Parotid Gland

• Largest salivary gland
• Moistening the oral mucosa
• Mixing with food to help in chewing and swallowing
• Salivary amylase
• Bacterial enzyme lysozyme
THE PAROTID GLAND

- Para=around otic (ear)
- Irregular, yellowish, lobulated
- weight =25 gm.
- Location: Antero-inferior to external acoustic meatus, between ramus of mandible and the sternomastoid and mastoid process. Apex posterior to angle of mandible.
  Base related to zygomatic arch
External feature

Shape: Inverted pyramid
Apex: directed downwards
- Surfaces: superior, superficial anteromedial, posteromedial
- Borders: Anterior, Posterior, Medial
• Superior: related to ext. aud. Meatus (cart. Part), post TM joint.
• Superficial: Skin, superficial fascia, lymph nodes, platysma.
• Anteromedial: grooved by the posterior border of ramus of mandible. Covers masseter, TM joint, medial pterygoid.
• Posteromedial: Mastoid process, SCM, post. Belly of diagastric, styloid process and muscles.
PAROTID CAPSULE

- Capsule of the Parotid is derived from investing layer of deep cervical fascia.
- Any inflammation or tension can cause exquisite pain just in front of Temporo-mandibular joint. Cause: unyielding parotid capsule
- Caused by stretching of the capsule and stimulation of great auricular nerve. Pain is felt at meal times usually
- seen in patients suffering from mumps or parotid obstruction.
PAROTID DUCT/STENSONS DUCT

- Length –5 cm, Diameter-3 mm
- Direction- forwards and slightly downwards on masseter.
- It runs between buccinator and oral mucosa opens into the vestibule of mouth opposite the upper crown of upper second molar tooth.
- At the anterior border of masseter it pierces:
  1. buccal pad of fat
  2. buccopharyngeal fascia
  3. buccinator muscle
  4. buccal mucosa
Structures within Parotid gland

- External carotid artery
- Retromandibular vein
- Facial nerve
• Innervation: lesser petrosal (preganglionic) (ix nerve)—synapse in otic ganglion—auriculotemporal (postganglionic)—parotid gland
  Sensory- auriculotemporal
• Vascular supply: Ext. carotid artery
  External jugular vein
• Lymphatics: parotid lymph nodes—upper deep cervical lymph nodes.
All glands above level of oral fissure innervated by greater petrosal of [VII]

Lacrimal gland

Palatine nerve

Glands on palate

Labial glands

Lingual glands

Sublingual gland

Submandibular gland

Pterygopatine ganglion

Greater petrosal nerve

Preganglionic parasympathetic fibers from [IX]

Chorda tympani

Parotid gland innervated by [IX]

Auriculotemporal nerve (from [V3])

Submandibular ganglion
Fig. 10.6 Transverse section through the parotid gland showing the relations of its various surfaces and structures within it.
Fig. 10.4 Relations of anteromedial surface of parotid.
Fig. 10.5 Relations of posteromedial surface of parotid.
Applied Anatomy

- Parotidectomy
- Parotiditis (mumps)
- Sialoraphy
- Sialolith
- Malignant tumors
- Accessory parotid gland
- *Parotid gland stones*