

Table of Contents

PAROTID GLAND

3

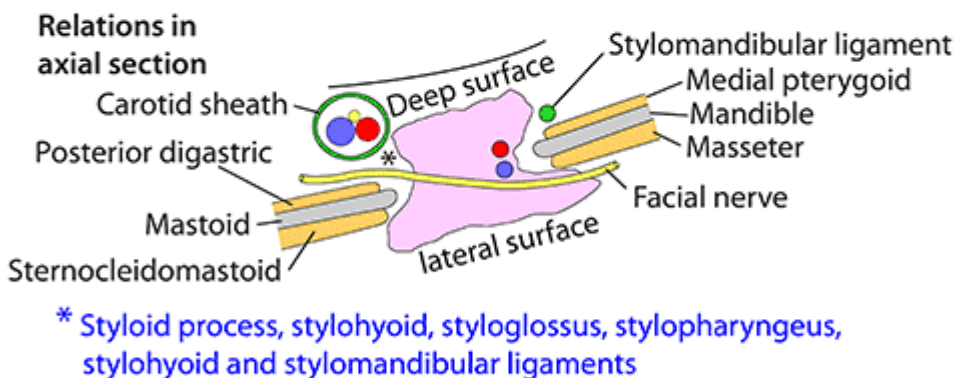
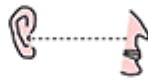
PAROTID GLAND



PAROTID GLAND 2

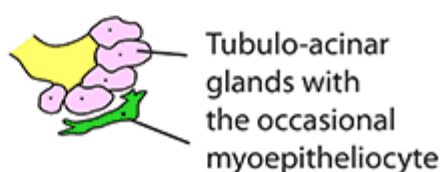
- **Blood supply:** Branches of external carotid
- **Venous drainage:** To retromandibular
- **Lymph drainage:** Pre-auricular to deep cervical
- **Nerve supply:** **Secretomotor** via inferior salivary nucleus to glossopharyngeal nerve to its tympanic branch to lesser petrosal nerve to otic ganglion to auriculotemporal nerve. **Sympathetics** via superior cervical ganglion and external carotid artery. **Sensation** for gland - auriculotemporal (Vc), for fascia - great auricular (C2)
- **Duct:** 5cm long, crosses masseter, pierces buccinator at 3rd molar and mucosa at 2nd molar. Stenson's duct
- **Surface markings of duct:**

Intertragic notch of ear Philtrum



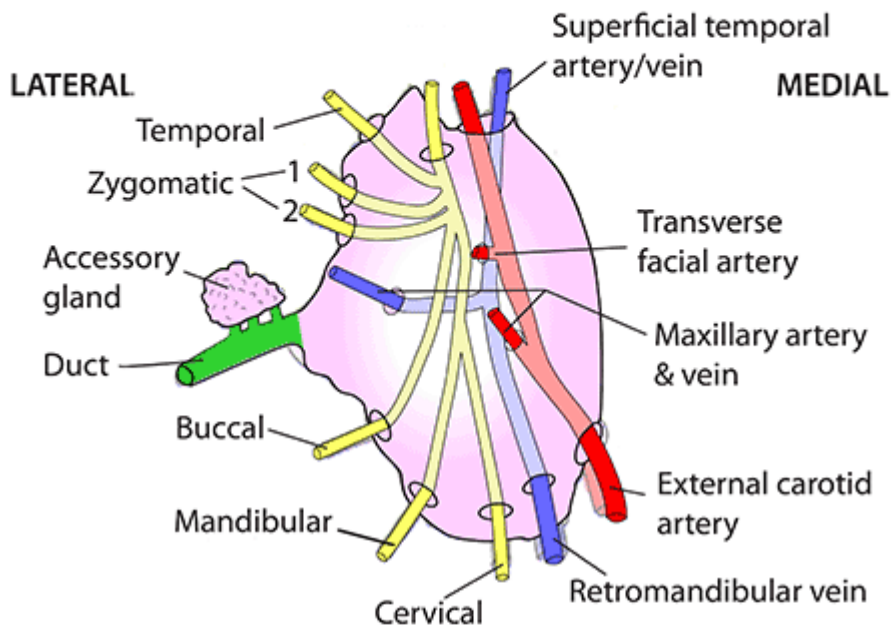
Development Lining of mouth → Ectoderm → Tunnel → Far end proliferates

Histology



PAROTID GLAND 3

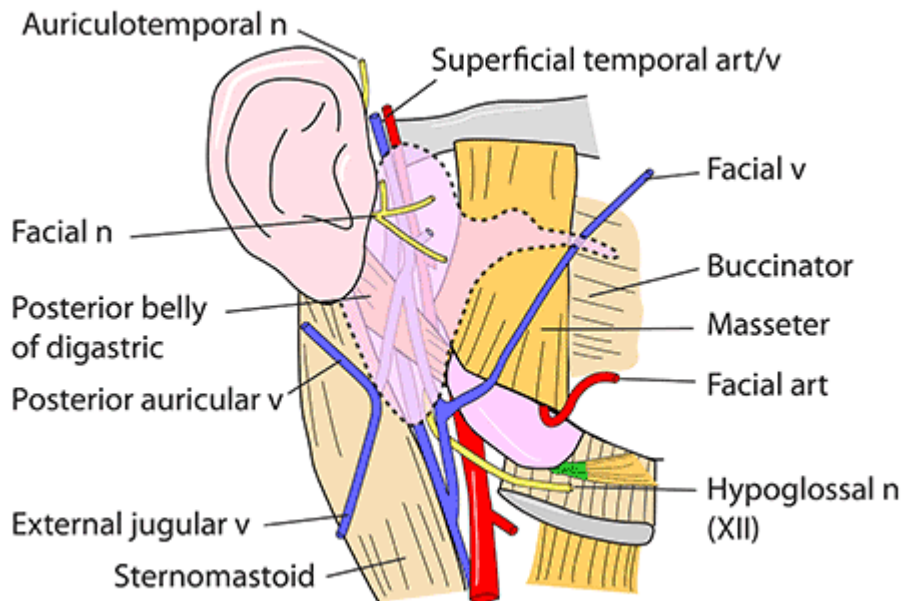
MEDIAL SURFACE OF RIGHT PAROTID GLAND



CLINICAL ASPECTS

- Minkulitz & Sjorgren's syndromes
- Adenomas
 - Both sexes equal occurrence
 - Pleomorphic
 - Poorly circumscribed
 - Can become malignant
 - Usually superficial to VII
- Adenolymphoma - Warthin's tumour (more in males than females)
- Primary malignant - adenocystic, acinar cell
- Secondary malignant - from face
- Stones in duct
- Frey's syndrome - gustatory sweating. Regrowth of parasympathetic fibres into damaged sympathetic fibres in the auriculotemporal nerve

PAROTID GLAND 1



Lies between mastoid, styloid process, ramus of mandible.
Surrounded by parotid fascia (investing layer of deep fascia)

- Serous secretions
- Produces amylase, water, Ig factors (lubricates & oral hygiene)
- Has an upper & lower pole, lateral, anterior & deep surface

RELATIONS:

Posterior

Sternocleidomastoid
Mastoid process

Above

External acoustic meatus
Temporomandibular joint

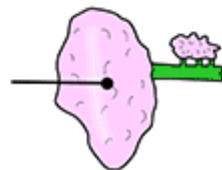
Anterior

Angle of mandible
Medial pterygoid plate
Masseter
Stylomandibular ligament

In gland: Facial nerve, retromandibular vein, external carotid artery, lymph nodes, fibres of auriculotemporal nerve

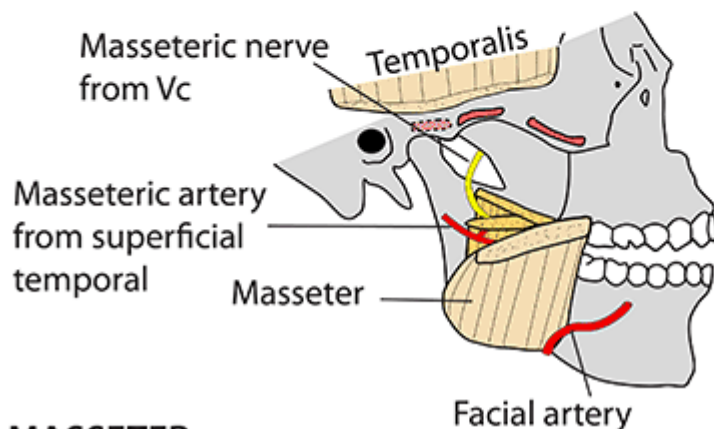
Deep to gland: Mastoid process, sternomastoid, posterior belly of digastric, styloid process, stylohyoid ligament & muscle, styloglossus, stylopharyngeus, temporomandibular joint

Lateral:
subcutaneous surface



PAROTID REGION & MASSETER

- **Definition:** In front and below ear
- **Features:** Masseter & Parotid gland



MASSETER

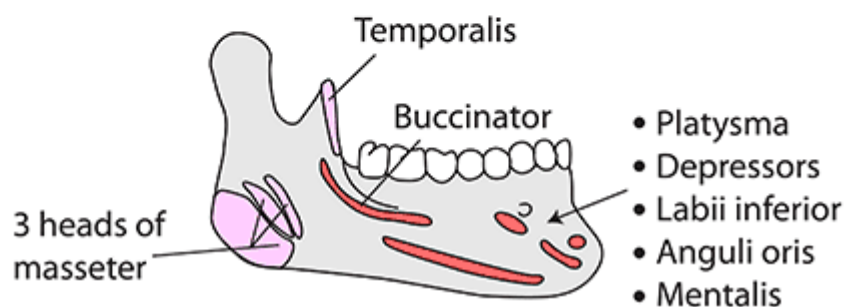
Origin: 3 heads from zygomatic arch

1. Superficial - anterior 2/3
2. Intermediate - middle 1/3
3. Deep - Deep surface of posterior arch

Insertion: Ramus/angle of mandible

Action: Closes jaw

Nerve: Masseteric branch of mandibular division of trigeminal (Vc)



parotid region

- features
- largest of salivary gland
- situated below external acoustic meatus
- between the ramus of mandible and sternocleidomastoid
- skin over gland supplied by greater auricular nerve
- structures within parotid gland
- arteries
- external carotid artery enters gland through posteromedial surface
- maxillary artery leaves the gland through its anteromedial surface
- superficial temporal artery gives transverse facial artery and emerges at the anterior part of superior surface
- veins

- retromandibular vein is formed within the **gland**
- union of
- superficial temporal and maxillary veins
- in lower part of **gland** vein divides into
- these emerge close to the apex (lower pole)
- anterior division
- posterior division
- **nerve**
- facial **nerve** is the **nerve** of second branchial arch
- leaves the skull by passing through stylomastoid foramen
- extracranial course
- 1. crosses the lateral side of base of styloid process
- then enters the posteromedial surface of parotid **gland**
- branches at its exit from stylomastoid foramen
- communicating branches with adjacent cranial and spinal nerves
- posterior auricular **nerve** arises just below the stylomastoid foramen
- ascends between mastoid process and external acoustic meatus
- supplies
- auricularis posterior
- occipitalis
- intrinsic muscles on back of auricle
- digastric branch arises close to previous **nerve**
- short and supplies posterior belly of digastric
- stylohyoid branch arises with digastric branch
- long and supplies stylohyoid **muscle**
- terminal branches
- temporal branches cross zygomatic arch and supply
- auricularis anterior
- auricularis superior
- intrinsic muscles on the lateral side of **ear**
- frontalis
- orbicularis oculi
- corrugator supercilii
- zygomatic branches
- run across zygomatic bone
- supply orbicularis oculi
- buccal branches are two in number
- marginal mandibular branch
- runs below the angle of mandible
- **deep** to platysma
- crosses **body** of mandible supplies
- muscles of lower lip and chin
- cervical branch
- emerges from apex of parotid **gland**
- runs downwards and forwards in the neck to supply platysma
- Bell's palsy
- sudden paralysis of facial **nerve** at stylomastoid foramen
- results in asymmetry of **corner** of **mouth**
- inability to close **eye**
- disappearance of nasolabial fold
- loss of wrinkling of skin of forehead on same side

- [nerve](#) supply
- parasympathetic nerves are secretomotor
- reach the [gland](#) through auriculotemporal [nerve](#)
- preganglionic fibres begin in inferior salivatory nucleus
- pass through glossopharyngeal [nerve](#)
- tympanic branch
- relay in otic ganglion
- sympathetic nerves
- postganglionic
- vasomotor
- derived from plexus around middle meningeal artery
- travel along branches of maxillary, external carotid artery and their branches
- sensory nerves
- to the [gland](#) come from
- auriculotemporal [nerve](#)
- parotid fascia innervated by sensory fibres of great auricular [nerve](#)
- parotid duct or stensons duct
- superiorly
- accessory parotid [gland](#)
- transverse facial vessels
- upper buccal branch of facial [nerve](#)
- inferiorly
- lower buccal branch of facial [nerve](#)
- anterior border of masseter
- parotid duct turns medially and pierces
- buccal [pad](#) of fat
- buccopharyngeal fascia
- buccinator
- contains
- largest salivary [gland](#)
- histology
- it is a serous acini
- external features
- surfaces
- superior (base of pyramid)
- forms the upper end of the [gland](#)
- small and concave
- related to cartilaginous part of external acoustic meatus
- posterior surface of temporomandibular joint
- superficial temporal vessels
- auriculotemporal [nerve](#)
- superficial
- largest surface
- covered by
- skin
- superficial fascia
- containing anterior branches of great auricular [nerve](#)
- preauricular or superficial parotid lymph nodes
- posterior fibres of platysma
- risorius
- parotid fascia which is thick and adherent

- anteromedial
- grooved by posterior border of ramus of mandible
- related to
- masseter
- lateral surface of temporomandibular joint
- posterior border of the ramus of mandible
- medial pterygoid
- emerging branches of facial [nerve](#)
- posteromedial
- moulded to mastoid
- moulded to styloid process
- structures attached to them
- related to
- mastoid process
- sternocleidomastoid
- posterior belly of digastric
- styloid process with structures attached to it
- external carotid artery and facial [nerve](#)
- enter the [gland](#) through this surface
- internal carotid artery lies [deep](#) to styloid process
- relations
- borders
- anterior
- separates superficial surface from anteromedial surface
- extends from anterior part of the superior surface to the apex
- following structures emerge at this border
- parotid duct
- terminal branches of facial [nerve](#)
- transverse facial vessels
- posterior
- separates superficial surface from posteromedial surface
- overlaps sternocleidomastoid
- medial / pharyngeal edge
- - separates anteromedial surface from posteromedial surface
- sep
- related to lateral wall of pharynx
- blood supply
- parotid lymph nodes
- CLINICAL ANATOMY
- parotid abscess
- caused by spread of infection from opening of parotid duct
- drained by making holes (Hilton's method)
- mixed parotid tumour is slow growing tumour
- parotid calculi may [be](#) formed in the parotid duct

From:

<https://mail.mantrakshar.co.in/> - **Kshtrgyn**

Permanent link:

https://mail.mantrakshar.co.in/doku.php/en/parotid_gland?rev=1686720800



Last update: **2023/06/14 05:33**