# **Parotid region**

#### L8



#### **Regions of Head**

 To allow clear communications regarding the location of structures, injuries, or pathologies, the head is divided into regions.

#### **REGIONS OF HEAD**

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## **Parotid Region**

- The parotid region is the posterolateral part of the facial region bounded by
- the:
- 2 Zygomatic arch superiorly.
- 2 Angle and inferior border of the mandible inferiorly.
- 2 Ramus of the mandible medially.
- 2 Anterior border of the masseter muscle anteriorly.
- Is ternal ear and anterior border of the sternocleidomastoid muscle posteriorly



#### contents

- The parotid region includes
- the parotid gland and duct, the parotid plexus of the facial
- nerve (CN VII), the retromandibular vein, the external carotid artery, and the masseter muscle.
- On the parotid sheath and within the gland are parotid lymph nodes. The five terminal branches of the facial nerve leave through the anterior border of the gland in
- a radiating manner that resembles the foot of a goose. this pattern is known as <u>"pes anserinus"</u>

#### **Parotid Gland**

- is the largest of three paired salivary glands and is composed mostly of serous acini.
- It is enclosed within the parotid sheath, a tough unyielding capsule derived from the deep cervical fascia. It lies in a deep hollow below the external auditory meatus, behind the ramus of the mandible and in front of the sternocleidomastoid muscle. The facial nerve divides the gland
- into superficial and deep lobes. Fatty tissue between the lobes confers the flexibility
- the gland must have to accommodate the motion of the mandible.

#### **Parotid Duct**

- The parotid (Stensen's) duct passes horizontally from the anterior edge of the gland ) and passes forward over the lateral surface of the masseter muscle about one fingerbreadth below the zygomatic arch.
- It then turns medially, dives deeply into the buccal fatpad, piercing the buccinator muscle and enters the vestibule of oral cavity
- through a small orifice (papilla) opposite the second maxillary molar tooth .
- The oblique passage of the duct in the buccinator muscle acts as a valve-like mechanism & prevents inflation of the duct during blowing.



#### Innervation of Parotid Gland and Related Structures

- Although the parotid plexus of the facial nerve (CN VII) is embedded within the parotid
- gland, CN VII does not provide innervation to the gland.
- The auriculotemporal and great auricular nerves provide sensory fibers to the gland and innervate the parotid sheath as well as the overlying skin.
- The parasympathetic component of the glossopharyngeal nerve (CN IX) supplies presynpatic secretory fibers to the otic ganglion.
- The postsynaptic parasympathetic fibers are conveyed from the
- ganglion to the gland by the auriculotemporal nerve.
- Sympathetic fibers are derived from the cervical ganglia through the external carotid nerve plexus on the external carotid artery .



#### Innervation of the parotid gland

#### **Arterial Supply**

- External carotid artery & its terminal branches.
- Venous Drainage
- Into the retro-mandibular vein.
- Lymph Drainage
- Into the parotid & then into the deep cervical lymph nodes.

### The Buccal Pad of Fat

- Superficial to the buccinators are encapsulated collections of fat.
- these buccal fat-pads are much larger in infants, to reinforce the cheeks and keep them from collapsing during sucking.
- The blood supply originates from the buccal and deep temporal branches of the maxillary artery, the transverse facial branch of the superficial temporal artery, and branches of the facial artery.
- This rich vascularity allows a reliable long axial flap and explains the rapid surface re-epithelialization. The cheeks are innervated by buccal branches of the mandibular nerve.



#### Functions or importance of pad

- The buccal fat-pad's primary function is thought to be related to chewing and suckling,
- especially in infants. Another proposed function is as gliding pads that facilitate the
- action of the muscles of mastication. The buccal fat pad may also function as a cushion
- to protect sensitive facial muscles from injury due to muscle action or exterior force.