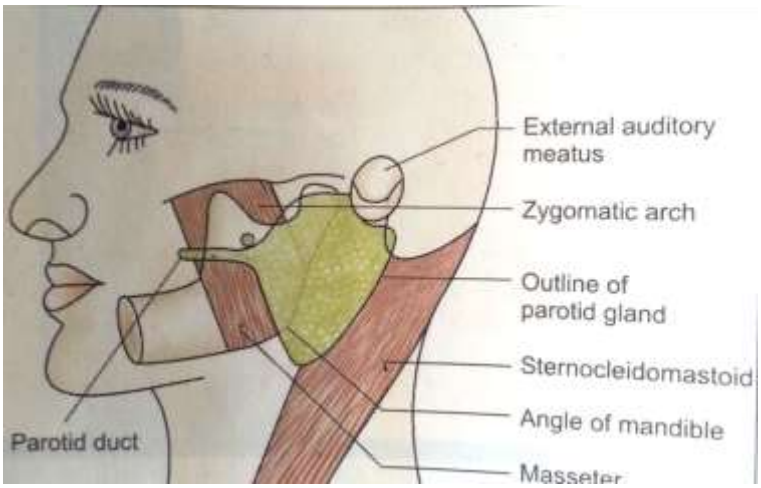
PAROTID GLAND

DESCRIBE PAROTID GLAND UNDER THE FOLLOWING HEADINGS
(A)SURFACES, (B)BORDERS, (C)RELATIONS AND DUCT(D)CONTENTS
(E)BLOOD AND NERVE SUPPLY (F)APPLIED ANATOMY(LE)

It is the largest of the salivary glands

Situated below the external acoustic meatus between the ramus of mandible and the sternocleidomastoid



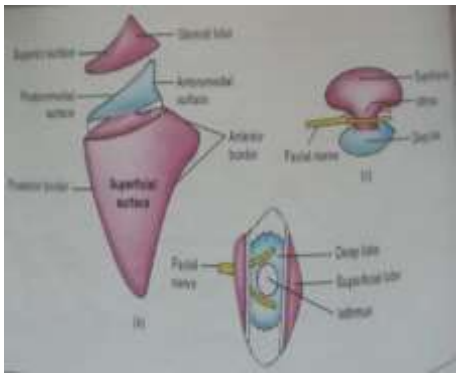
Capsule:

Investing layer of deep cervical fascia

Superficial lamina- thick and adherent to gland

Deep lamina-thin

Stylomandibular ligament



(A)EXTERNAL FEATURES:

Gland resembles 3 sided pyramids

Apex directed downwards

4 surfaces-

Superior (base)

Superficial

Anteromedial

Posteromedial

(B)BORDERS

Anterior

Posterior

Medial

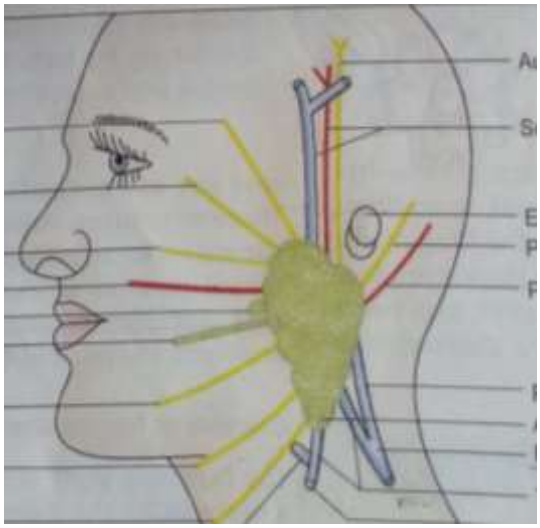
(C)RELATIONS

Apex

Overlaps Posterior belly of digastric

Cervical branch of facial nerve

Retromandibular vein.



Superior surface

Cartilagenous part of external auditory canal

Temporomandibular joint

Superficial temporal vessels

Auriculotemporal nerve.

Superficial surface

Largest of the 4 surfaces

Skin

Superficial fascia –greater auricular nerve, preauricular lymph nodes, platysma

Parotid fascia

Anteromedial surface

Grooved by the ramus of mandible

Masseter

Temporomandibular joint

Ramus of mandible

Medial pterygoid

Facial nerve- its emerging branches

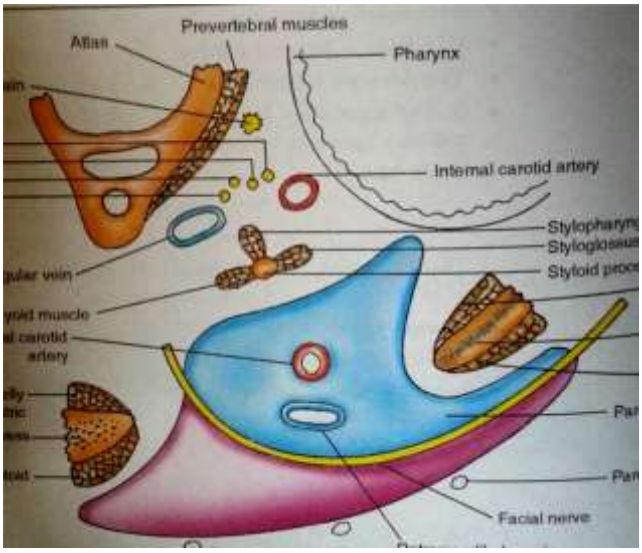
Posteromedial surface

Moulded to the mastoid and styloid process

Mastoid process with sternocleidomastoid and posterior belly of digastric

Styloid process with structures attached to it

External carotid artery enters this surface



Anterior border: Structures emerging from this border

Parotid duct

Terminal branches of facial nerve

Transverse facial vessels

Acccessory parotid gland.

Posterior border

Overlaps sternocleidomastoid

Medial border

Lateral wall of pharynx

(D)CONTENTS:

From Medial to lateral

Arteries

Veins

Facial nerve

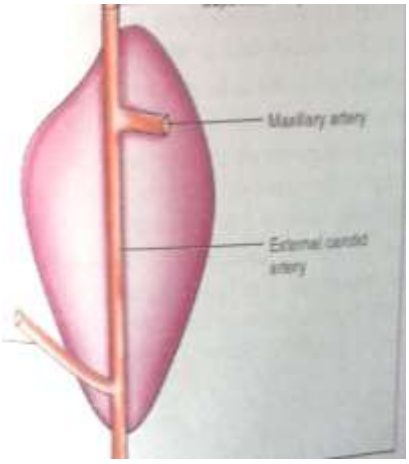
Arteries

External carotid artery

Maxillary artery

Superficial temporal artery – transverse facial artey

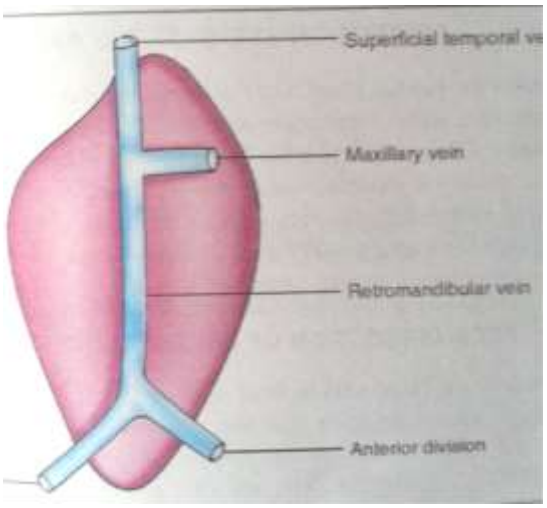
Posterior auricular artery



Veins

Retromandibular vein is formed by union of superficial temporal and maxillary veins

Vein divides into anterior and posterior divisions and emerge at the apex of gland.

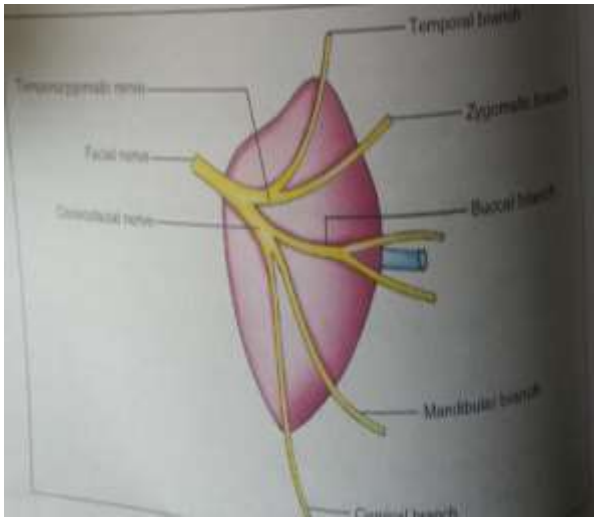


Facial nerve enters through posteromedial surface and divides into 2 branches,

Temporofacial – temporal and zygomatic

Cervicofacial – buccal , marginal mandibular, cervical

Facial nerve seperates large superficial part from small deep part.



PAROTID DUCT

Thick walled

5 cm long

Emerges from the middle of anterior border of gland

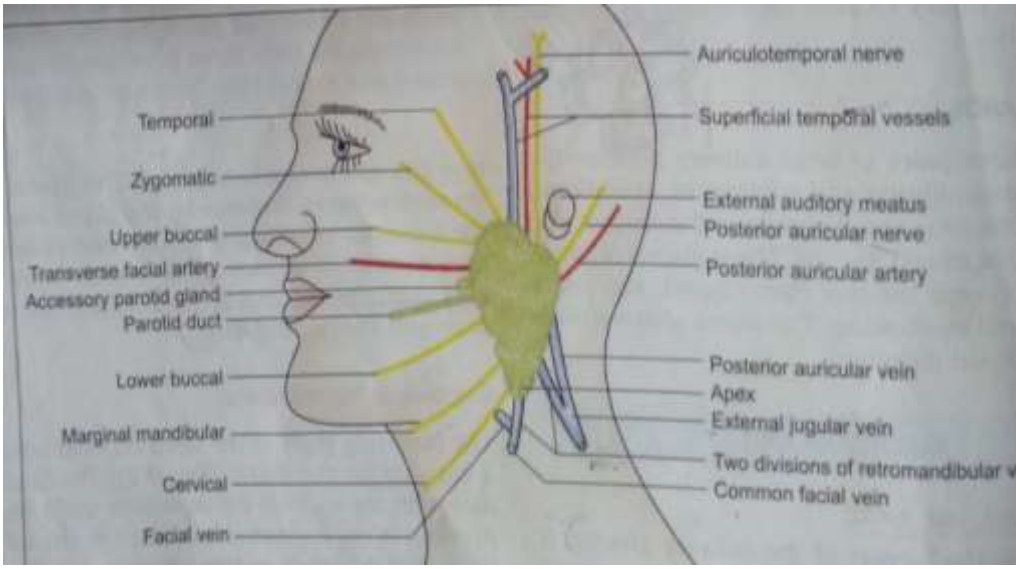
Runs downwards on masseter, Turns medially and pierces

Buccal pad of fat

Buccopharyngeal fascia

Buccinator

Opens into the vestibule of mouth opposite upper 2nd molar tooth.



(E)BLOOD SUPPLY

External carotid artery and its branches that arise within the gland.

Veins drain into external jugular and internal jugular veins.

(E)NERVE SUPPLY

Parasympathetic nerves are secretomotor, Reach the gland through auriculotemporal nerve.

Sympathetic nerves are vasomotor.

Sensory nerves come from auriculotemporal nerve and greater auricular nerve.

(F)APPLIED ANATOMY

Mumps

Parotid abscess

Parotidectomy

Parotid calculi

Freys syndrome.

PAROTID DUCT(SE)

Thick walled

5 cm long

Origin - Emerges from anterior border of gland

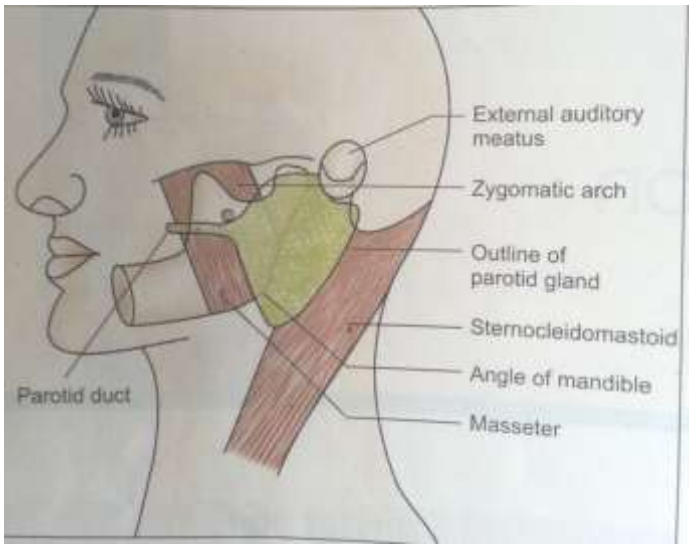
Related

Superiorly

To acessory parotid gland

Upper buccal branch of facial nerve

Transverse facial vessels.



Inferiorly

Lower buccal branch of facial nerve.

Runs on masseter and turns medially and pierces

Buccal pad of fat

Buccopharyngeal fascia

Buccinator(obliquely)

Oblique course of the duct through buccinator prevents inflation of the duct during blowing

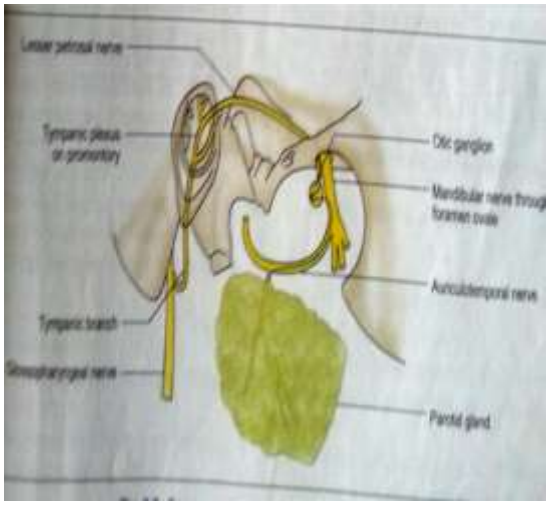
The duct opens into the vestibule of the mouth opposite the crown of upper 2nd molar tooth.

PAROTID GLAND NERVE SUPPLY(SA)

Parasympathetic nerves are secretomotor, Reach the gland through auriculotemporal nerve

Sympathetic nerves are vasomotor

Sensory nerves come from auriculotemporal nerve and greater auricular nerve.



Inferior salivary nucleus (preganglionic fibres) -> Glosspharyngeal nerve ->Tympanic branch->lesser petrosal nerve-> Relay in otic ganglion-> Postganglionic fibres -> auriculotemporal nerve> Parotid gland.

STRUCTURES PRESENT WITHIN THE SUBSTANCE OF PAROTID GLAND(SA)

External carotid artery

Retromandibular vein

Facial nerve

TRACE THE PATHWAY FOR SECRETOMOTOR (PARASYMPATHETIC) FIBRES TO PAROTID GLAND (SA)

Inferior salivary nucleus (preganglionic fibres)

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Glosspharyngeal nerve

⇩

Tympanic branch

⇩

Lessor petrosal nerve

⇩

Relay in otic ganglion

⇩

Postganglionic fibres relay in auriculotemporal nerve

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Parotid gland.