

ORAL CAVITY



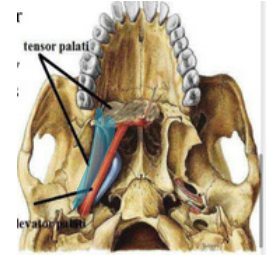
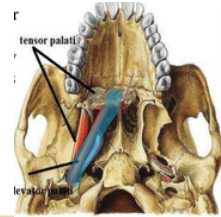

Lec 1	Oral cavity	Palate
anterior	Anterior oral opening=oral fissure opens on the face and bounded by lips	attached to hard palate.
Posterior	Posterior opening = oropharyngeal isthmus open into the oropharynx	shows the uvula at midline, the uvula is a conical projection that hangs from the post. border in midline
Latral	s formed by the cheek Structure:-1- Skin,2-buccal pad of fat, 3-buccopharyngeal fascia,4-buccinators,5-mucous membrane: attached to buccinator,the linea alba may be seen at the occlusal plane of the teeth	
Roof &super surface	The roof is formed of hard and soft palate	Upper surface: its mucous membrane continuous with that of floor of nose.
Floor &inferior surface	2 mylohyoid muscles and the structures above mylohyoid: • Geniohyoid,• sublingual salivary gland,• deep part of submandibular salivary gl,• tongue (with most of its muscles,vessels and nerves • Lingual frenulum: midline fold of mucous membrane connects the floor with the undersurface of tongue. • Sublingual papilla: on the side of lingual frenulum at its attachment to the floor. for opening of submandibular duct • Sublingual fold: just lateral to the papilla, it is raised by sublingual salivary gland and receives the openings of most of the ducts of the gland	Inferior surface: its mucous membrane is continuous with that covering hard palate, Palatoglossal arch and palatopharyngeal arch start at this surface

N.B. All these layers are pierced by parotid duct except the skin

done by : Aya Ayman

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Lec 1 muscles	Origin	Insertion	actions	photo
Tensor palati	-sphenoid fossa - Cartilaginous part of auditory tube	by a palatine aponeurosis into post.border of hard palate	tensor for soft palate. -opening of auditory tube	
Levator palati muscle.	- petrous bone - Cartilaginous part of auditory tube.	upper surface of palatine aponeurosis	-elevates the palate. -open auditory tube (little effect)	
Palatoglossus Palatopharyngeus Musculus uvulae	post. nasal spine.	mucous membrane of uvula.	pull uvula to its own side.	

Nerve supply of palate

Motor: all muscles of palate are supplied by cranial part of accessory nerve through vagus except tensor palati which is supplied by mandibular branch of the trigeminal nerve

Sensory:

Lesser palatine nerves: of pterygopalatine ganglion.
Tonsillar branch of Glossopharyngeal n.

Blood supply:

Arteries:-

greater palatine art.
Ascending palatine art.
Ascending pharyngeal art.

Veins:

-Accompanying veins end in: pterygoid and pharyngeal venous plexuse

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THE TONGUE

EXTRINSIC MUSCLES OF TONGUE



Lec 2	Origin	Insertion	actions
Genioglossus	Superior genial tubercle	whole length of lower surface of tongue -reach hyoid bone	one muscle Protrudes tongue to opposite side two muscle Protrudes tongue directly forward by its tone prevent backward displacement of tongue during sleep
Styloglossus	Styloid process	Side of tongue	Retracts and elevates tongue
Hyoglossus	body & greater horn of hyoid bone	Post. 1/2 of side of tongue	Depresses tongue during speech , chewing , singing
Palatoglossus	inferior surface of palatine aponeurosis	side of tongue (at junction between ant 2/3 and post. 1/3)	Elevates tongue depresses palate

Nerve supply :

Motor: all muscles (extrinsic and intrinsic) are supplied by hypoglossal nerve except palatoglossus which is supplied by cranial part of accessory n through vagus.

Sensory:

-Ant. 2/3: General sensation:- lingual nerve

taste sensation:- chorda tympani n.

Post. 1/3: general & taste sensation by glossopharyngeal.n

-Most lower part of pharyngeal part: by vagus n

N.B.:- vallate papilla are supplied by glossopharyngeal nerve

Blood supply :

Arterial supply:- Mainly by lingual artery

Venous drainage: it is drained by 2 veins.

1 -Deep lingual vein:

2-Dorsal lingual vein:

Both veins end in IJV

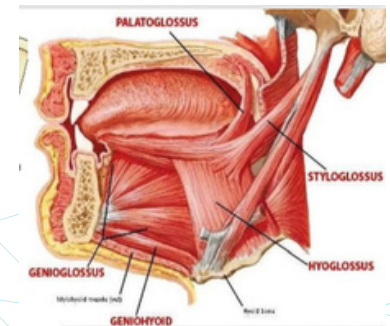
Lymphatics: it drains to

-Tip:- to Submental lymph nodes.

-Sides :- to Submandibular L.N. of the same side

-Central part :- to Submandibular L.N. of both sides

Posterior part:- to Deep cervical L.N



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SUBMANDIBULAR & SUBLINGUAL GLANDS



Lec 3	Submandibular gland		Sublingual gland
General	Type: It is a mixed Salivary gland (mucous and serous). Parts: 1. Large superficial part. 2.Small deep part. - The two parts are continues with each other at the posterior border of the mylohyoid muscle.		Site: It lies under the mucous membrane of the floor of the mouth forming sublingual fold and occupying the sublingual fossa of the mandible. Size: it is the smallest of the 3 salivary glands. Shape: almond shaped.
Anterior	Superficial	Deep	-----
	to the mental foramen, it overlaps the anterior belly of digastric	-----	
Posterior	to the angle of mandible, it is separated from the parotid gland by the stylomandibular ligament.	-----	-----
Above	mylohyoid line of mandible.	Lingual nerve	Superiorly: mucous membrane of the floor of the mouth.
Below	it overlaps the intermediate tendon digastric.	Hypoglossal nerve and vena commitants	Inferiorly: mylohyoid muscle.
Latral	Submandibular fossa of mandible.-Facial artery,Insertion of medial pterygoid muscle. inferolateral: (1) Skin.(2) superficial fascia containing platysma and cervical branch of facial nerve.(3)deep fascia.(4) Submandibular lymph nodes.(5) Anterior Facial vein.	Mylohyoid muscle (Laterally).	Laterally: sublingual fossa of mandible.
medial	anterior part is related to mylohyoid muscle, middle part is related to hyoglossus muscle, posterior Part is related to:Posterior belly of digastric. ,Stylohyoid muscle and stylohyoid ligament.	Hyoglossus muscle	genioglossus muscle separated from it by the lingual erve and submandibular duct.

OESOPHAGUS



Lec6		oesophagus (in the neck)	oesophagus (in the thorax)
Relation	Anterior	the trachea the recurrent laryngeal nerves	trachea , left recurrent laryngeal nerve , left main bronchus, the pericardium ,left atrium
	Posterior	the vertebral column the vertebral column	the vertebral column the thoracic duct the descending thoracic aorta
	Laterally	the lobes of the thyroid gland	Right side: the pleura the terminal part of the azygos vein Left side: the pleura the aortic arc
Blood.S		A. S. : the inferior thyroid artery,descending thoracic aorta.<. gastric artery V.D.:- Inferior thyroid vein ,azygos v. <. gastric vein	
Lymph.D		Deep cervical L.N. , mediastinal L.Ns & coeliac L.Ns	
Nerve .S		parasympathetic and sympathetic ,fibers via the vagi and sympathetic trunks that form oesophageal plexus	

Constrictions:-

1-At Pharyngo oesophageal junction

approximately 15 cm
from the incisor teeth

2-At Aortic arch

22.5 cm
from the incisor teeth

3-At left main bronchus

27.5 cm
from the incisor teeth

4-At diaphragm

40 cm
from the incisor teet

STOMACH

Lec6	Pyloric orifice	Cardiac orifice	Rt. (lesser curvature)	Lt (greater curvature)	anterior (antero superior)	Posterior (postero inferior)
Relation	Ant. quadrated lobe of liver Post.: neck of pancreas	Ant.: it lobe of liver ant. gastric n. Post.: diaphragm post. gastric.n	attach to lesser omentum with: Rt. & Lt. gastric vessels () 2 layer of omentu	-gastrophrenic lig. -gastrosplenic lig. -greater omentum with: Lt & Rt. gastroepiploic vessels () 2 ant. layers of omentum	Lt part: -diaphragm. Lt lung & pleura -lt7, 8 ribs & costal cartilages. Rt part: -Lt lobe of liver. Intermediate part: -ant. abdominal wall	stomach bed: •Lt crus of diaphragm. •spleen. •Lt kidney & suprarenal gland. •body of pancreas & splenic art. •transverse colon & mesocolon. •Lt colic flexure.
Blood.S	arterial supply: 1-Lt gastric art. 2-Rt gastric art. 3-Lt gastro-epiploic art. 4-Rt gastro-epiploic art. 5-Short gastric art Venous drainage: The left and right gastric veins. The short gastric veins and the left gastroepiploic veins. The right gastroepiploic vein.					
Lymph.D	1.the left and right gastric nodes, 2.the left and right gastroepiploic nodes, 3.the short gastric nodes. All lymph from the stomach passes to the celiac nodes					
Nerve .S	sympathetic: •from T6- 10 segments of spinal cord parasympathetic: •from 2 vagi that continue as 2 gastric nerves.					

DUODENUM

Lec 8		1st part	2nd part	3rd part	4th part
Relation	Anterior	The quadrate lobe of the liver and the gallbladder	The fundus of the gallbladder and the right lobe of the liver, the transverse colon, and the coils of the small intestine	The root of the mesentery of the small intestine, the superior mesenteric vessels (contained within it), and coils of jejunum	The beginning of the root of the mesentery and coils of jejunum
	Posterior	The lesser sac (first inch only), the gastroduodenal artery, the bile duct and portal vein, and the inferior vena cava.	The hilum of the right kidney and the right ureter	The right ureter, the right psoas muscle, the inferior vena cava, and the aorta	The left margin of the aorta and the medial border of the left psoas muscle
	Superiorly	The entrance into the lesser sac (the epiploic foramen)	Laterally The ascending colon, the right colic flexure, and the right lobe of the liver	The head of the pancreas	-----
	Inferiorly	The head of the pancreas	Medially The head of the pancreas, the bile duct, and the main pancreatic duct	Coils of jejunum	-----
Blood.S		A.S: upper half is -> superior pancreaticoduodenal artery, a branch of the gastroduodenal artery. lower half -> the inferior pancreaticoduodenal artery, a branch of the superior mesenteric artery		V.D: the superior pancreaticoduodenal vein drains into the portal vein The inferior vein joins the superior mesenteric vein	
Lymph.D		upward via pancreaticoduodenal nodes -> gastroduodenal nodes -> celiac nodes		Downward via pancreaticoduodenal nodes -> superior mesenteric nodes	
Nerve .S		sympathetic -> the celiac and superior mesenteric plexuses		parasympathetic -> (vagus) nerves	

JEJUNUM AND ILEUM

Lec8		jejunum	ileum
General		wider bore, thicker walled, and redder than the ileum. The jejunal wall feels thicker because the plicae circulares are larger, more numerous, and closely set in the jejunum	plicae circulares : they are smaller and more widely separated and in the lower part they are absent. (upper part)
mesentery	Attachment	posterior abdominal wall above and to the left of the aorta	attached below and to the right of the aorta
	vessels	one or two arcades, with long and infrequent branches passing to the intestinal wall	numerous short terminal vessels that arise from a series of three or four or even more arcades
	fat distribution	deposited near the root and is scanty near the intestinal wall.	deposited throughout so that it extends from the root to the intestinal wall
Blood.S		branches of the superior mesenteric artery The intestinal branches They anastomose with one another to form a series of arcades. The lowest part of the ileum is also supplied by the ileocolic artery	branches of the superior mesenteric artery and drain into the superior mesenteric vein V.D:
Lymph.D		The lymph vessels pass through many intermediate mesenteric nodes and finally reach the superior mesenteric nodes, which are situated around the origin of the superior mesenteric artery	
Nerve .S		sympathetic and parasympathetic (vagus) nerves from the superior mesenteric plexus	

THE LARGE INTESTINE

Lec 9		Cecum	Appendix	Ascending	Transverse	Descending	Sigmoid
Relation	Anterior	Coils of small intestine, sometimes part of the greater omentum, and the anterior abdominal wall in the right iliac region	-----	Coils of small intestine, the greater omentum, and the anterior abdominal wall	greater omentum and the anterior abdominal wall (umbilical and hypogastric regions)	Coils of small intestine, the greater omentum, and the anterior abdominal wall	In the male , the urinary bladder; in the female , the posterior surface of the uterus and the upper part of vagina
	Posterior	The psoas and the iliacus muscles, the femoral nerve, and the lateral cutaneous nerve of the thigh	-----	iliacus, iliac crest, quadratus lumborum, origin of transversus abdominis muscle, and lower pole of the right kidney.	the second part of the duodenum, the head of the pancreas, and the coils of the jejunum and ileum	lateral border of the left kidney, origin of the transversus abdominis muscle, quadratus lumborum, iliac crest, iliacus, and left psoas. iliohypogastric and the ilioinguinal nerves, the lateral cutaneous nerve of the thigh, and femoral nerve also lie posteriorly	The rectum and the sacrum
	Medial	The appendix arises from the cecum on its medial side					
Blood.S		Anterior and posterior cecal.a form the ileocolic.a a branch of the superior mesenteric.a The veins correspond to the arteries and drain into the superior mesenteric.v	The appendicular artery is a branch of the posterior cecal artery The appendicular vein drains into the posterior cecal vein	ileocolic and right colic branches of the superior mesenteric.a supply this area. veins correspond to the arteries and drain into the superior mesenteric.v	The proximal two thirds are supplied by the middle colic.a, a branch of the superior mesenteric.a. The distal third is supplied by the left colic.a, a branch of inferior mesenteric.a Veins correspond to the arteries and drain into the superior and inferior mesenteric.v.	left colic and the sigmoid branches of the inferior mesenteric.a supply this area. veins correspond to the arteries and drain into inferior mesenteric.v	Sigmoid branches of the inferior mesenteric.a veins drain into the inferior mesenteric vein, which joins the portal venous system
Lymph.D		several mesenteric nodes and finally reach the superior mesenteric nodes	1 or 2 nodes lying in the mesoappendix and then eventually into the superior mesenteric nodes	lymph nodes lying along the course of the colic blood vessels and ultimately reach the superior mesenteric nodes	proximal two thirds drain into the colic nodes and then into the superior mesenteric nodes; the distal third drains into the colic nodes and then into inferior mesenteric.n	drains into the colic lymph nodes and the inferior mesenteric nodes around the origin of the inferior mesenteric.a	drains into nodes along the course of the sigmoid arteries; from these nodes, lymph travels to inferior mesenteric nodes
Nerve .S		sympathetic and parasympathetic (vagus) nerves form the superior mesenteric plexus	-----	-----	-----	-----	The sympathetic and parasympathetic nerves from the inferior hypogastric plexus