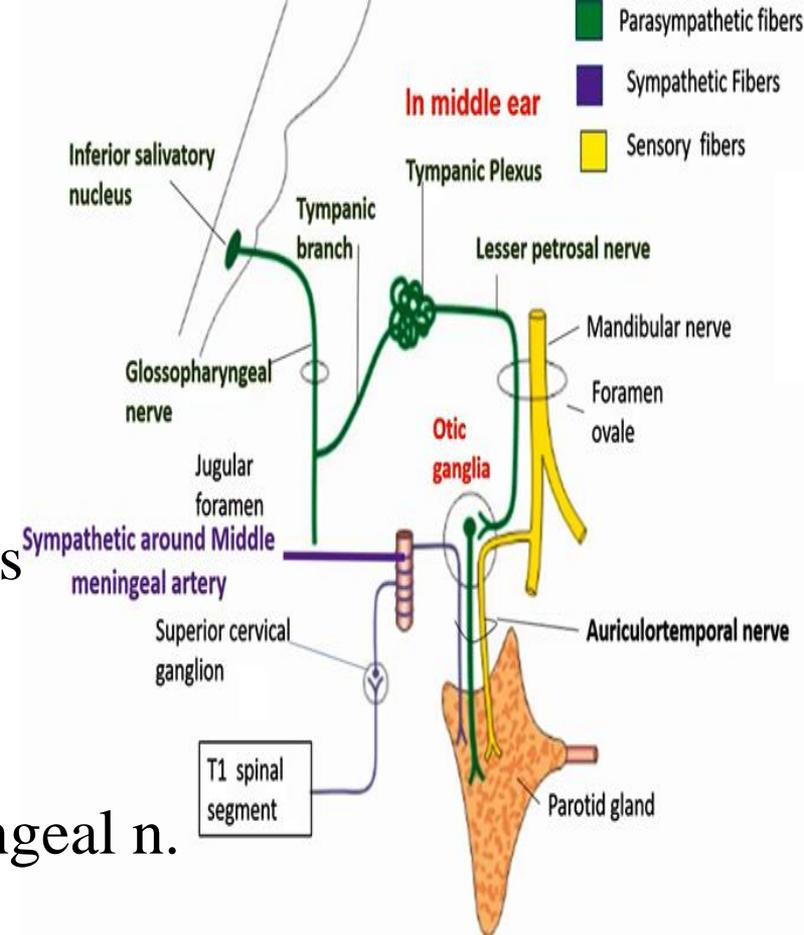
from lesser petrosal n.

from tympanic br. of glossopharyngeal n.

from inferior salivary nucleus

these fibers pass from otic ganglion to parotid gland through auriculotemporal n.

N. B: the capsule of the gland is supplied by great auricular n.



PAROTID GLAND

applied anatomy:

The parotid capsule is very tight, and so in inflammation of the gland (e.g. mumps), the edema causes stretch of capsule leading to severe pain due to irritation of great auricular n. . The pain increases in eating due to increased salivation and movement of mandible. The pain is referred to auricle due to similarity in nerve supply



parotitis (mumps)

THANQ