

The palate

The palate forms the roof of the mouth . it may be divided into two parts :(1)the hard palate in front &(2)the soft palate behind.

*The **hard palate** is formed by the palatine processes of the maxillae &the horizontal plates of the palatine bones . it is bounded by the alveolar arches , & behind it is continuous with the soft palate . it forms the floor of the nasal cavities . The under surface of the hard palate is covered with mucoperiosteum and possesses a median ridge, on either side of which the mucous membrane shows corrugations . The mucous membrane is covered by stratified squamous epithelium &possesses numerous mucous glands in its posterior part. The **soft palate** is a mobile fold attached to the posterior border of the hard palate it is covered on its upper & lower surfaces by mucous membrane & contains an aponeurosis , muscle fiber , lymphoid tissue , glands , vessels & nerves . its free posterior border presents in the midline a conical projection called the **uvula**. The soft palate is continuous at the sides with the lateral wall of the pharynx. The soft palate is composed (1)mucous membrane ,(2)palatine aponeurosis &(3)muscles*

*The **mucous membrane** covers the upper & lower surface of the soft palate . its covered mainly with stratified squamous epithelium . numerous glands are present on both surfaces ,&collection of lymphoid tissue are found in the submucosa.*

*The **palatine aponeurosis** is fibrous sheet attached to the posterior border of the hard palate. it's the expanded tendon of the tensor veli palatine, & it' splits to enclose the musculus uvulae .*

*The **muscles** of the soft palate are the tensor veli palatini , the levator veli palatini, the palatoglossus , the palatopharyngeus , and the muscles uvulae.*

tensor veli palatine

***Origin;** from the spin of the sphenoid , the lateral side of the auditory tube ,& the scaphoid fossa .*

Insertion ;the fibers converge as they descend and form a narrow tendon , which turns medially around the pterygoid hamulus . The tendon pierces the origin of the buccinator muscle and , together with the tendon of the muscle of the opposite side , expands to form the palatine aponeurosis

Nerve Supply From the nerve to the medial pterygoid muscle from the mandibular division of the trigeminal nerve .

Action ; The two muscle tighten the soft palate so that it may be moved upward or downward as a tense sheet .

Levator Veli Palatini

Origin : from the undersurface of the petrous part of the temporal bone and from the medial surface of the cartilage of the auditory tube .

Insertion

The muscle descend medial to the upper border of the superior constrictor muscle and is inserted into the upper surface of the palatine aponeurosis .

Nerve Supply ; pharyngeal plexus

Action : Raises the soft palate

Palatoglossus

Origin ;from the undersurface of the palatine aponeurosis , where it is continuous with the muscle of the opposite side .

Insertion

it passes downward and forward beneath the mucous membrane of the lateral wall of the pharynx , where it forms the palatoglossal arch . Having passed in front of the tonsil , its inserted into the side of the tongue .

Nerve Supply pharyngeal plexus

Action ; pulls the root of the tongue upward and backward . Both muscles contracting together cause the palatoglossal arches to approach the midline , and thus the opening (oropharyngeal isthmus) between the oral pharynx and the mouth is narrowed.

Palatopharyngeus

Origin ; From the posterior border of the hard palate and from the palatine aponeurosis .

Insertion ;It passes downward and backward beneath the mucous membrane of the lateral wall of the pharynx , where it forms the palatopharyngeal arch . it passes behind the tonsil and is inserted into .it passes behind the tonsil and is inserted into the posterior border of the lamina of the thyroid cartilage. it forms part of the longitudinal muscle of the pharyngeal wall.

Nerve Supply pharyngeal plexus

Action ; pulls the wall of the pharynx upward . acting together , they pull the palatopharyngeal arches toward the midline.

Musculus Uvulae.

Origin ;from the posterior border of the hard palate and the palatine aponeurosis .

Insertion ;The muscle is inserted into the mucous membrane of the uvula.

Nerve Supply pharyngeal plexus.

Action; pull the uvula.