SOFT PALATE

- It is a movable,muscular fold suspended from the posterior border of the hard palate
- It separates the nasopharynx from the oropharynx,the cross road between the food and air passages
- The soft palate has **two surfaces**-ANTERIOR & POSTERIOR
- The soft palate has **two borders-** SUPERIOR & INFERIOR
- The ant surface is concave and is marked by a median raphe
- The post surface is convex,and is continuous superiorly with the floor of the nasal cavity

FEATURES

- **Superior border** is attached to the posterior borders of the hard palate,blending on each side with the pharynx
- The **inferior border** is free and bounds the pharyngeal isthmus
- From its middle,there hangs a conical projection called the ***uvula***
- From each side of base of the uvula **two curved fold** of mucous membrane extend laterally and downwards
- The anterior fold is called th**e palatoglossal arch**.it contains the palatoglossus muscle and reaches the side of the tongue at the junction of its oral and pharyngeal parts.
- The posterior fold is called the **palatopharyngeal arch**. it contains the palatopharyngeus muscle.it forms the post boundary of tonsillar fossa

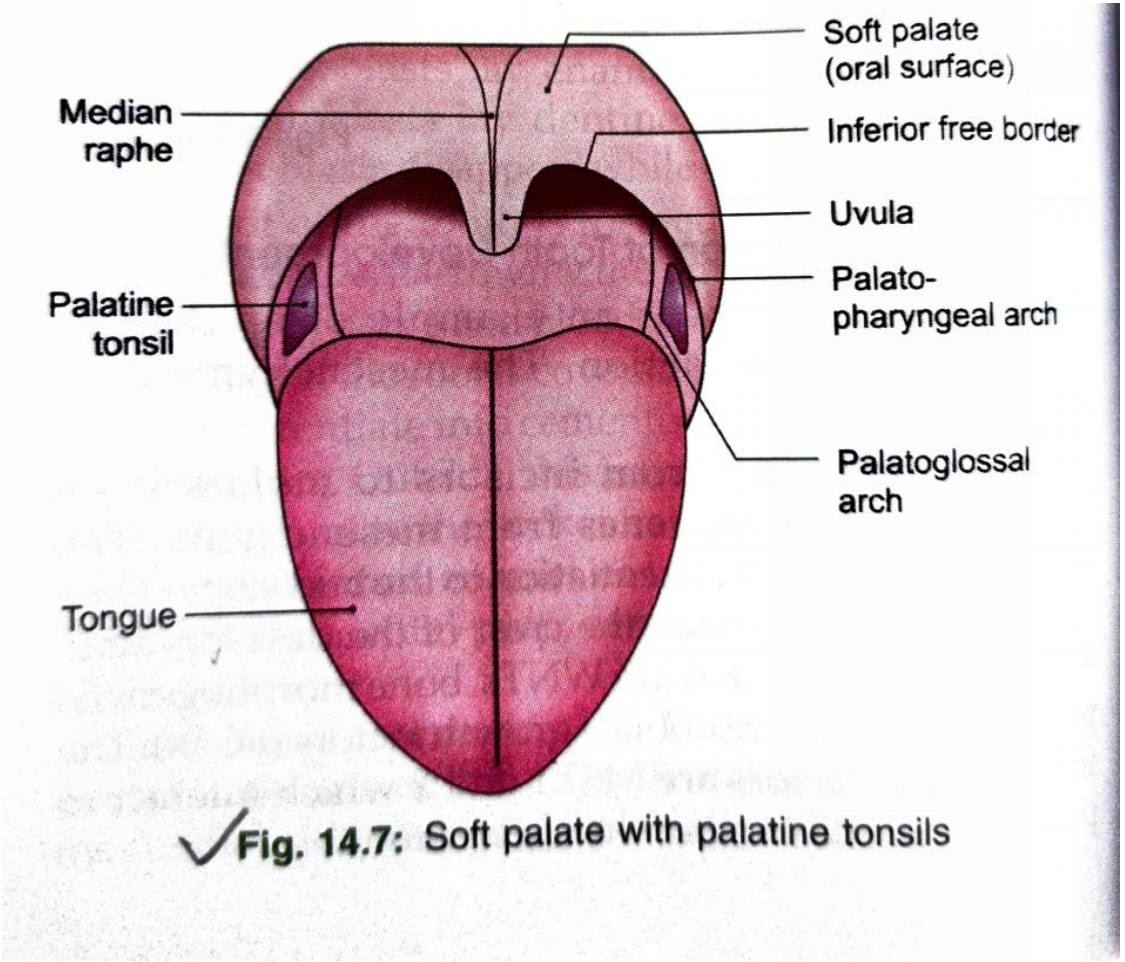


Fig. 14.7: Soft palate with palatine tonsils

STRUCTURE

☐The soft palate is a fold of mucous membrane containing the following parts

- **The palatine aponeurosis** which is the flattened tendon of the tensor veli palatini forms the fibrous basis of the palate. near the median plane,the aponeurosis splits to enclose the musculus uvulae

- **The levator veli palatini** and the palatopharyngeus lie on the superior surface of the palatine aponeurosis

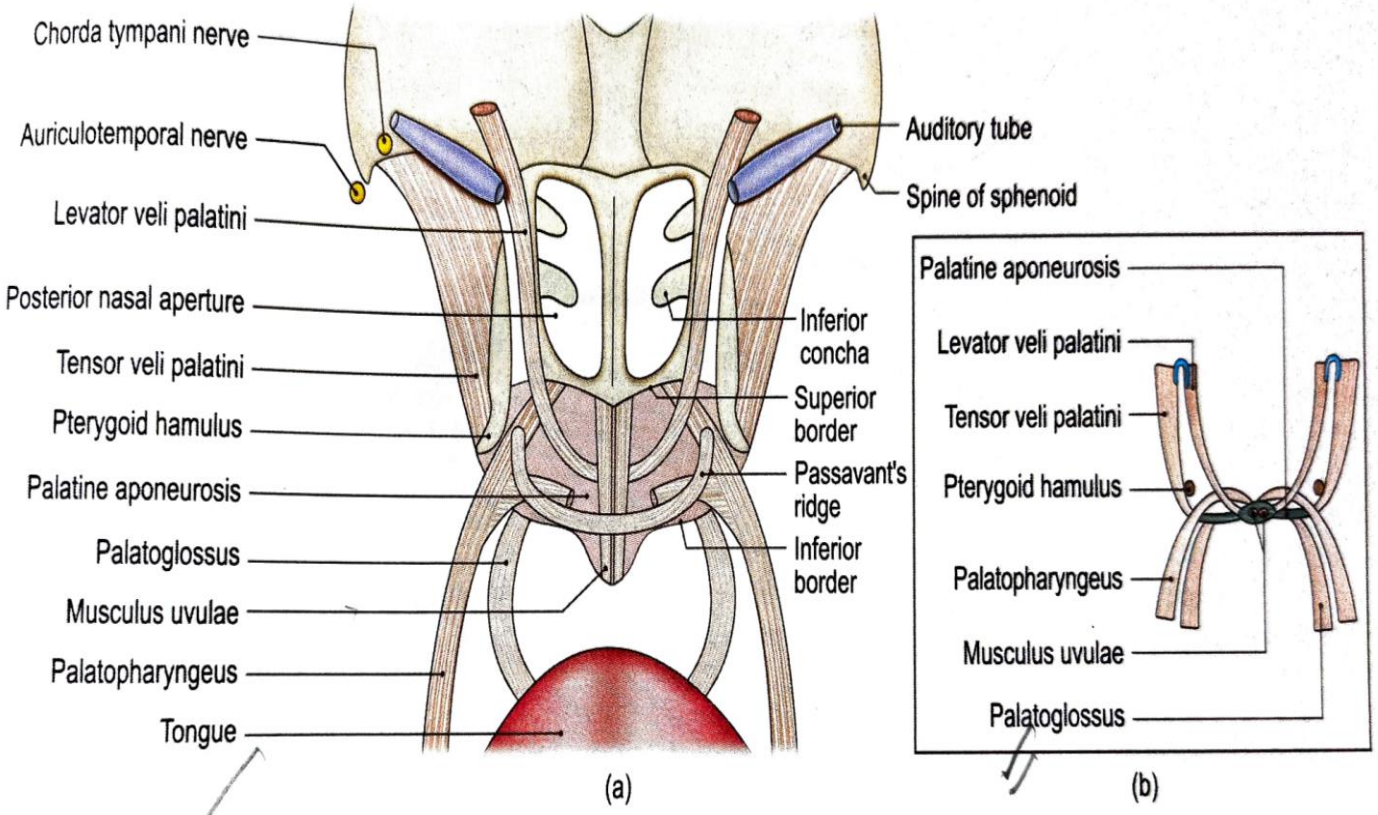
- **The palatoglossus** lies on the inferior or anterior surface of the palatine aponeurosis

- **Neumerous mucous glands**, and some taste buds are present

- **Note-** The muscles of the soft palate are derived from ***1st, 4th,*** and ***6th*** branchial arches and are supplied by mandibular and vagoaccessory complex

MUSCLES OF SOFT PALATE

- Tensor palati (tensor veli palatini)
- Levator palati (levator veli palatini)
- Musculus uvulae
- Palatoglossus
- Palatopharyngeus



Figs 14.8a and b: (a) Attachment of the muscles of the soft palate; (b) Muscles of soft palate

NERVE SUPPLY

- MOTOR NERVES-all muscles of the soft palate except tensor palati are supplied by pharyngeal plexus.the fibres of this plexus are derived from the cranial part of the accessory nerve through the vagus.the tensor palati is supplied by mandibular nerve
- GENERAL SENSORY NERVES-are derived from the
- middle and posterior lesser palatine nerves, which are branches of the maxillary nerve through the pterygopalatine ganglion
- The glossopharyngeal nerve
- Special sensory-carrying taste sensations from the oral surface are contained in the lesser palatine nerves. the fibres travel through the greater petrosal nerve to the geniculate ganglion of the facial nerve and from there to the nucleus of the tractus solitarius.
- Secretomotor nerves are also contained in the lesser palatine.they are derived from the sup salivatory nucleus and travel through the greater petrosal nerve

BLOOD SUPPLY & LYMPHATIC DRAINAGE

- Arteries-greater palatine Branch of maxillary artery,ascending palatine branch of facial artery,palatine branch of ascending pharyngeal artery
- Veins-they pass to the pterygoid & tonsillar plexuses of veins
- Lymphatics-drain in to the upper deepcervical& retropharyngeal lymph nodes

CLINICAL ANTOMY

- Paralysis of soft palate in lesions of the vagus produces- nasal regurgitation of liquids, nasal twang in voice, flattening of the palatal arch, deviation of uvula to normal side

PALATINE TONSIL

- Paltine tonsil occupies tonsillar sinus or fossa between palatoglossal and palatopharyngeal arches
- The tonsil is almond shaped and has two surfaces- medial & lateral,two borders- ant& post and two poles- upper& lower
- The medial surface is covered by stratified squamous epithelium continuous with that of the mouth. this surface has 12 to 15 crypts. the largest of these is called the intra tonsillar cleft
- The lateral surface is covered by a sheet of fascia which forms the hemi capsule of the tonsil.the capsule is is an extension of the pharyngobasilar fascia
- The tonsillar artery enters the tonsil by piercing the sup constrictor muscle of pharynx.
- Palatine vein descends on the lateral surface of the pharynx, and crosses the tonsil before piercing he wall of pharynx. the vein may be injured during removal of the tonsil or tonsiliectomy

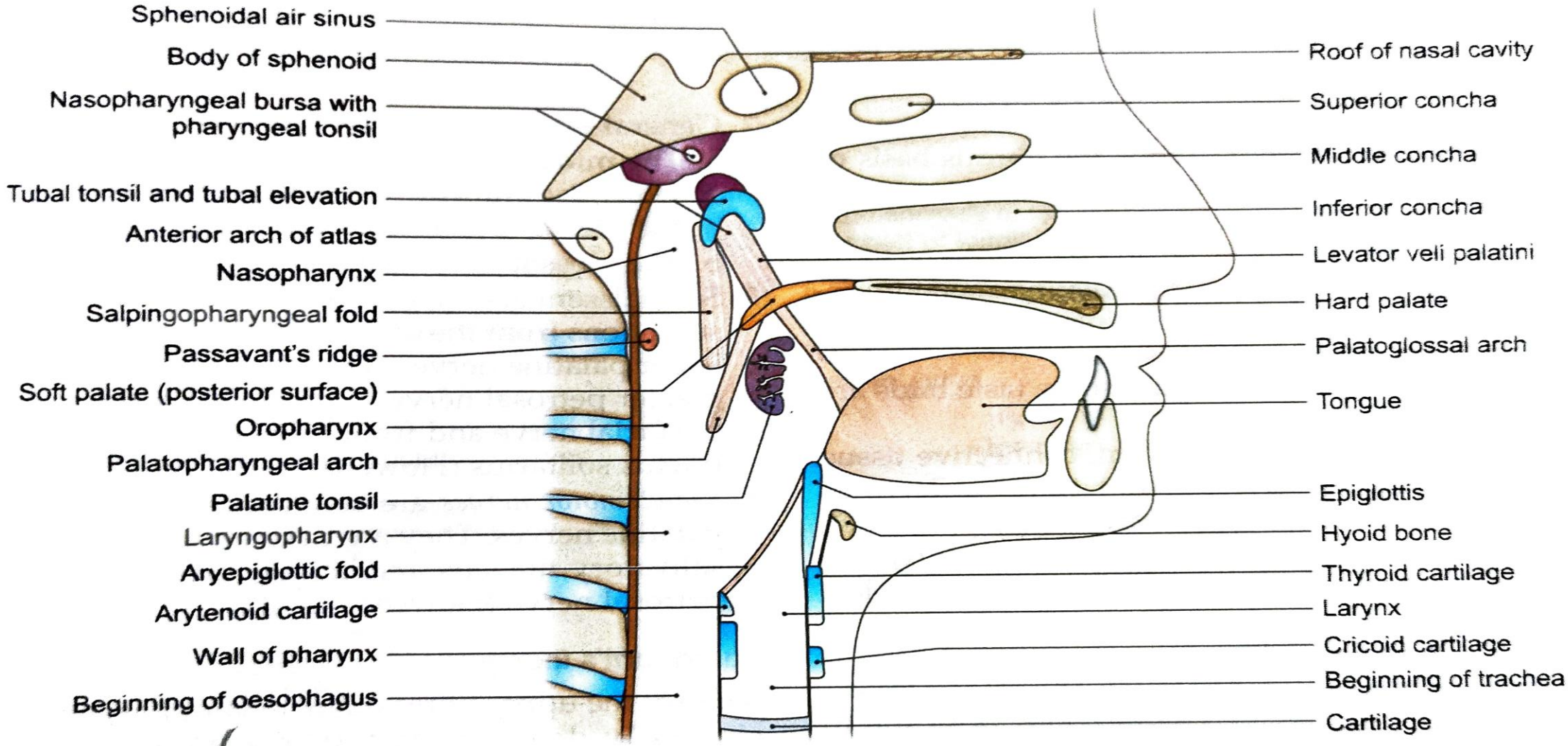


Fig. 14.9a: Sagittal section through the pharynx, the nose, the mouth and the larynx

TONSILLAR BED

- the bed of the tonsil is formed from with in outward by

a) The pharyngobasilar fascia

b) Sup constrictor and palatopharyngeus muscle

c) The buccopharyngeal fascia

d) In the lower part, the styloglossus

e) The glossopharyngeal nerve

Still more laterally,there are the facial artery with its tonsillar and ascending palatine branches

RELATIONS

- The ant border is related to the palatoglossal arch with its muscle
- The post border is related to the palatopharyngeal arch with its muscle
- upper pole is related to the soft palate
- Lower pole is related to the tongue

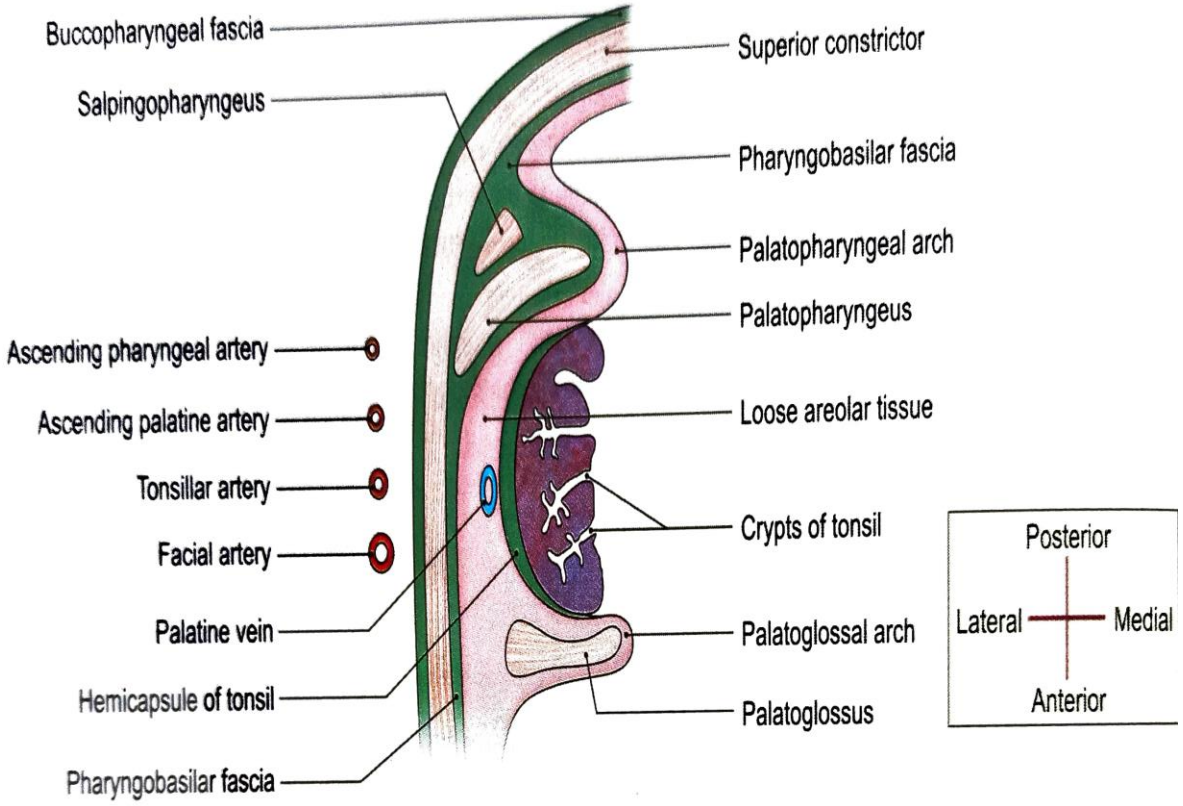


Fig. 14.14: Horizontal section through the tonsil showing its deep relations

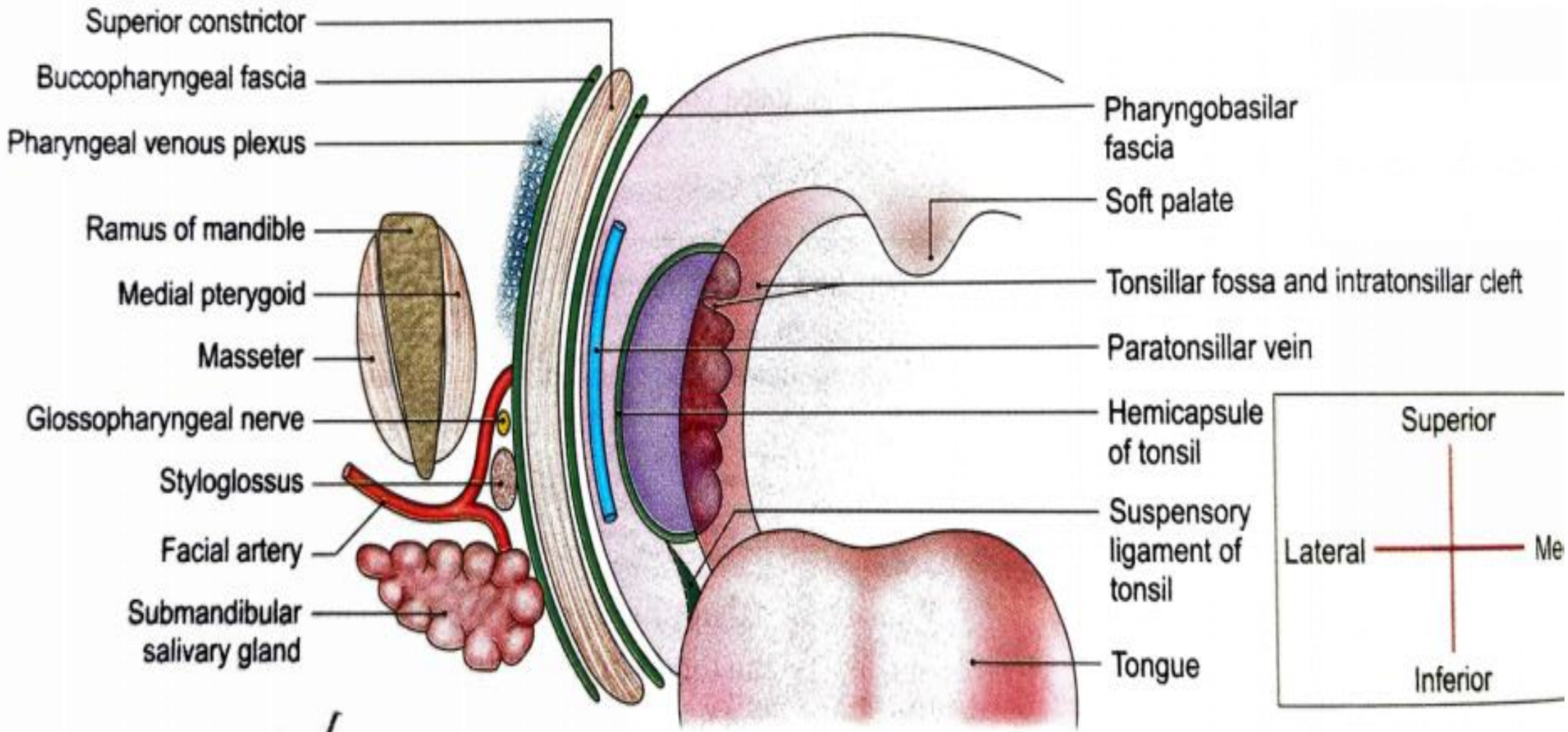


Fig. 14.15: Vertical section through the tonsil, showing its deep relations

ARTERIAL SUPPLY

- Main supply is by tonsillar branch of facial artery
- Additional supply by
- ascending palatine branch of facial artery
- dorsal lingual branch of lingual artery
- Ascending pharyngeal branch of the external carotid artery
- The greater palatine branch of the maxillary artery

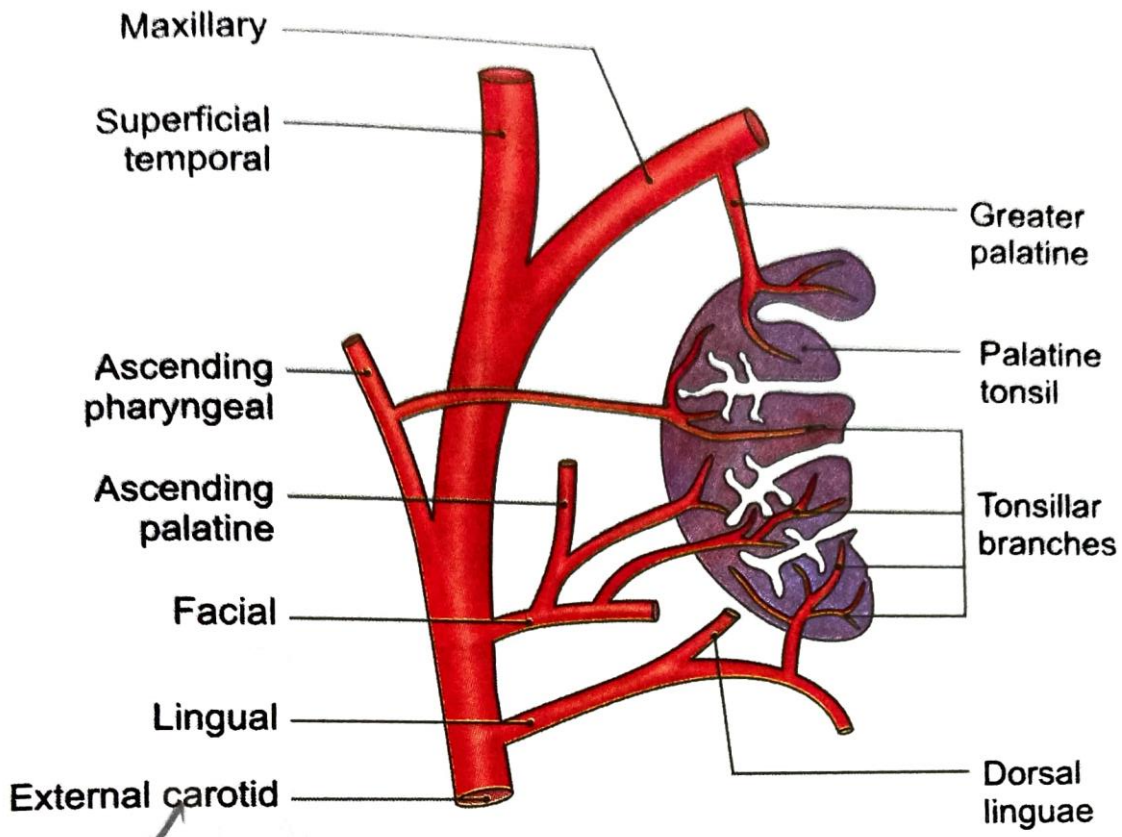


Fig. 14.16: Arterial supply of the palatine tonsil

There are no afferent lymphatics to the tonsil.

VENOUS DRAINAGE & LYMPHATIC DRAINAGE

- One or more veins leave the lower part of deep urface of the tonsil,pierce thesup constrictor,and join the palatine ,pharyngeal,or facial veins
- Lymphatic drainage-Lymphatics pass to jugulodigastric node
- There are no afferent lymphatics to the tonsil
- NERVE SUPPLY-Glossopharyngeal and lesser palatine nerves

CLINICAL ANATOMY

- The tonsils are large in children. they retrogress after puberty.
- The tonsils are frequently sites of infection,especially in children.infection may spread to surrounding tissue forming a peritonsillar abscess.
- enlarged and infected tonsils often require surgical removal.the operation is called tonsillectomy
- Tonsillitis may cause referred pain in the ear as glossopharyngeal nerve supplies both these area
- Suppuration in the peritonsillar area is called quinsy.