

Oral cavity muscles

Muscle	Origin	insertion	Nerve supply	Action
Geniohyoid	Inf. Mental spines	Body of hyoid bone	c.1 nerve	-Elevate hyoid -Depress mandible
intrinsic muscles				
Superior longitudinal	Submucosal CT at the back of the tongue + median septum	Submucosal CT + mucosa at the margins of the tongue	Hypoglossal	Shorten the tongue + curl the apex and the sides
Inferior longitudinal	Root of the tongue	Apex of the tongue	Hypoglossal	Shorten the tongue + uncurl the apex and turn it downward
Transverse	Median septum	Submucosal CT on the lateral margins	Hypoglossal	Narrowing + elongating the tongue
Vertical	Submucosal CT on the dorsum of the tongue	CT in more ventral regions of the tongue	hypoglossal	Flatten + widen the tongue
Genioglossus	Sup mental spines	Body of hyoid ; entire length of the tongue	Hypoglossal	Protrude the tongue + depress tongue's center
Extrinsic muscles				
Hyoglossus	Greater horn of the hyoid	Lateral surface of the tongue	Hypoglossal	Depress the tongue
Styloglossus	Styloid process	Lateral surface of the tongue	Hypoglossal	Retract the tongue
Palatoglossus	Inf surface of palatine aponeurosis	Lateral margins of the tongue	Pharyngeal branch of vagus N	Elevate back of the tongue + depress the palate + move the palatoglossal arch toward the midline
Soft palate muscles				
Tensor veli palatini	Spine of sphenoid + fibrous part of pharyngotympanic tube + scaphoid fossa of sphenoid	Palatine aponeurosis	Nerve to medial pterygoid muscle	Tense the soft palate + open pharyngotympanic tube
Levator veli palatini	Petrous portion of temporal bone ant to carotid canal	Sup surface of palatine aponeurosis	Pharyngeal branch of vagus N	Elevate soft palate above neutral
Palatopharyngeus	Sup surface of palatine aponeurosis	Pharyngeal wall	Pharyngeal brach of vagus N	Depress soft palate + elevate pharynx + move palatopharyngeal arch toward midline
Palatoglossus	Same of the above	-	-	-
Musculus uvulae	Post Nasal spine	CT of uvula	Pharyngeal branch of vagus N	Elevate + retract uvula + thicken the central region of soft palate

Notes about nerves :

Inf alveolar nerve – mental branch : supply lower lip and chin

Incisor branch : supply incisors canines and 1st premolar

Post sup alveolar nerve : supply molars

Middle sup alveolar nerve : supply premolars

Ant sup alveolar nerve : supply canines and incisors

Muscles of the larynx

Muscle	origin	insertion	Nerve supply	action
		Intrinsic	muscles	
Cricothyroid	Anterolateral aspect of cricoid cartilage arch	Oblique : inf horn of thyroid straight : inf margin of thyroid	External branch of sup laryngeal N of vagus N	Forward downward rotation of thyroid (tense vocal cords)
Posterior cricoarytenoid	Oval depression of cricoid lamina	Muscular process of arytenoid (post surface)	Recurrent laryngeal branch of vagus	Abduction of arytenoid cartilage
Lateral cricoarytenoid	Sup surface of cricoid arch	Ant surface of muscular process of arytenoid	Recurrent laryngeal of vagus	Internally rotate arytenoid + adduct vocal folds
Transverse arytenoid	Lateral border of post surface of arytenoid	Lateral border of post surface of opposite arytenoid	Recurrent laryngeal	Adduction of arytenoid cartilages
Oblique arytenoid	Post surface of muscular process of arytenoid	Post surface of the apex of adjacent arytenoid	Recurrent laryngeal	Sphincter of laryngeal inlet (narrowing)
Thyroarytenoid	Thyroid angle + cricothyroid ligament	Anterolateral surface of arytenoid + some continue to lateral margin of epiglottis	Recurrent laryngeal	Sphincter of vestibule and laryngeal inlet (widening)
Vocalis	Lateral surface of vocal process of arytenoid	Thyroid angle + vocal ligament	Recurrent laryngeal	Adjust tension on vocal folds(relaxing)

Muscles of the pharynx

Muscle	Origin	Insertion	Nerve supply	Action
Sup constrictor	Pharyngeal raphe	Pterygomandibular raphe + pterygoid Hamulus + mandible	Pharyngeal branch of vagus	Constriction of pharynx
Middle constrictor	Pharyngeal raphe	Margins of hyoid's greater horn + adjacent margin of lesser horn + stylohyoid ligament	Pharyngeal branch of vagus	Constriction of pharynx
Inf constrictor	Pharyngeal raphe	Cricoid + oblique line of thyroid + ligament that spans between them + cricothyroid	Pharyngeal branch of vagus	Constriction of pharynx
Stylopharyngeus	Medial side of styloid's base	Pharyngeal wall	Glossopharyngeal	Elevate the pharynx
Salpingopharyngeus	Inf aspect of the pharyngeal end of pharyngotympanic tube	Pharyngeal wall	Vagus nerve	Elevate the pharynx
Palatopharyngeus	Upper surface of palatine aponeurosis	Pharyngeal wall	Vagus nerve	Elevate the pharynx + close oropharyngeal isthmus

Best of luck!!

Farah Saadeh