

# Arteries

<p><b>Palate</b></p> <ol style="list-style-type: none"> <li>Greater Palatine from maxillary</li> <li>ascending Palatine from facial</li> <li>ascending pharyngeal</li> </ol>	<p><b>Tongue</b></p> <ol style="list-style-type: none"> <li>lingual Artery</li> <li>ascending pharyngeal</li> <li>tonsillar branch of facial Artery</li> </ol>	<p><b>Glands</b></p> <p>* The Parotid Gland encloses the external carotid artery</p>	<p><b>pharynx</b></p> <ol style="list-style-type: none"> <li>ascending pharyngeal</li> <li>tonsillar branch of facial</li> <li>branches of maxillary + lingual</li> </ol>
<p><b>Palatine tonsils</b></p> <p>* Tonsillar branch of facial Artery</p>	<p><b>esophagus</b></p> <ul style="list-style-type: none"> <li>1/3 → inferior thyroid Artery.</li> <li>2/3 → branches of descending thoracic</li> <li>3/3 → left Gastric Artery</li> </ul>	<p><b>Stomach</b></p> <ul style="list-style-type: none"> <li>* derived from celiac trunk (branch from Abdomin Aorta T12-L1)</li> <li>* left gastric Artery → lower third of esophagus + upper right part of stomach.</li> <li>* right gastric → branch of hepatic Artery → supplies lower part of right stomach</li> <li>* Short gastric arteries → from "splenic artery" in gastrosplenic ligament → fundus</li> <li>* left gastroepiploic → from splenic → upper part of Greater curvature.</li> <li>* right gastroepiploic → from gastroduodenal (a branch of hepatic Artery) → lower part of Greater curvature.</li> </ul>	<p><b>Small intestine</b></p> <ul style="list-style-type: none"> <li>* upper 1/2 of duodenum             <ul style="list-style-type: none"> <li>↳ superior pancreaticoduodenal                 <ul style="list-style-type: none"> <li>↳ which is a branch of gastroduodenal</li> <li>↳ which is a branch of hepatic</li> </ul> </li> </ul> </li> <li>* lower 1/2             <ul style="list-style-type: none"> <li>↳ inferior pancreaticoduodenal</li> <li>↳ superior mesenteric artery</li> </ul> </li> </ul>

"إِنَّ أَلْفِي قَزِيْفَةٌ مِنْ كَلَامٍ، لَمْ تَسَاوِي قَزِيْفَةً وَاحِدَةً مِنْ حَدِيدٍ" - د. عبدالعزيز

## Nerves

- \* all muscles of the tongue: hypoglossal nerve, except: Palatoglossus = vagus + access.
- \* all muscles of the soft palate: pharyngeal plexus, except: Tensor veli palatini: nerve to medial pterygoid from mandibular.
- \* The 3 constrictor muscles of pharynx: pharyngeal plexus.
- \* stylopharyngeus: Glossopharyngeal
- \* palatopharyngeus + salpingopharyngeus: pharyngeal plexus.
- \* Parotid Gland: Glossopharyngeal → tympanic → lesser occipital → petrosal → otic ganglion → auriculotemporal.
- \* Submandibular + lingual: facial → chorda tympani → submandibular ganglion → postganglionic pass to the Gland directly

# veins

## Palate

"not mentioned"

## tongue

\* internal jugular vein.

## Glands

\* parotid Gland encloses the retromandibular vein

## pharynx

"not mentioned"

## Stomach

\* left + right gastric veins  
↓  
portal vein

\* short gastric + left gastroepiploic  
↓  
splenic vein

\* right gastroepiploic  
↓  
superior mesenteric + splenic = portal vein

## esophagus

1/3 → inferior thyroid vein

2/3 → azygos vein

3/3 → left gastric vein  
↓  
portal vein.

"يا أيها الناس لمن وعد الله حق فلا تغربنكم أمانة التبا ولا يغربنكم بالله التزود"

## small intestine

\* duodenum:  
- superior pancreatico → portal vein

- inferior pancreatico...  
↳ joins superior mesenteric vein  
↳ with the splenic = portal vein.

\* Jejunum + ileum

- All → superior mesenteric vein

## palatine tonsil

\* external palatine vein → joins the pharyngeal plexus

# nerve supply

## palate

\* Greater + lesser Palatine → maxillary  
\* nasopalatine → maxillary  
\* glossopharyngeal → supplies soft palate.

Motor: all muscles by hypoglossal, except palatoglossus: vagus access.

## tongue

\* Post 1/3: tast + sens.  
↳ Glossopharyngeal  
\* Ant 2/3: sens.: lingual.  
taste: chorda tymp. ↳ facial.

## Palatine tonsils

\* lesser palatine from maxillary.

## pharynx

\* nasopharynx: Maxillary  
\* oropharynx: Glossopharynx  
\* laryngopharynx: internal laryngeal branch of vagus.

## Stomach

\* sympathetic: celiac plexus (pain sensation)  
\* parasympathetic: vagus  
↳ secretomotor to Glands + motor to muscles  
\* pyloric sphincter: Motor → symp / inhibitory → vagus

## small intestine

\* duodenum:  
\* sympathetic  
\* parasympathetic:  
1. celiac plexus  
2. superior mesenteric plexus  
\* Jejunum + ileum  
1. symp + para (vagus)  
2. superior mesenteric plexus.

## esophagus

Parasymp → vagi  
symp → sympathetic + trunk

↓  
esophageal nerve plexus.

Cheek: buccal → Mandibular "sensory"  
"Motor" → buccal ↓ facial

Cont →

## Lymphatic drainage:

\* Tongue: \* Tip  $\rightarrow$  submental nodes

\* sides of Ant. 2/3  $\rightarrow$  Submandibular nodes + deep cervical LN

\* post. 1/3  $\rightarrow$  Deep cervical LN.

\* Palate: Deep cervical LN

\* Pharynx: Directly  $\rightarrow$  Deep cervical LN / Indirectly  $\rightarrow$  retropharyngeal or paratracheal LN  $\rightarrow$  cervical LN.

\* Palatine tonsils: upper deep cervical LN, just below + behind the angle of the mandible.

\* Esophagus: 1/3  $\rightarrow$  Deep cervical LN

2/3  $\rightarrow$  superior + post. mediastinal nodes.

3/3  $\rightarrow$  Celiac nodes.

\* Stomach: \* left + right gastric nodes \* left + right gastroepiploic nodes  
\* short gastric nodes \* All  $\rightarrow$  celiac nodes

\* Duodenum: \* drain up: pancreaticoduodenal nodes  $\rightarrow$  gastroduodenal  $\rightarrow$  celiac nodes.

\* drain down: pancreaticoduodenal  $\rightarrow$  superior mesenteric nodes  $\rightarrow$

\* Jejunum + ileum: through many intermediate mesenteric nodes finally reach the superior mesenteric nodes.