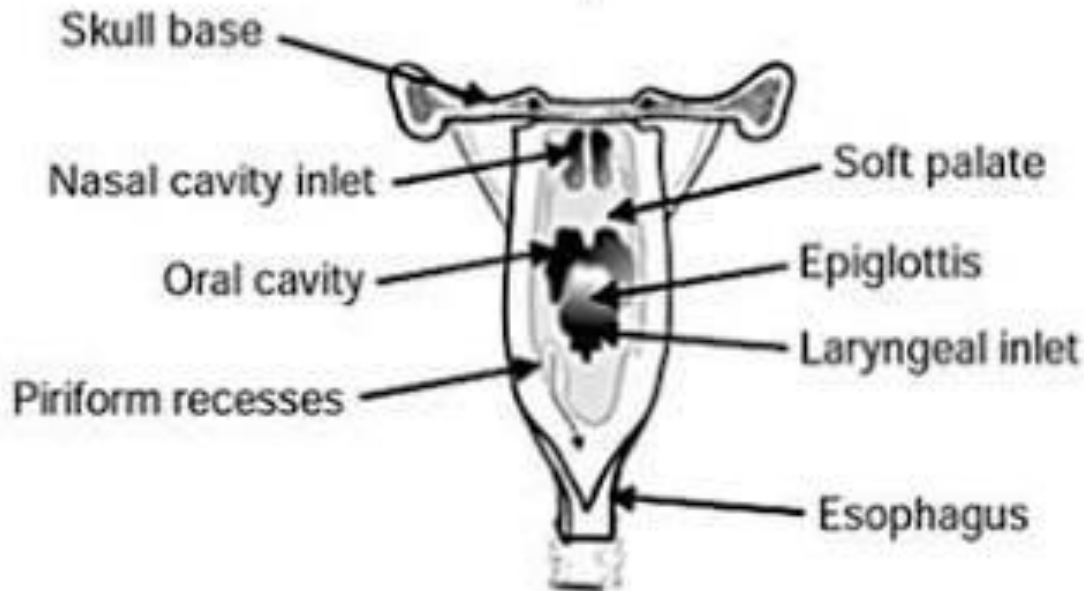
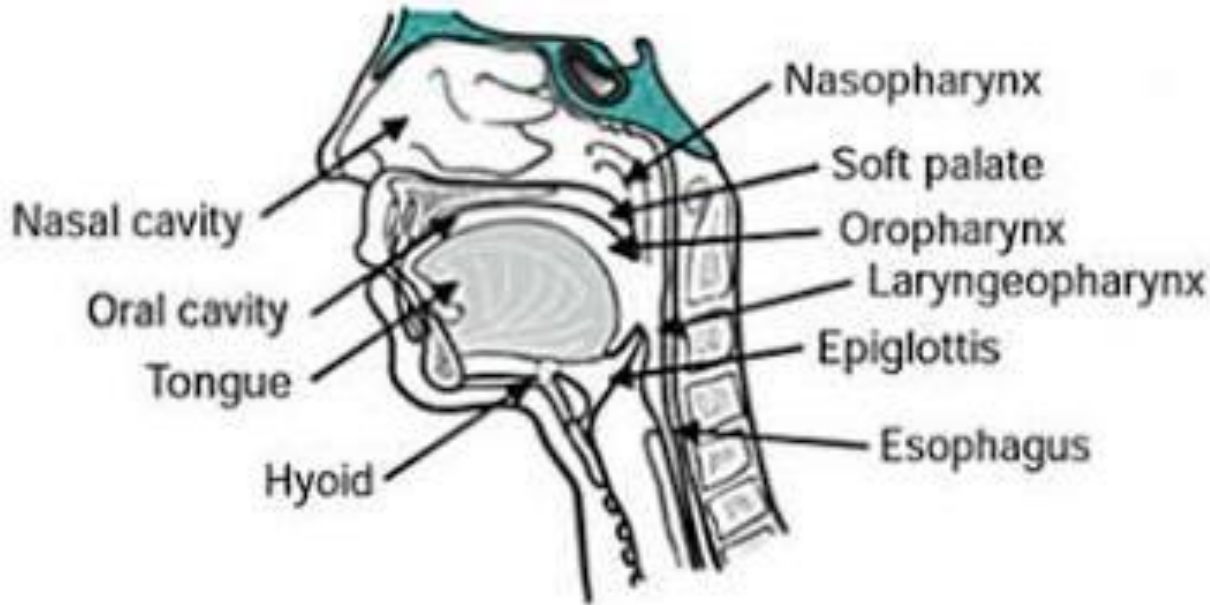


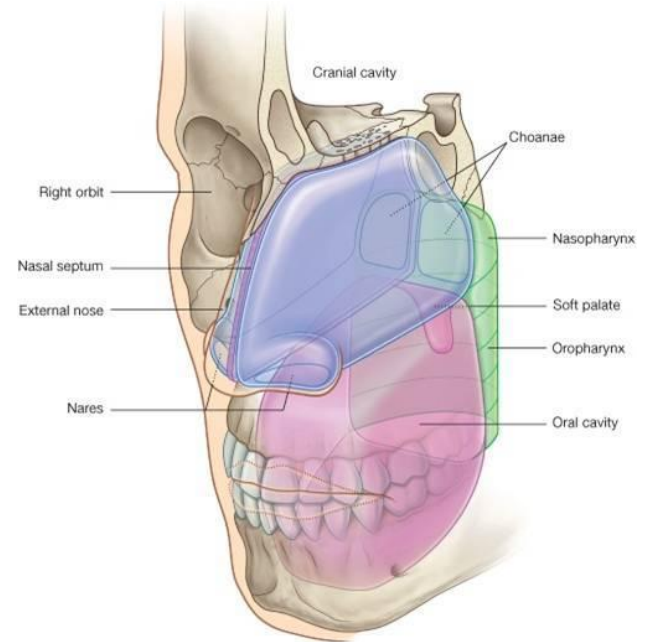
DIGESTIVE SYSTEM – UPPER GIT



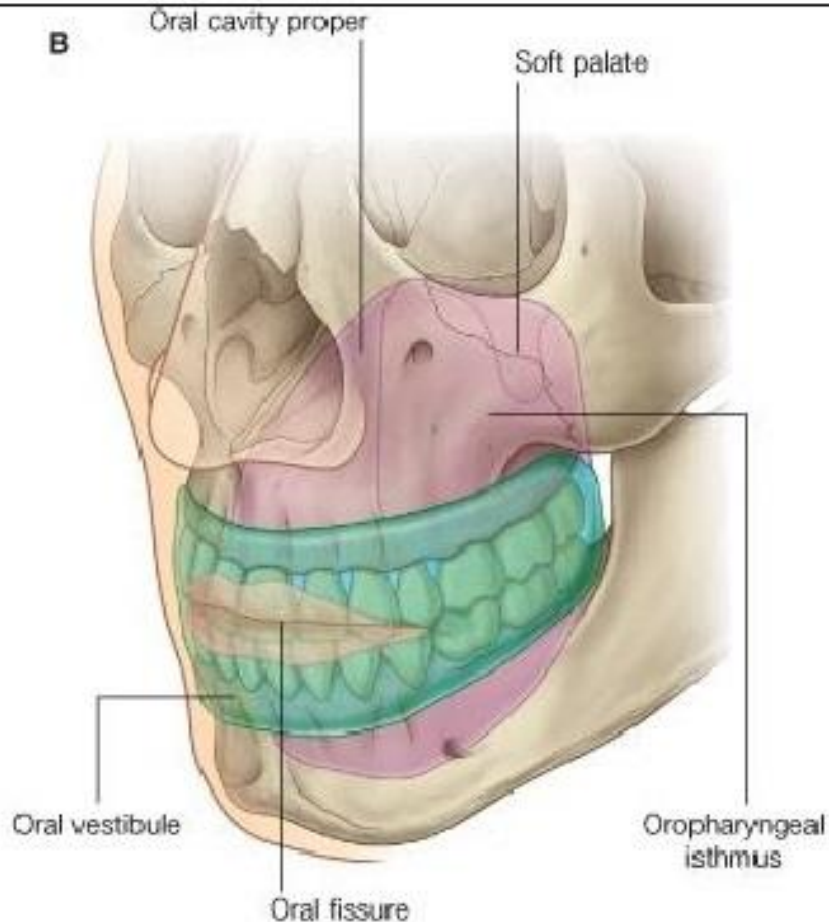
Department of Anatomy
Second Faculty of Medicine
Charles University

MUDr. Azzat Al-Redouan

Oral Cavity



Oral Vestibule and Oral cavity proper



Section 1 The Oral Cavity

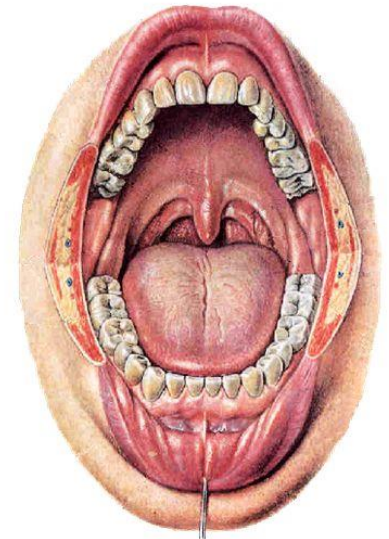
Consists of two parts

- Oral vestibule : between cheeks and lip and teeth
- Oral cavity proper: within arch of teeth

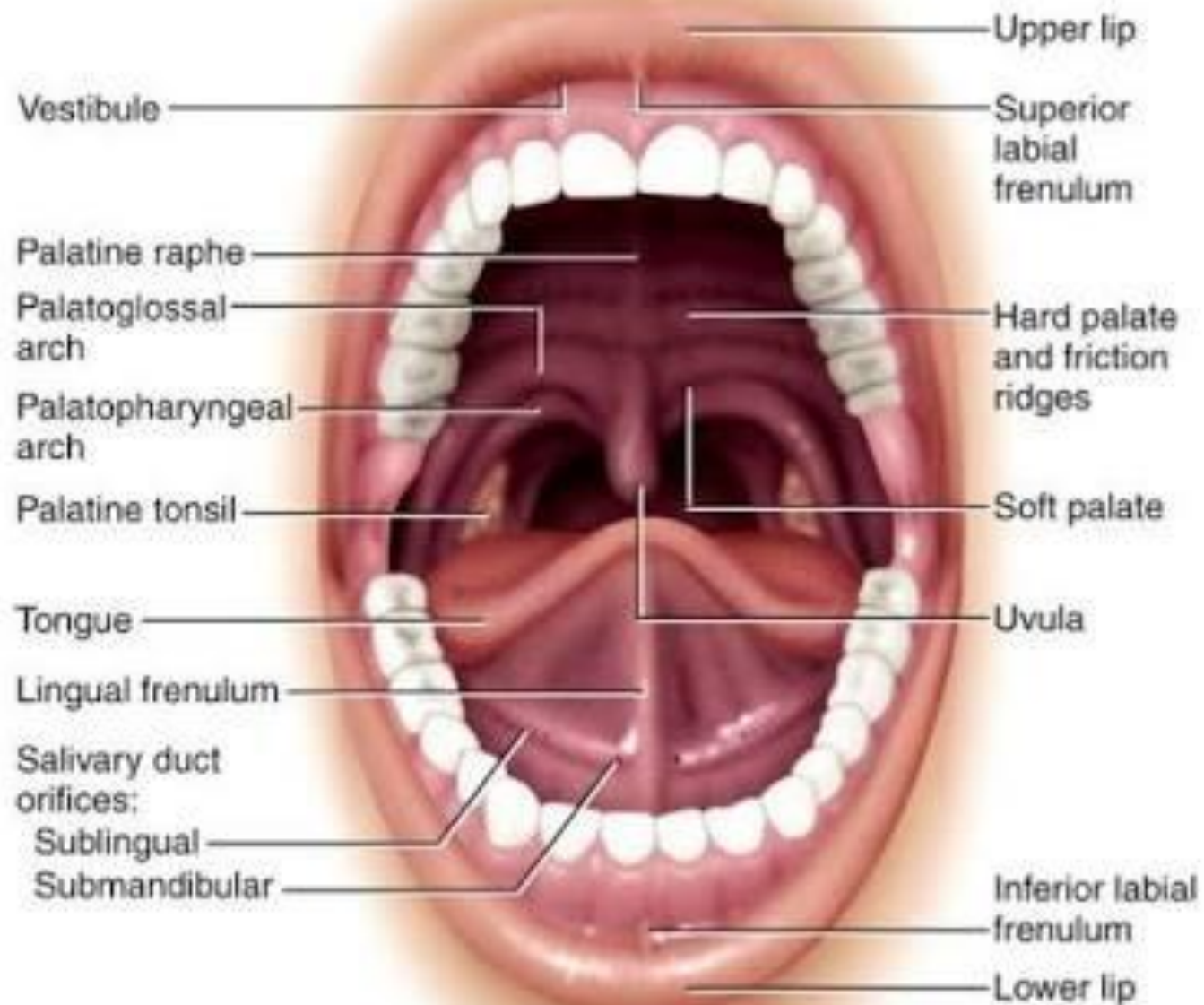
Oral vestibule leads, by the space behind the molar teeth, into the oral cavity proper

Boundaries

- Anterior and lateral: gum and teeth
- Posterior: **oropharyngeal isthmus**
- Roof: **palate**
- Floor: **tongue**, muscles and mucous membrane



Oral Cavity

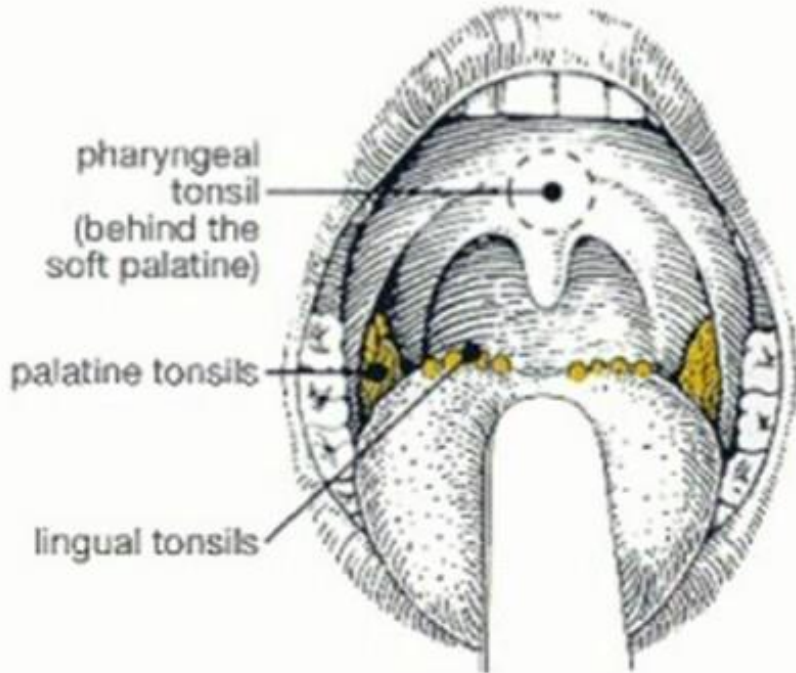


Oral Cavity

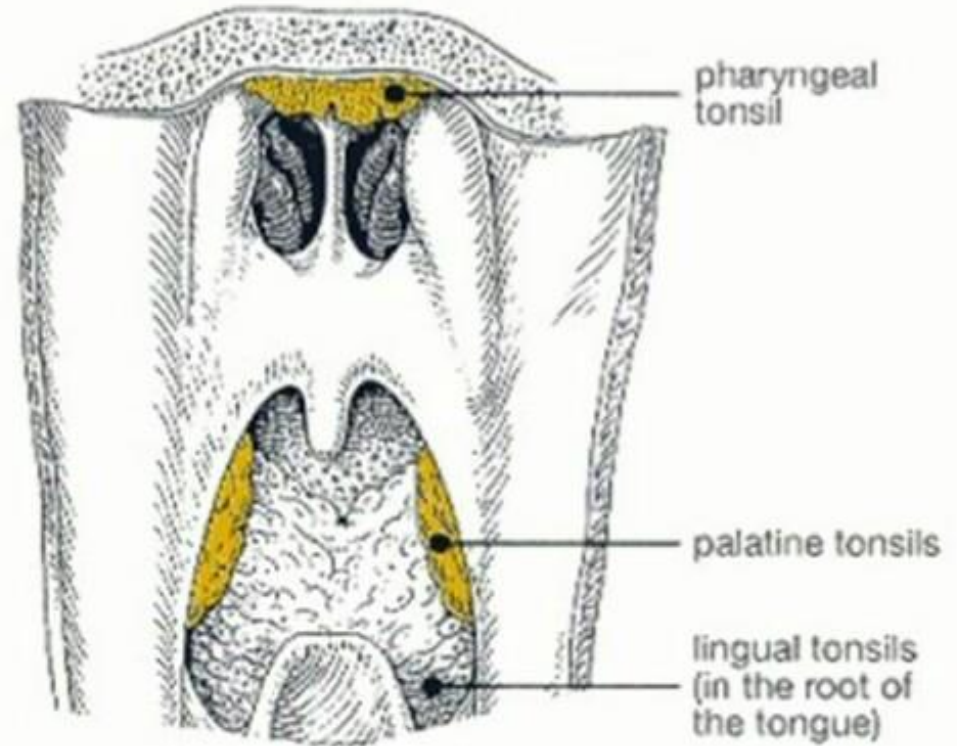


Waldeyer's Ring

FROM THE FRONT
-anterior view



FROM THE BACK
-posterior view

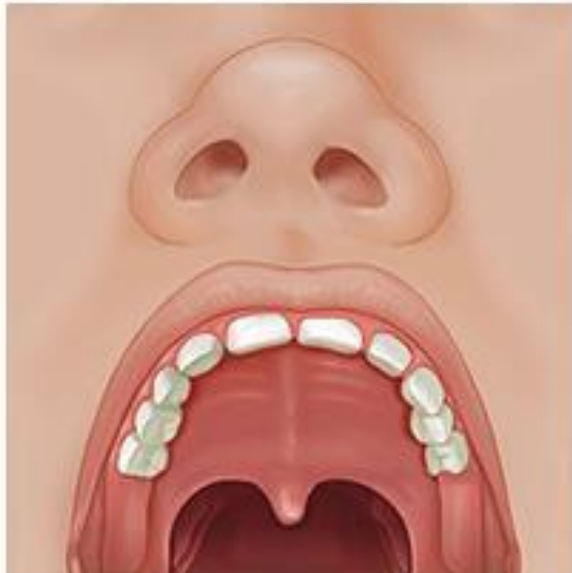




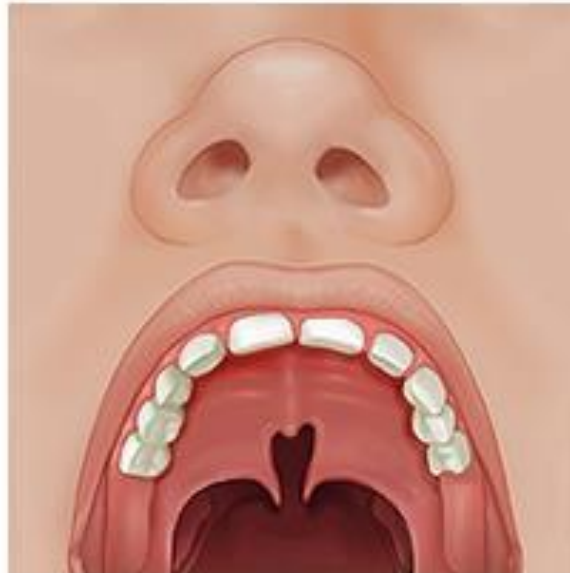
Frenulum injuries



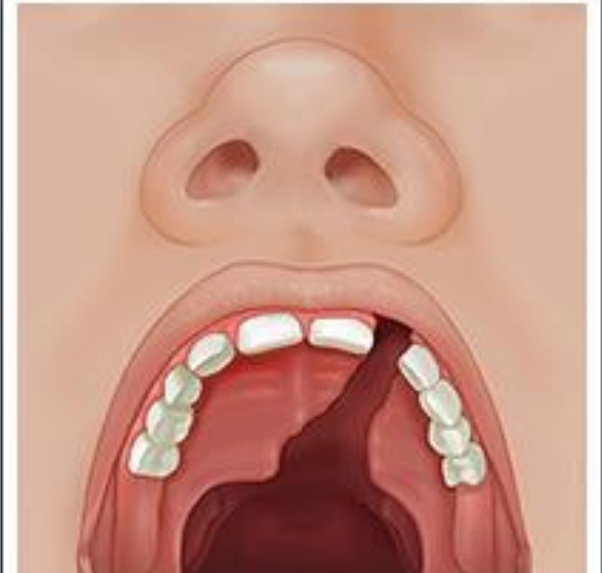
Cleft Palate Congenital Defect



Normal palate



Partial cleft palate



Complete cleft palate

Cleft Palate Congenital Defect

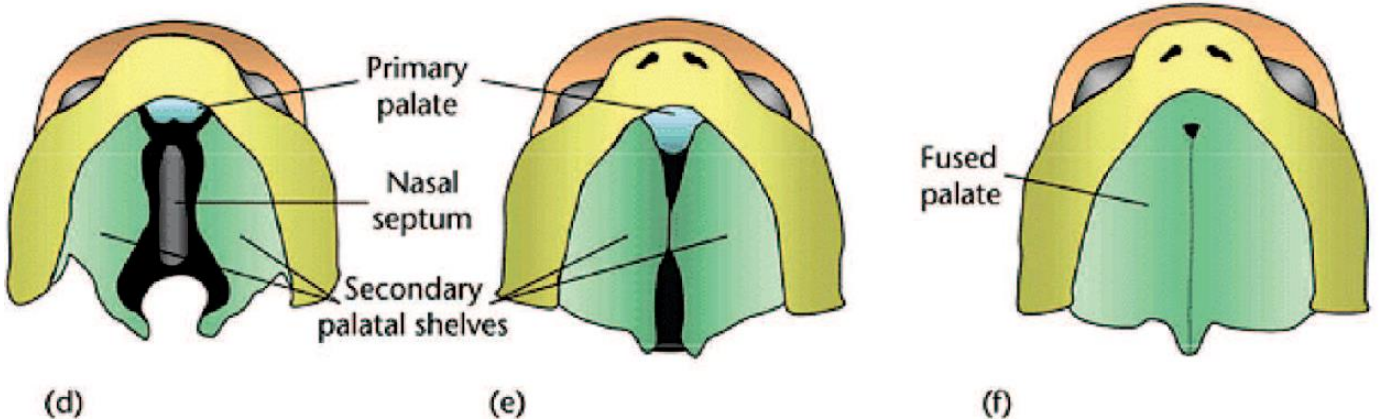
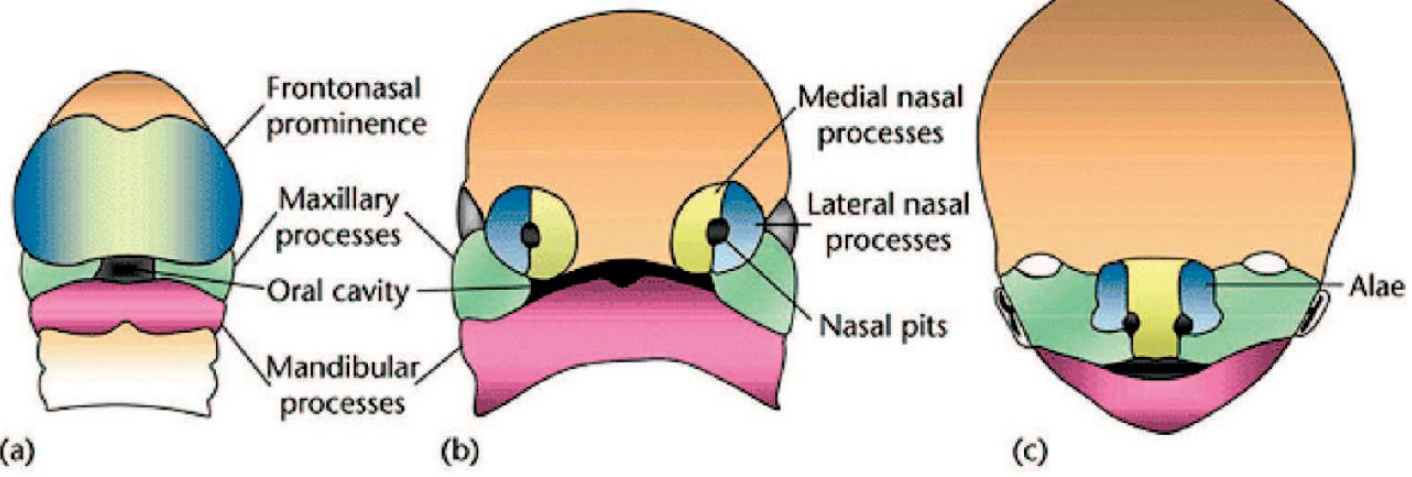
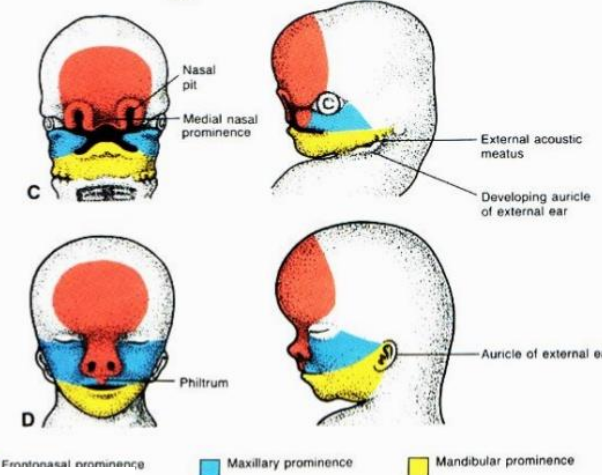
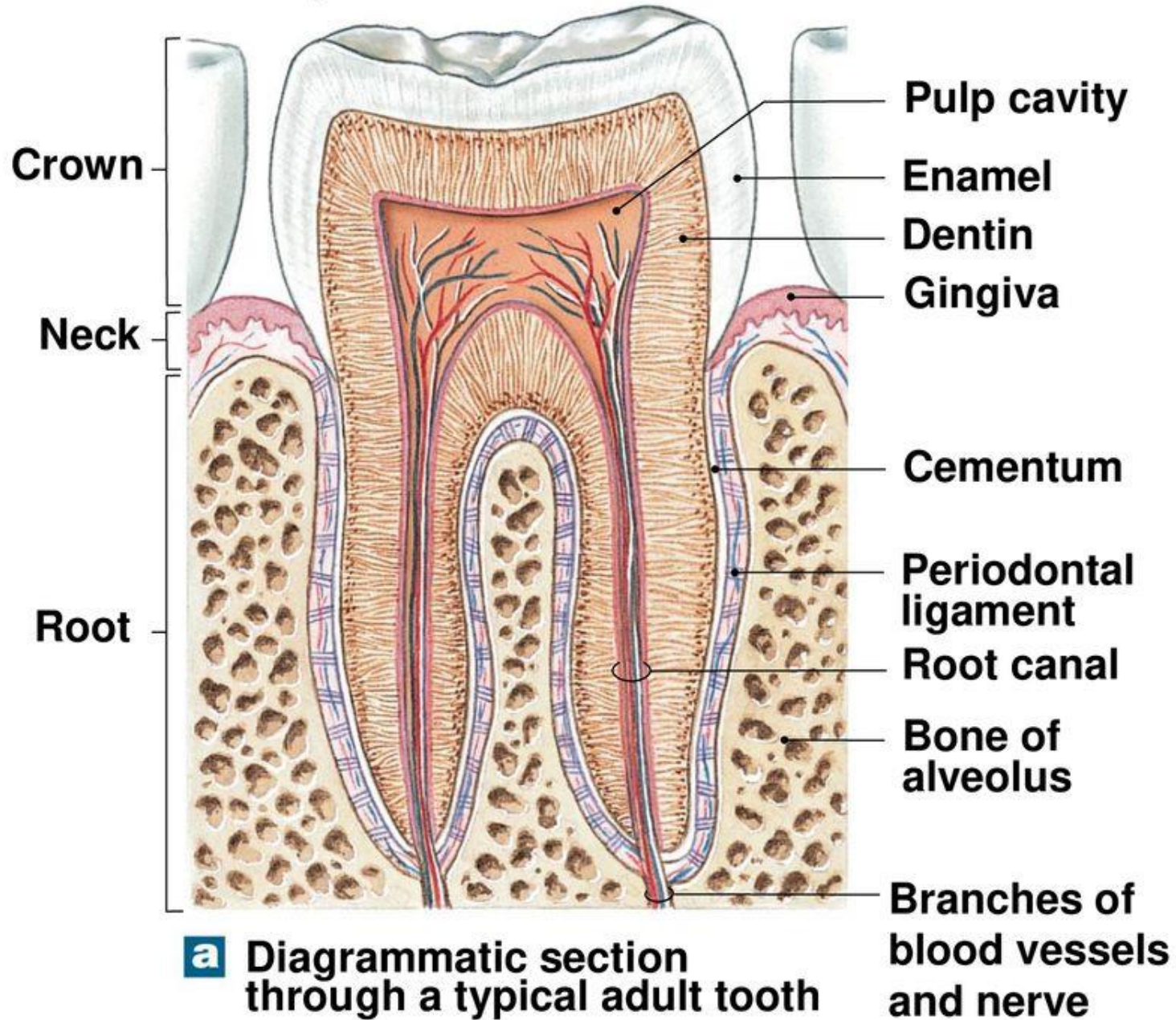
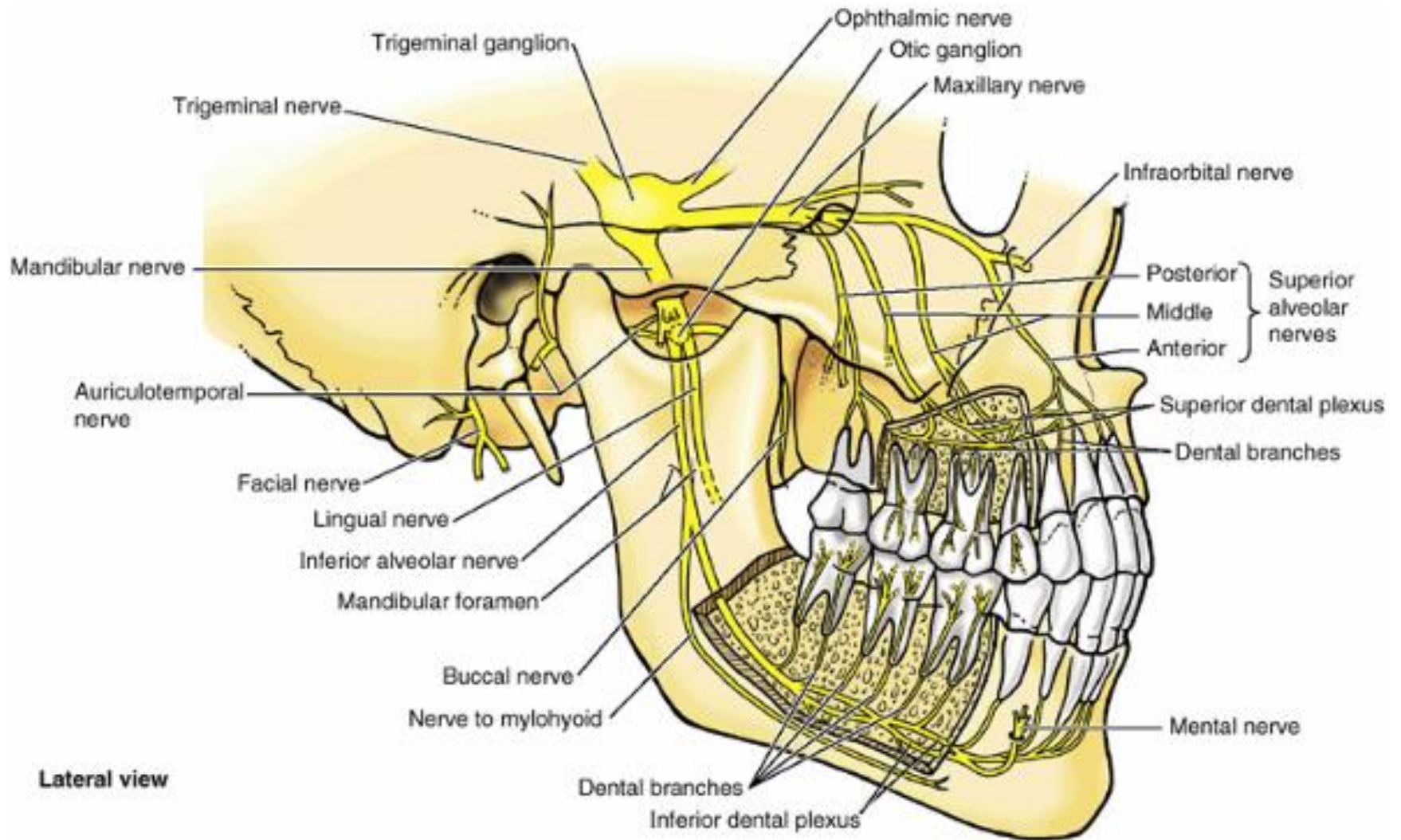


Figure 16-6a Teeth: Structural Components and Dental Succession.

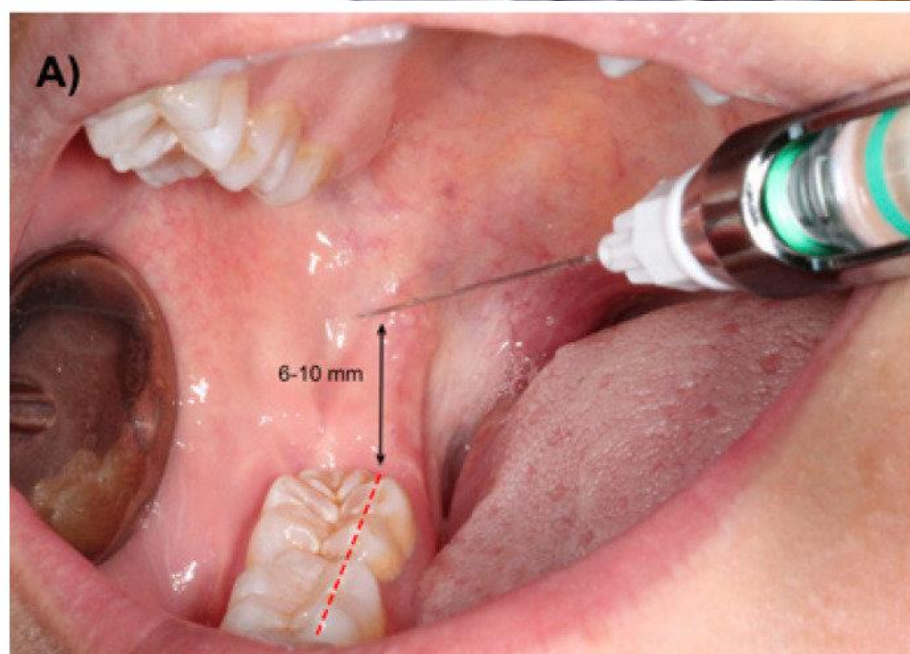
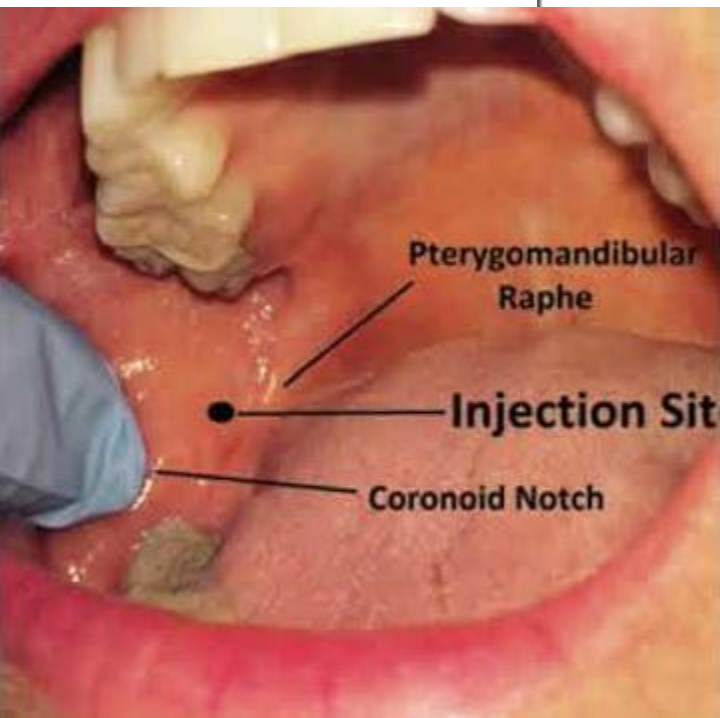
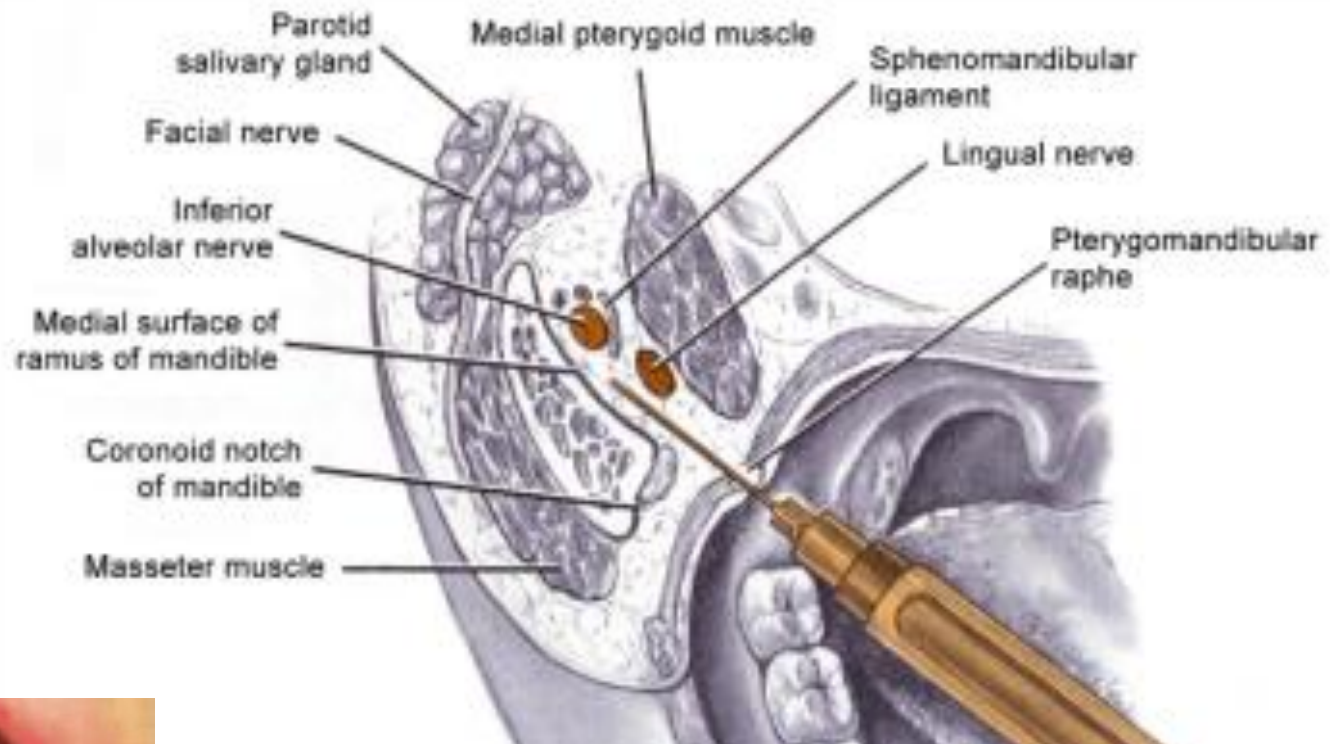


Teeth Innervation



Lateral view

Inferior Alveolar n. Block

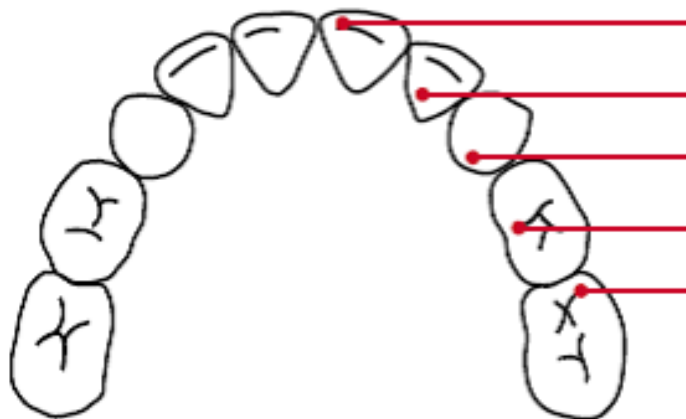


Teeth

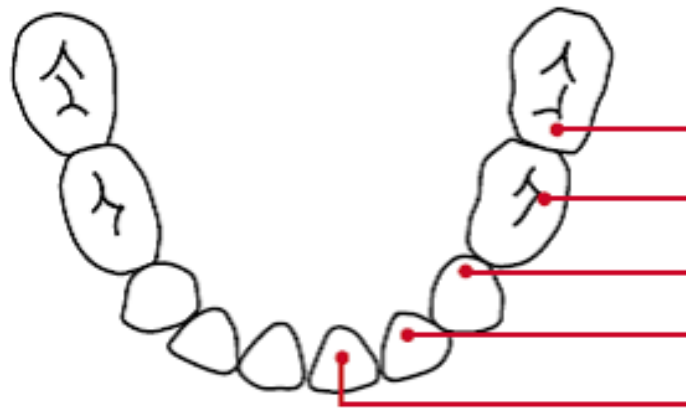


Growth Anatomy

Primary Teeth



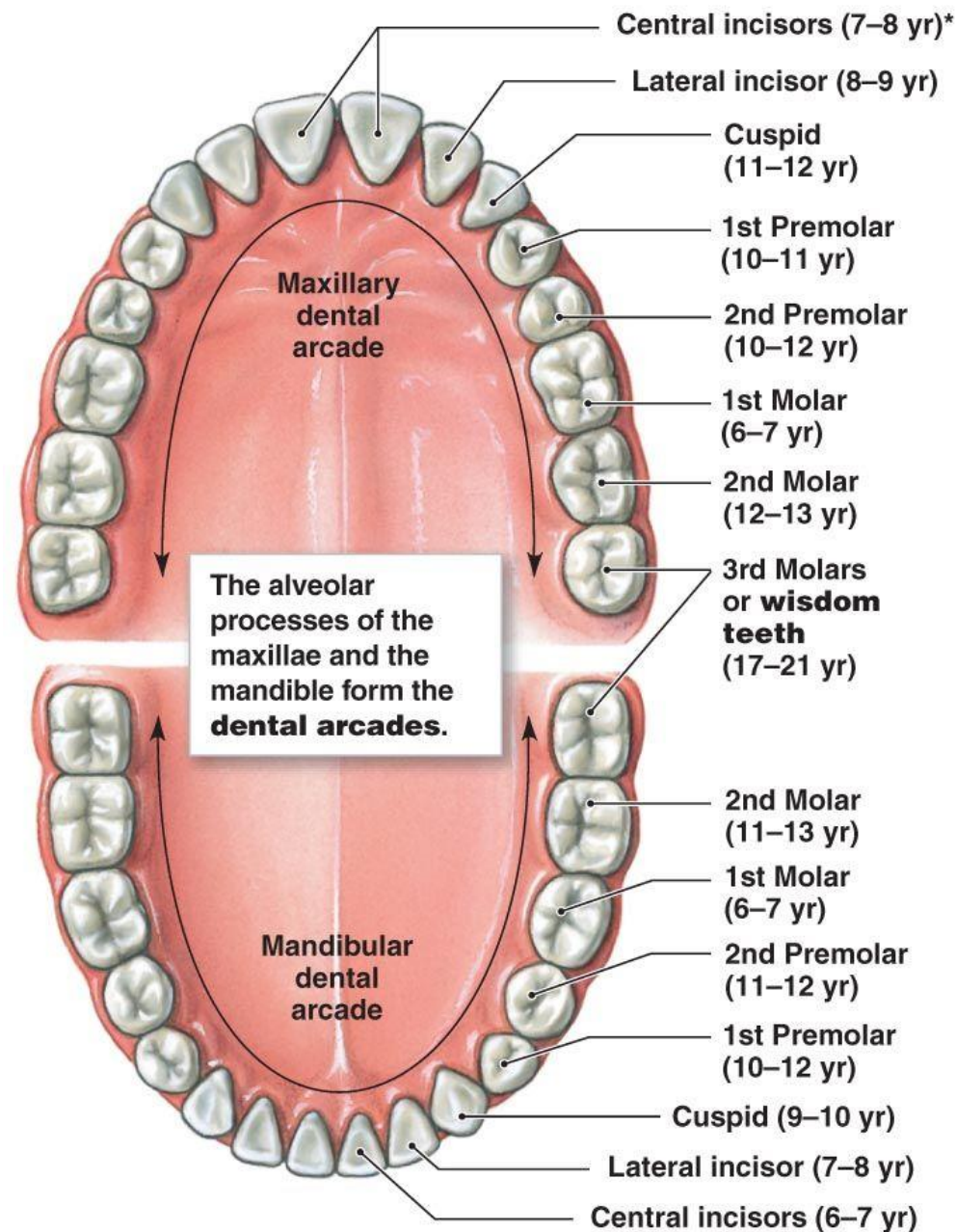
Upper Teeth	Erupt	Shed
Central Incisor	8-12 Months	6-7 Years
Lateral Incisor	9-13 Months	7-8 Years
Canine (Cuspid)	16-22 Months	10-12 Years
First Molar	13-19 Months	9-11 Years
Second Molar	25-33 Months	10-12 Years



Lower Teeth	Erupt	Shed
Second Molar	23-31 Months	10-12 Years
First Molar	14-18 Months	9-11 Years
Canine (Cuspid)	17-23 Months	9-12 Years
Lateral Incisor	10-16 Months	7-8 Years
Central Incisor	6-10 Months	6-7 Years

Growth Anatomy

The secondary dentition, or adult teeth



Adult teeth, upper and lower jaws

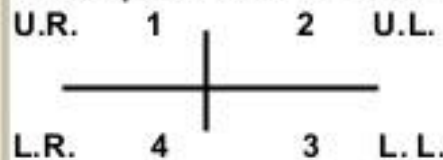
Teeth Formula

)The international numbering system (the two digit system-

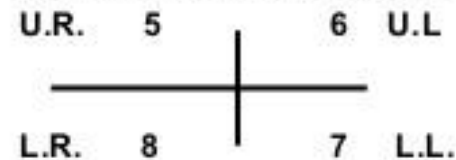
The teeth are designed by using two-digit systems:

- a. The **first digit** of the code is located at the left side of the number and indicates the quadrant.

In the permanent dentition.



In the deciduous dentition.



- b- The **second digit** is located at the right side of the number and indicates the number of the tooth in the quadrant.
The two digits should be pronounced separately.



Deciduous teeth

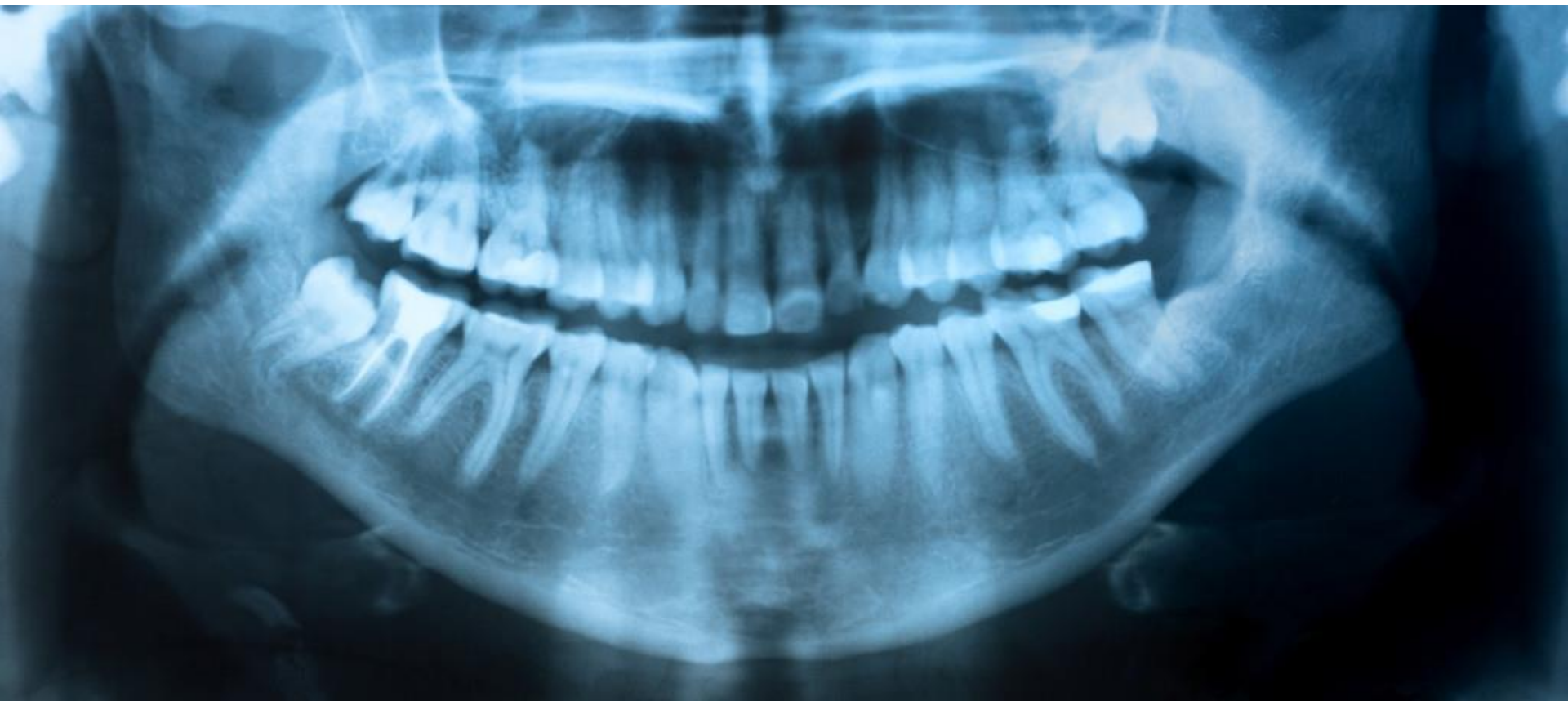


Adult Panorama X-Ray

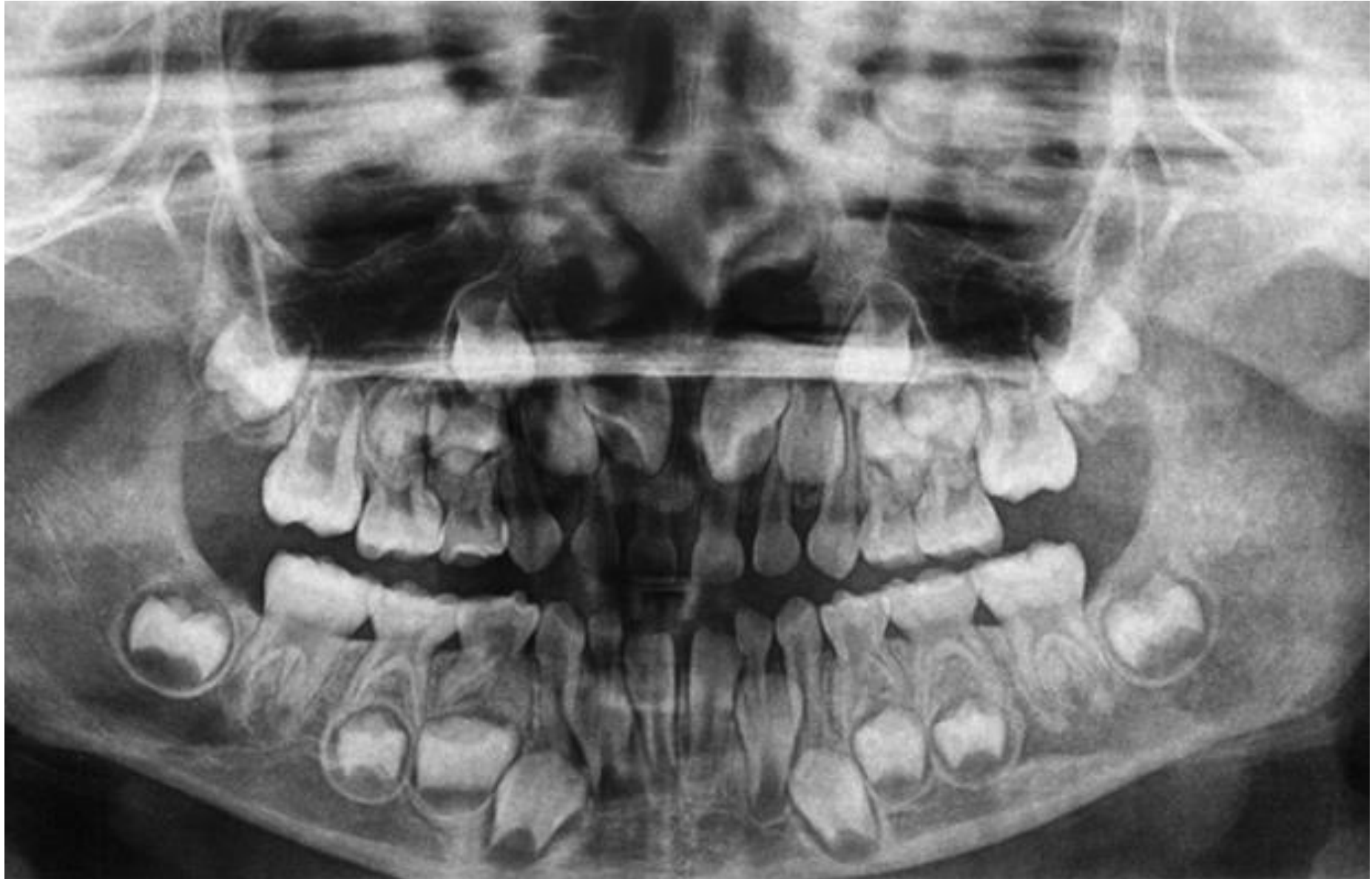


Adult Panorama X-Ray

Abnormal molar tooth

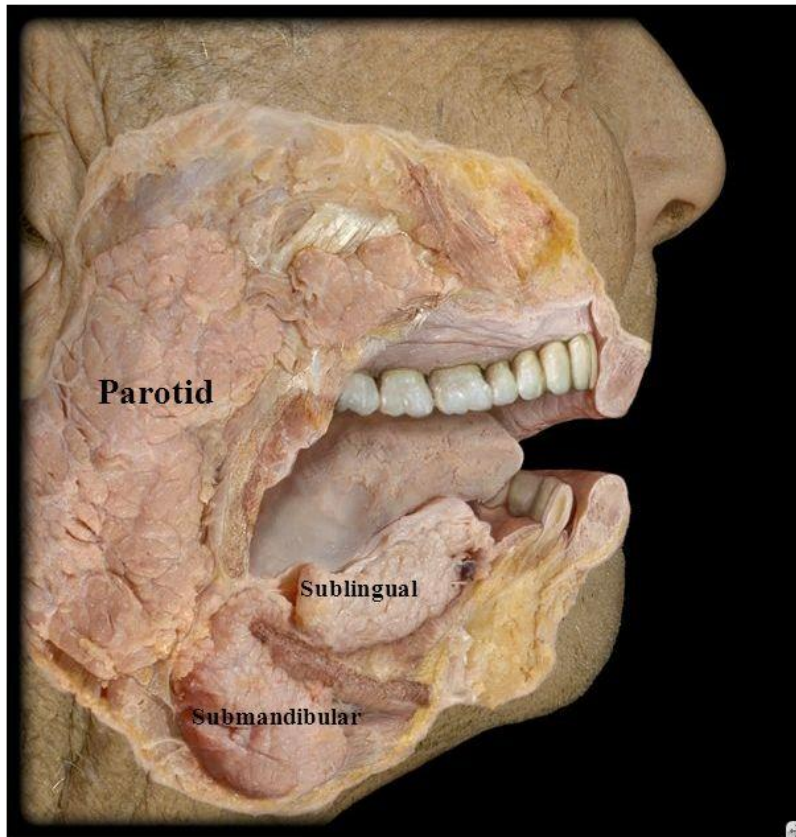


Child Panorama X-Ray



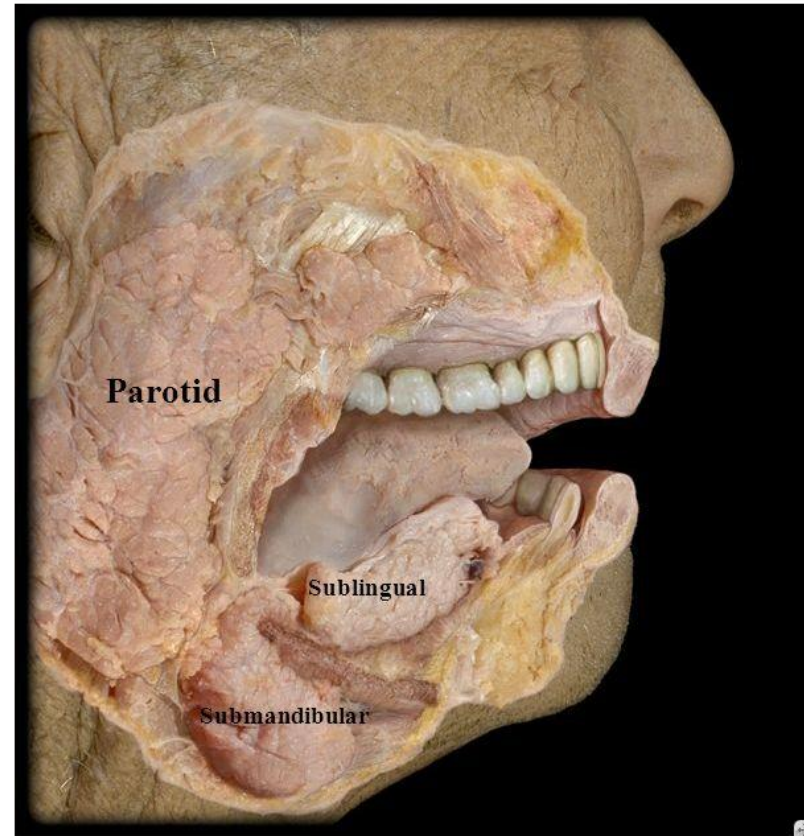
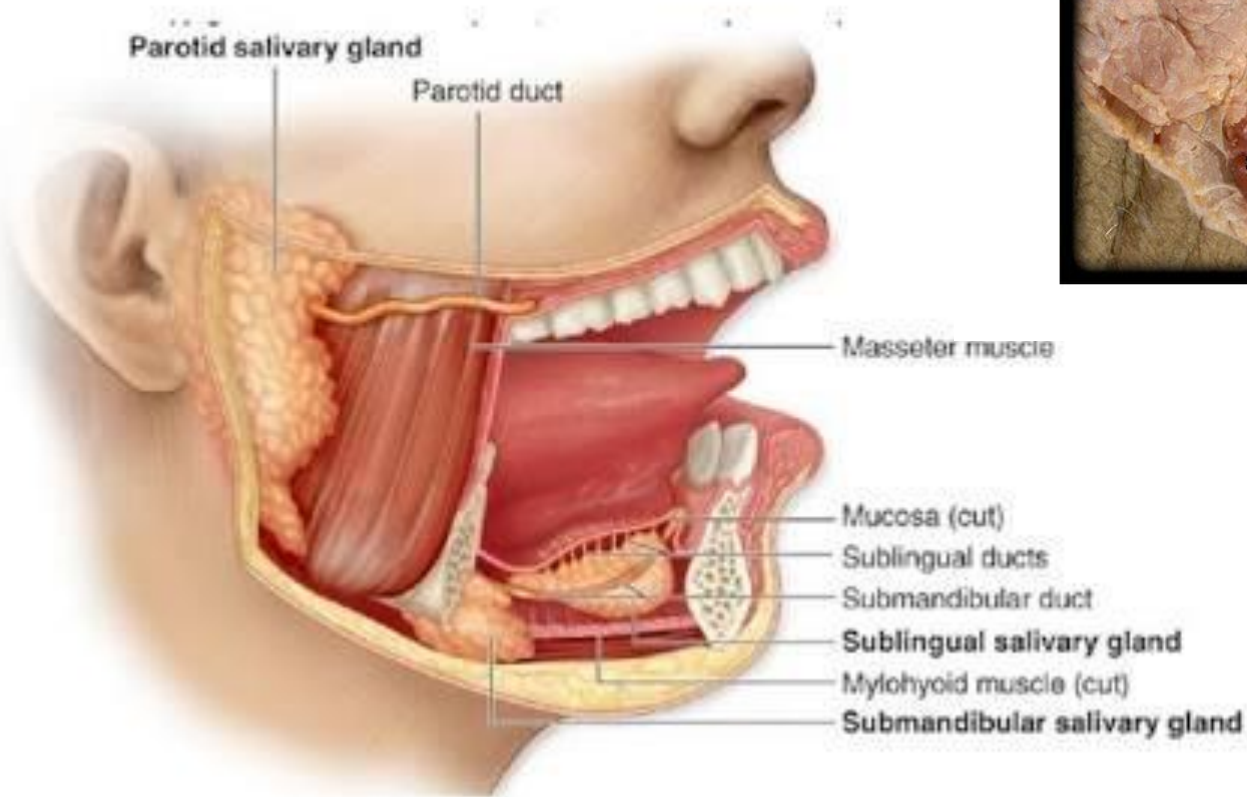
Child Panorama X-Ray





- Parotid gland secretes the enzyme **Salivary amylase**
- Submucosa layer of the tongue secretes **Lingual lipase**

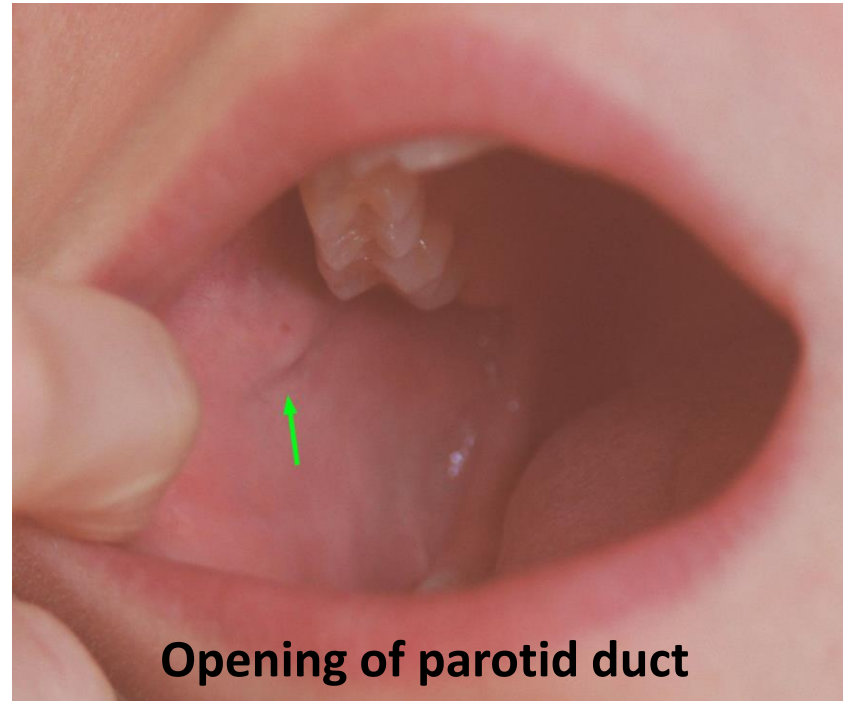
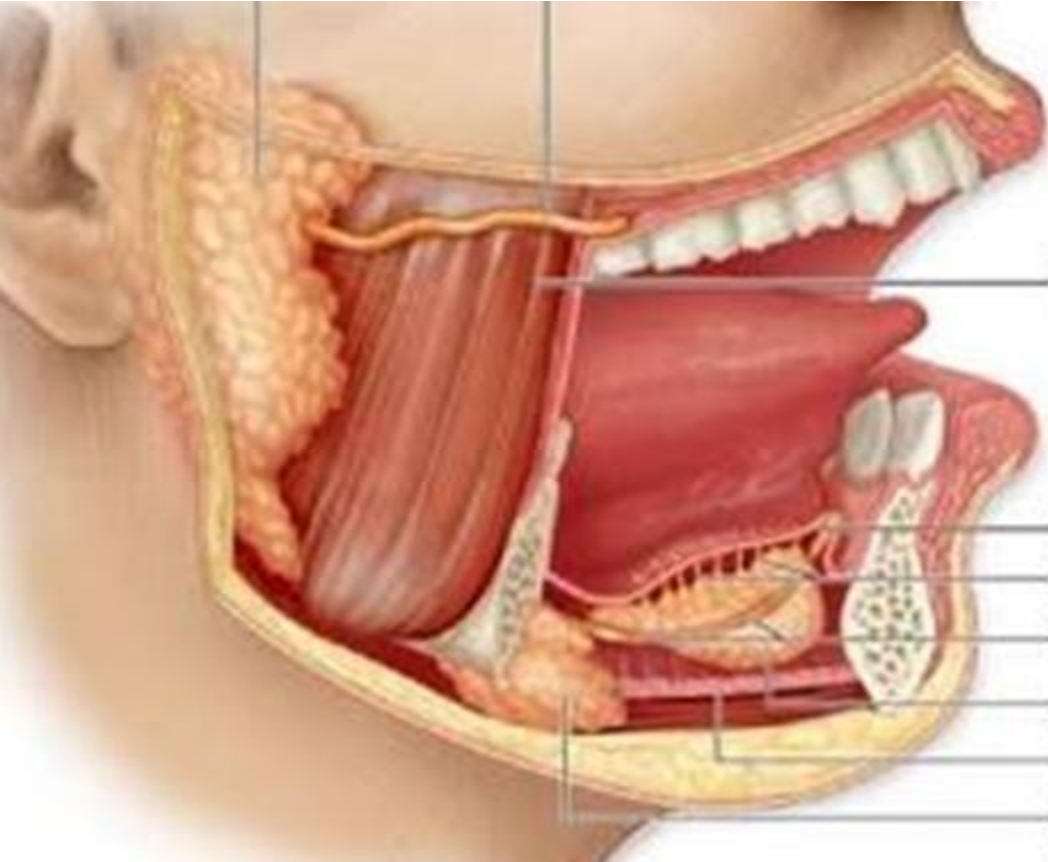
Salivary Glands



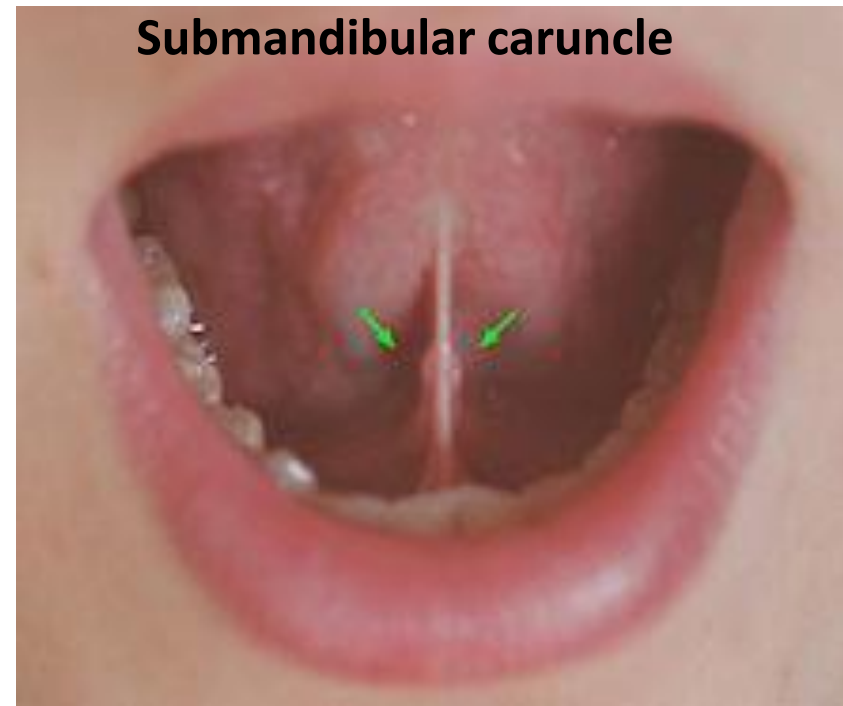
Topography



Duct Systems

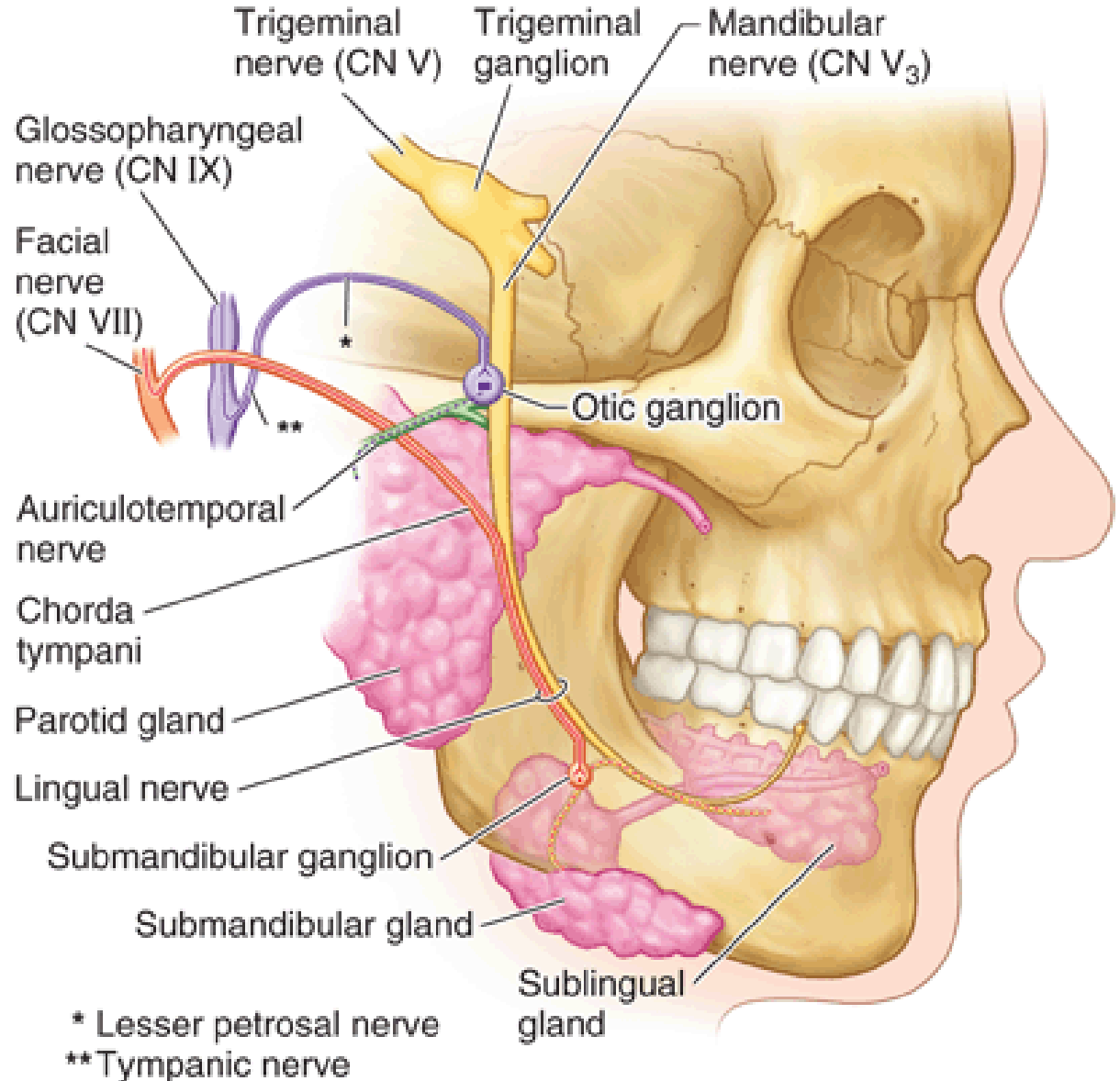


Opening of parotid duct



Submandibular caruncle

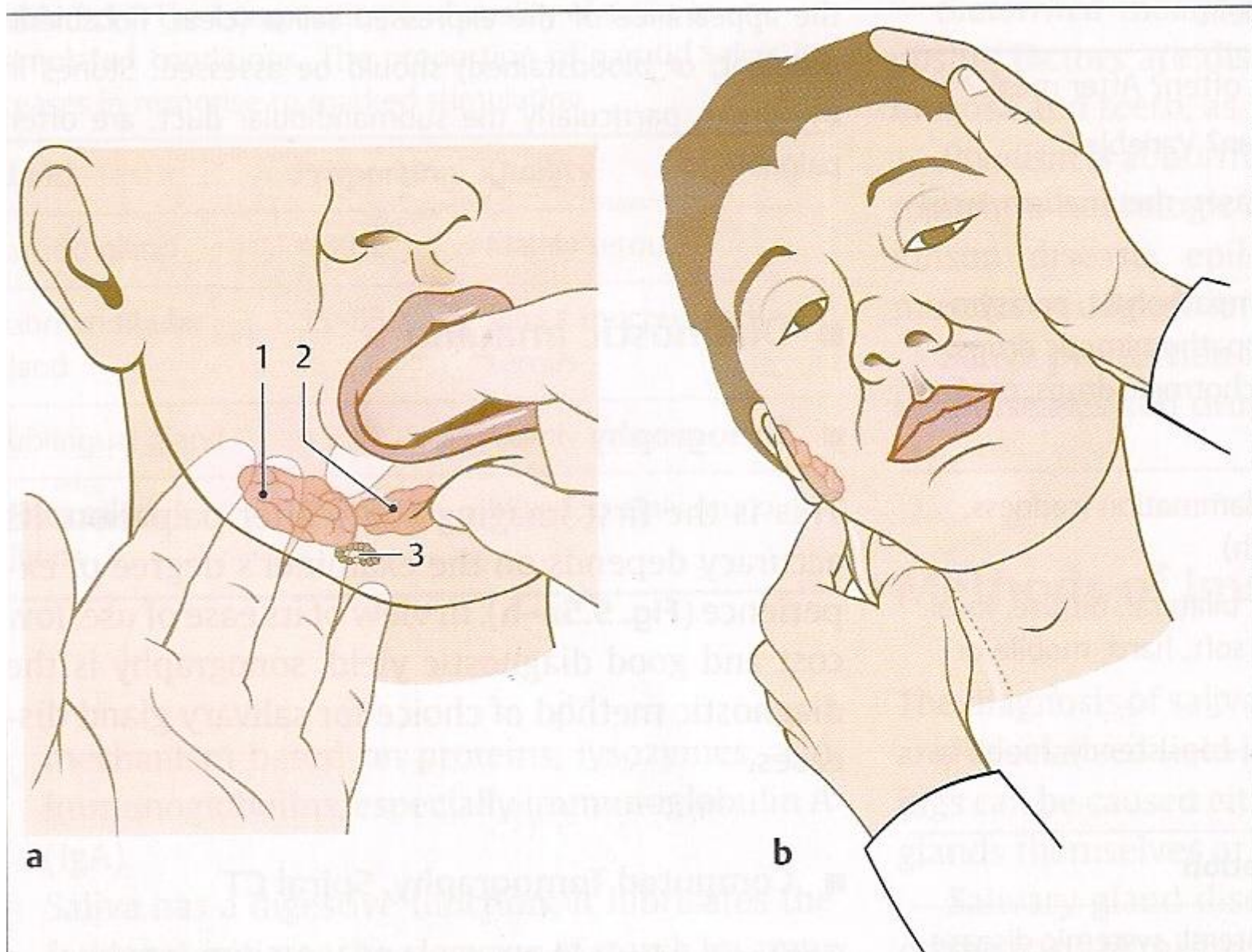
Salivary Gland Innervation



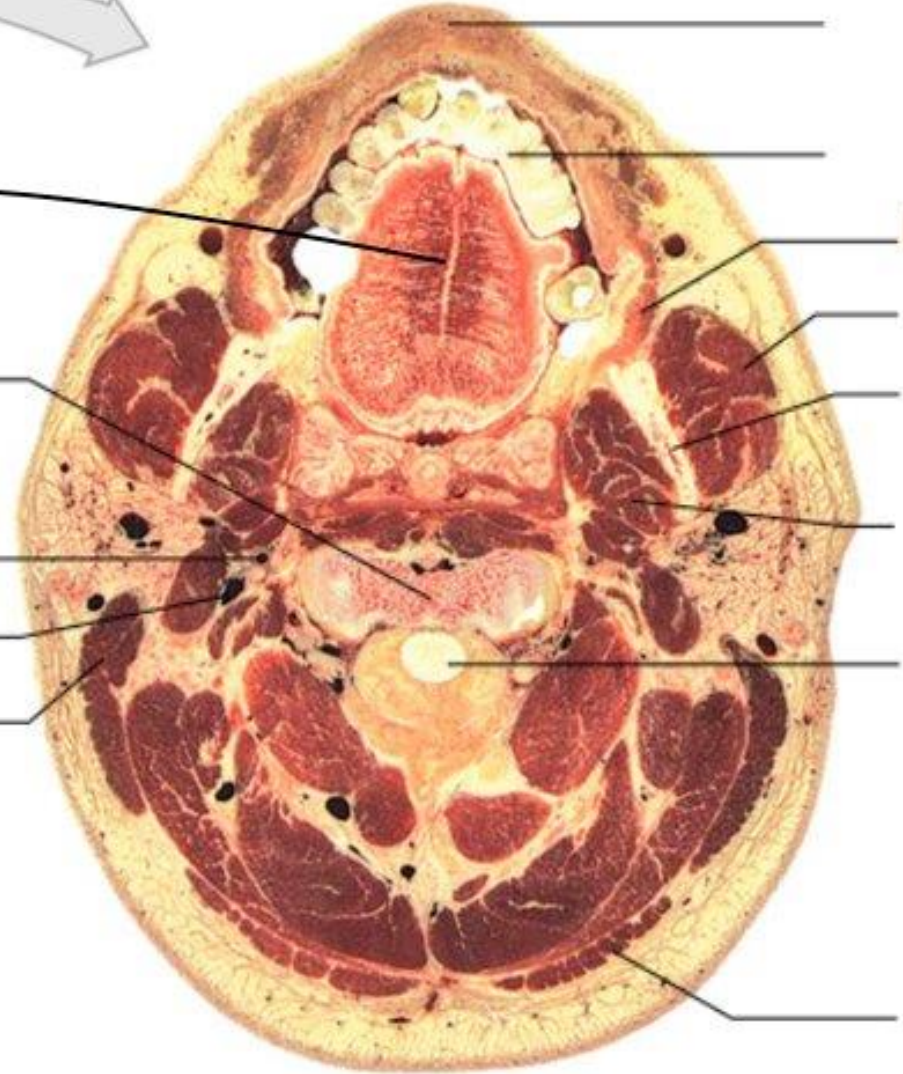
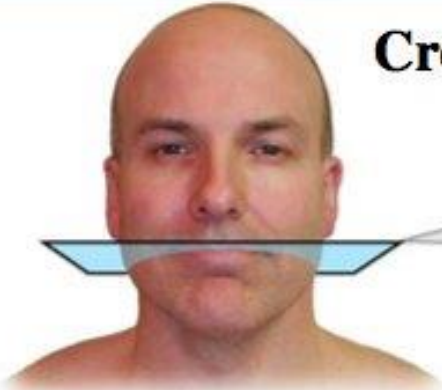
- Presynaptic parasympathetic fibers (CN VII)
- Presynaptic parasympathetic fibers (CN IX)
- Sensory fibers (CN V)
- Postsynaptic parasympathetic fibers
- Postsynaptic parasympathetic fibers

Postsynaptic sympathetic fibers from superior cervical ganglion travel with arteries to glands in peri-arterial plexuses

Physical Examination



Cross Section of the Head at the Level of Vertebra C2



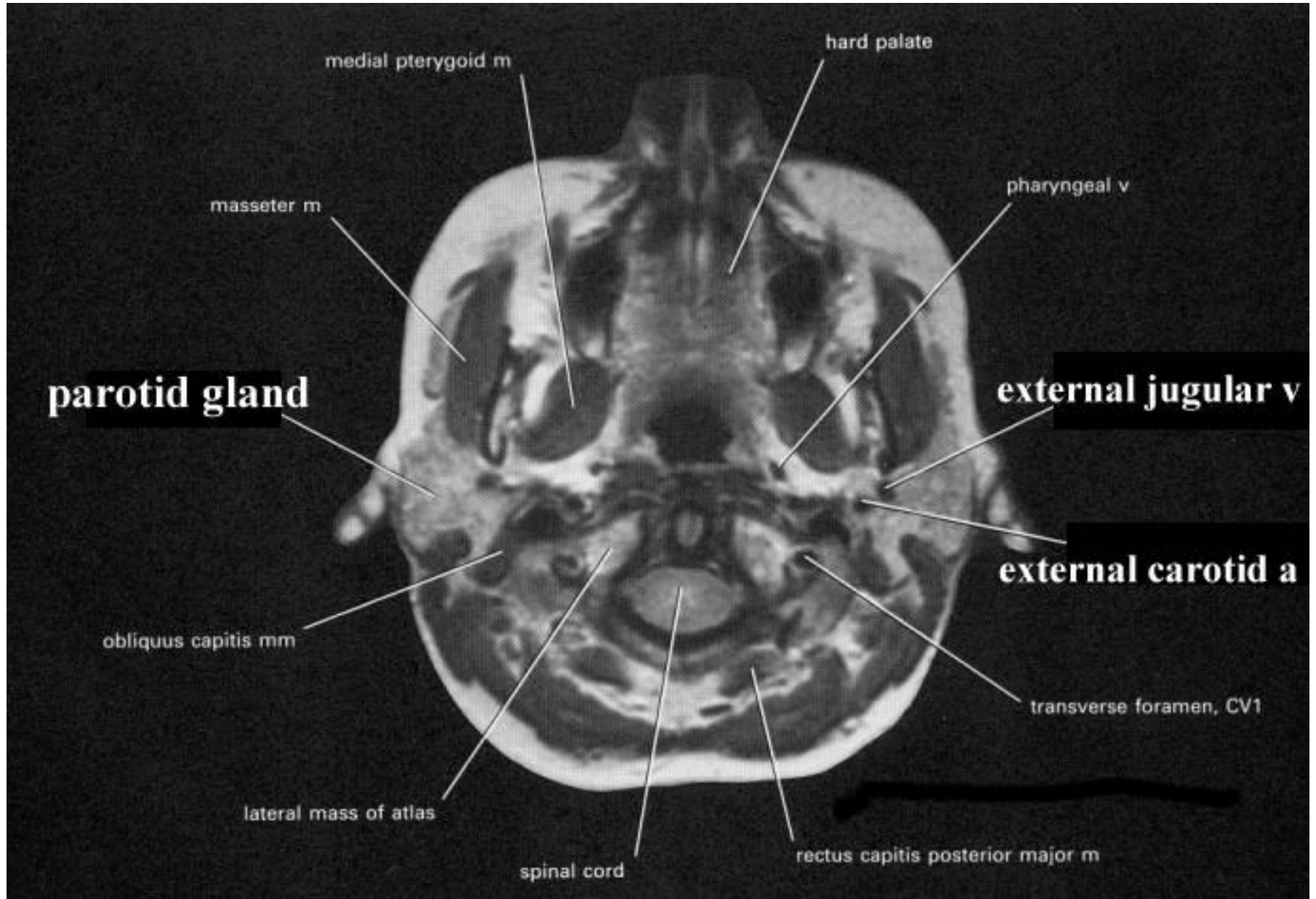
Median lingual raphe

Internal carotid artery

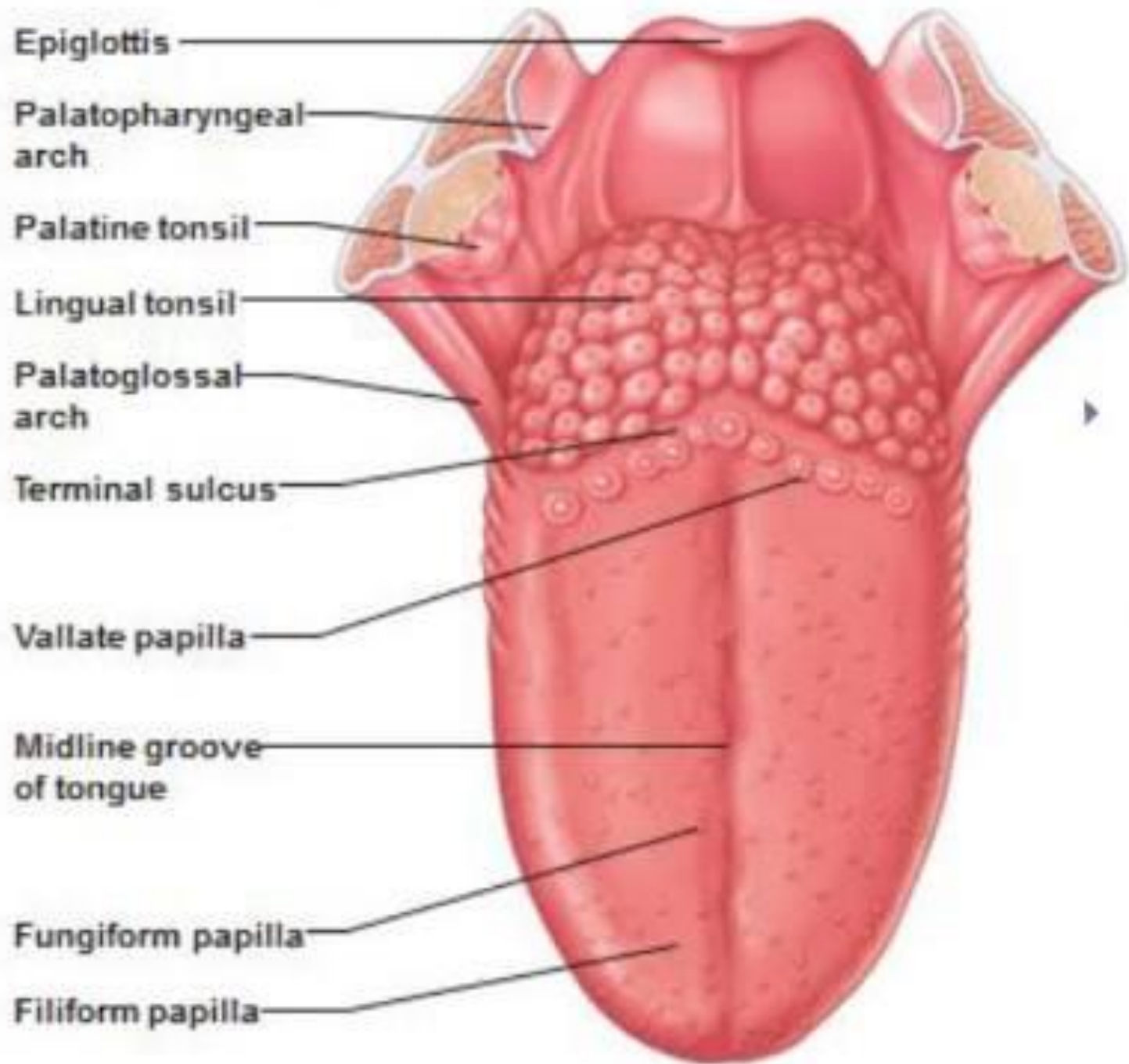
Internal jugular vein

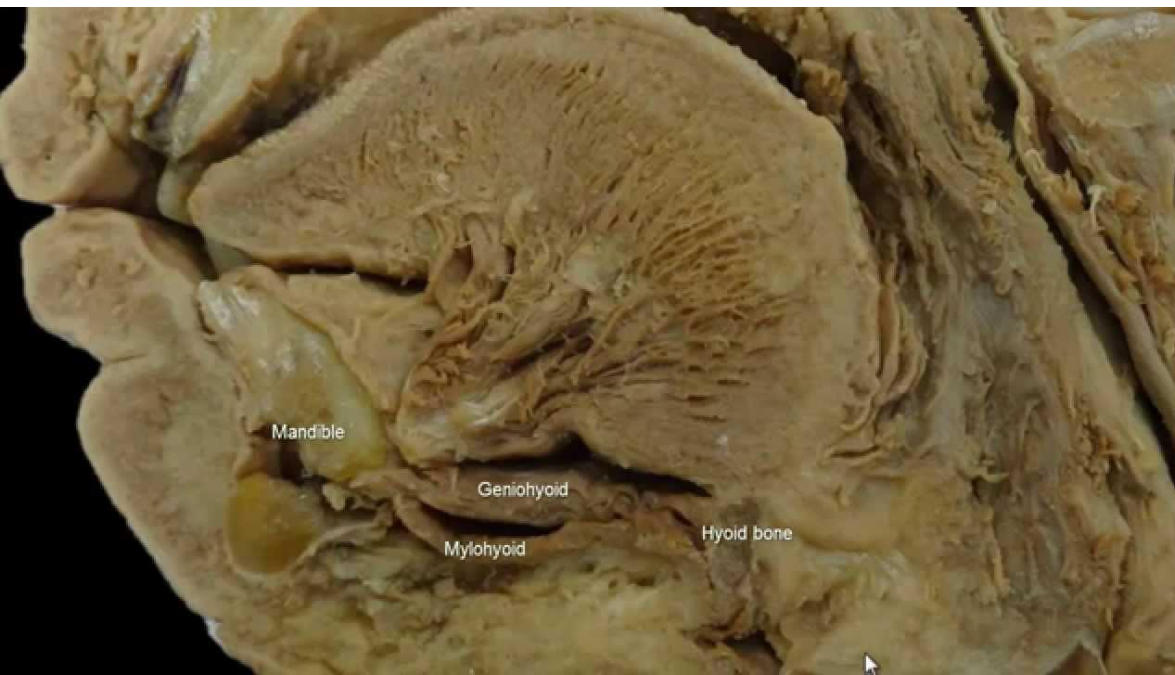
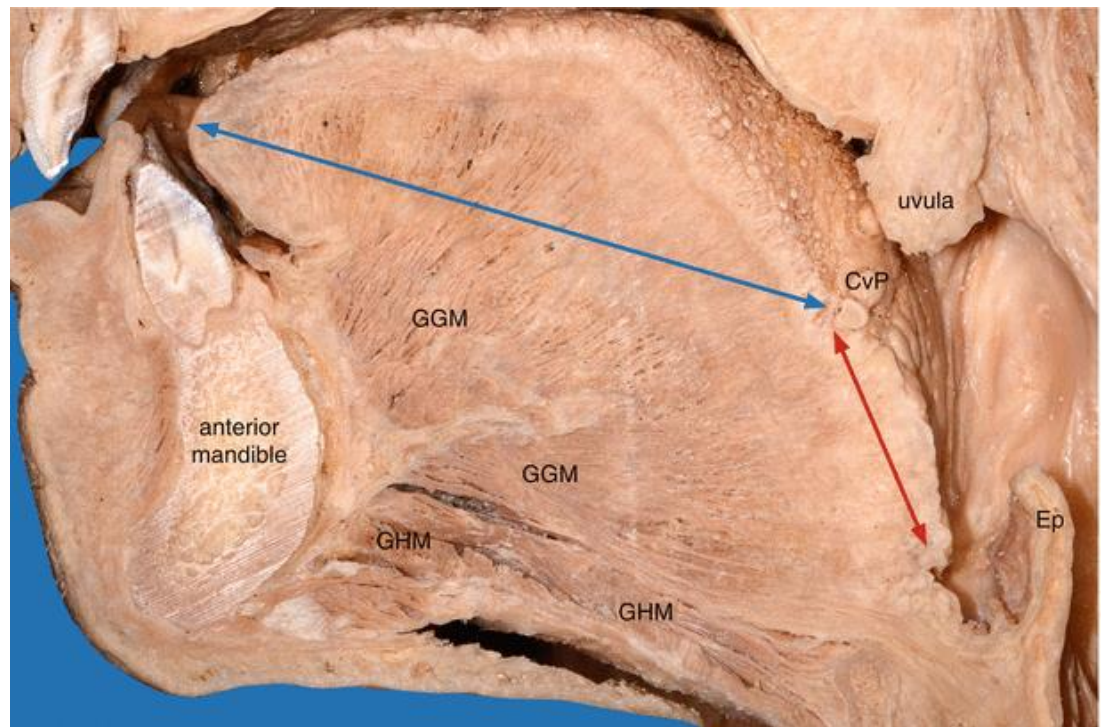
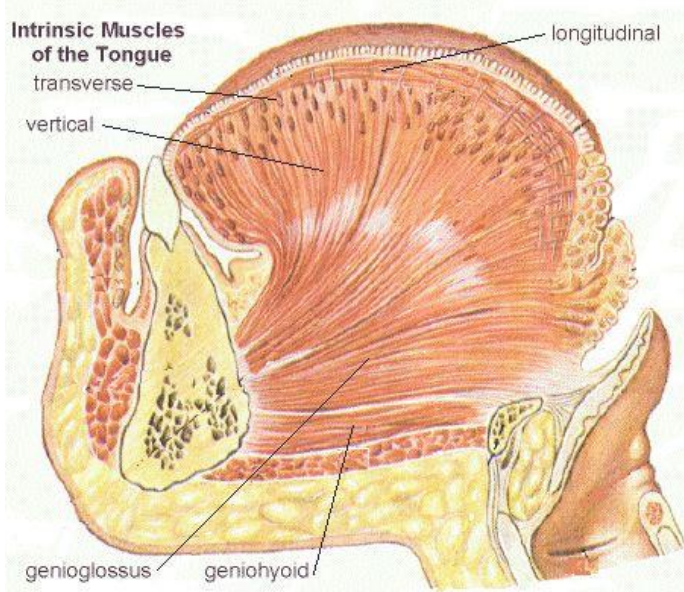
Spinal cord

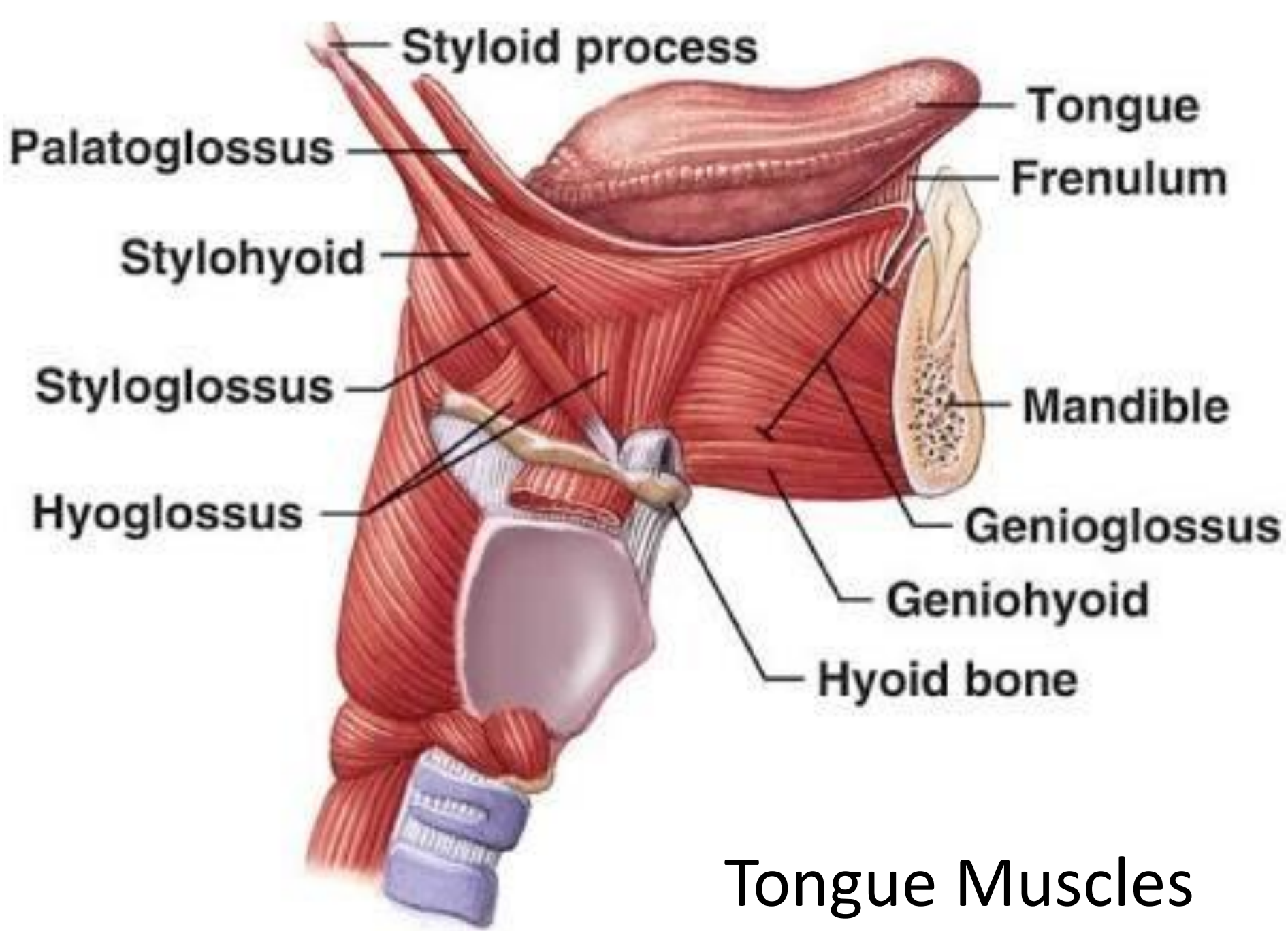
Normal CT



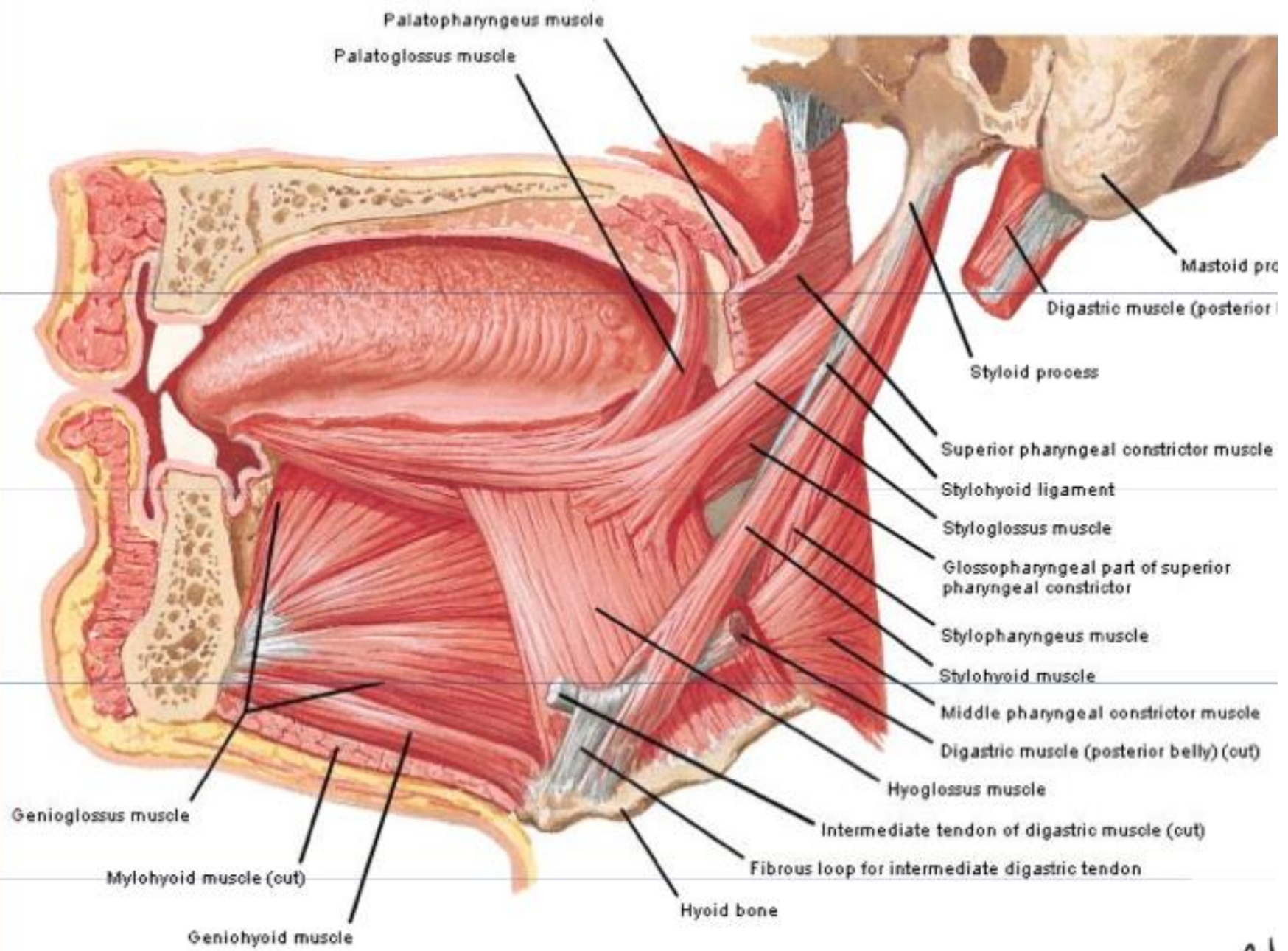
Tongue



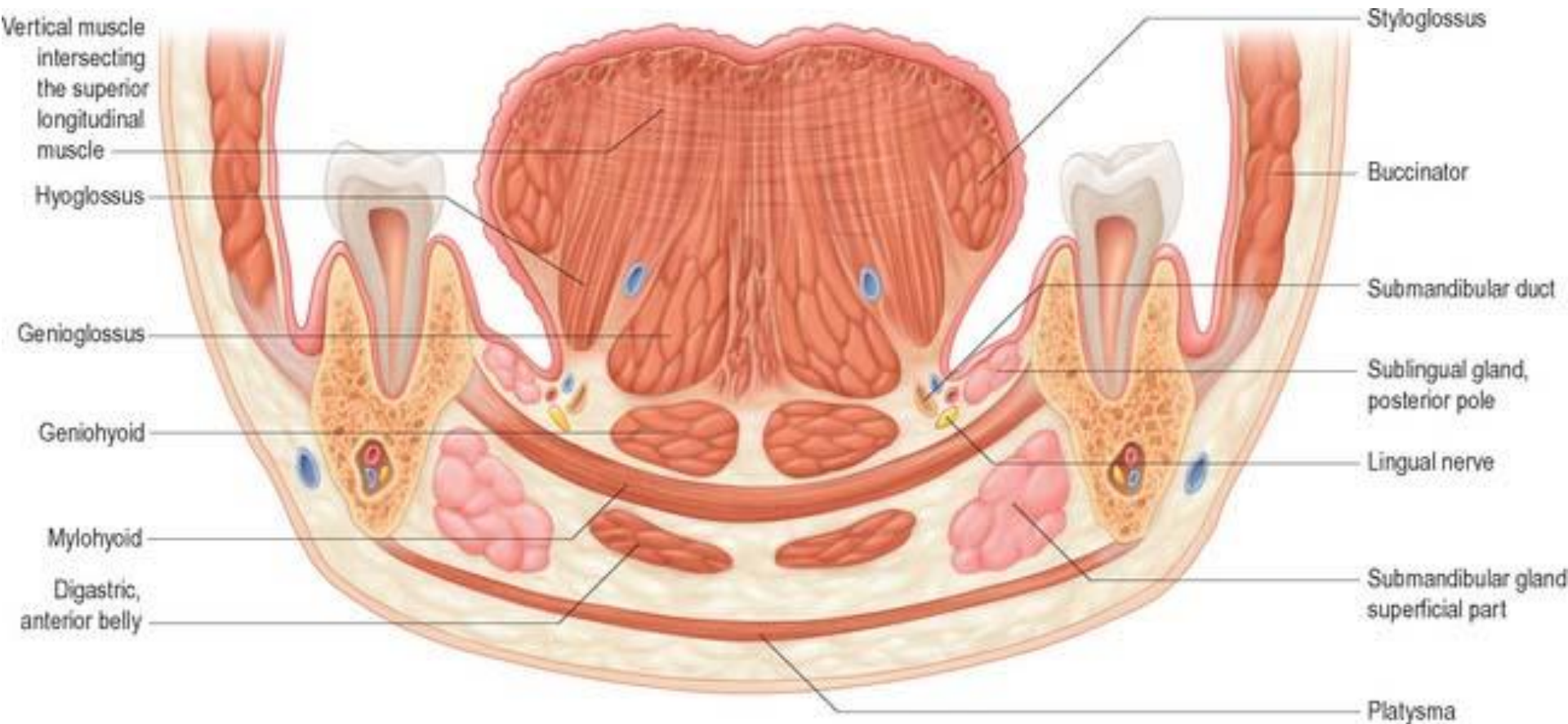




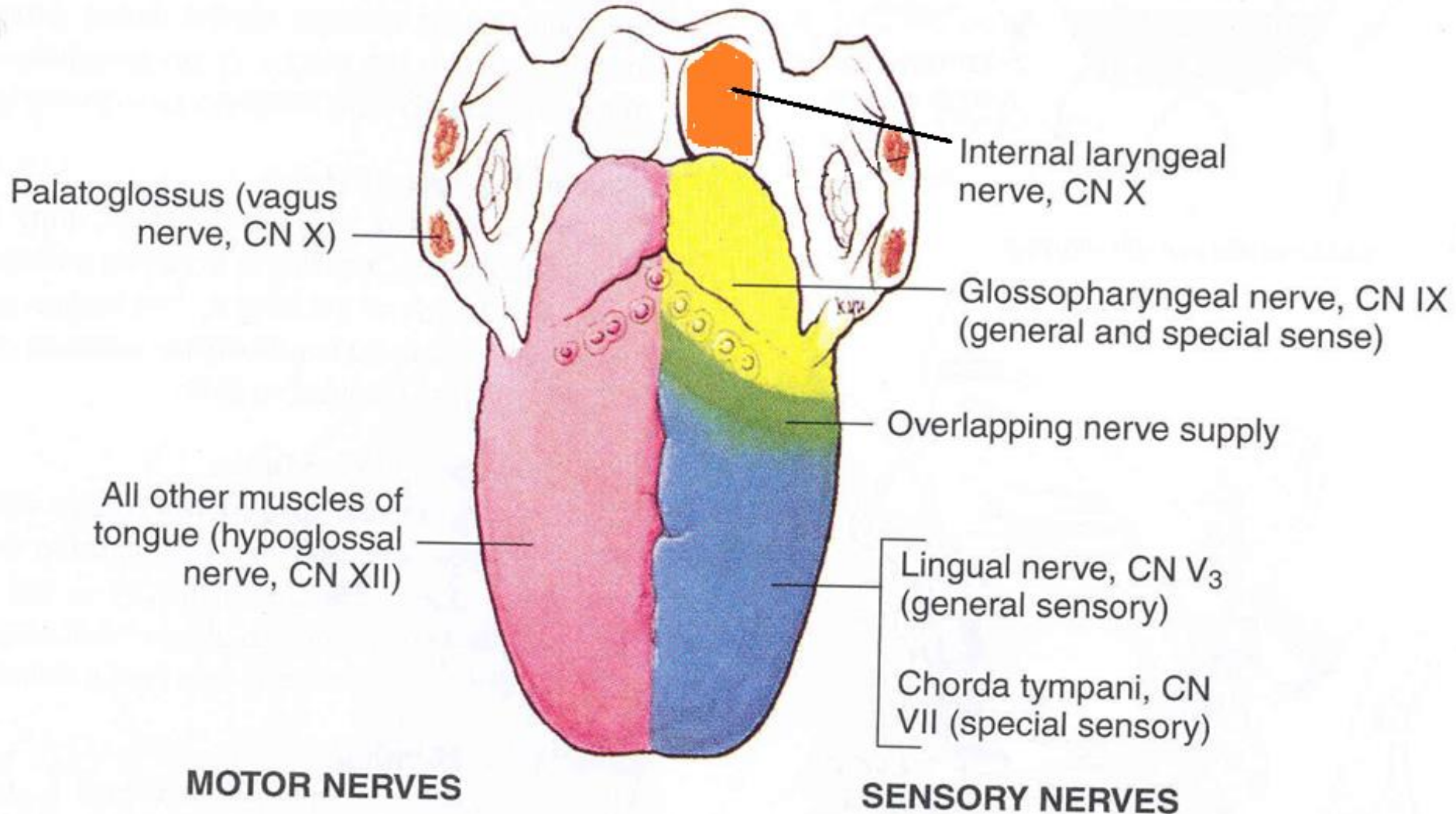
Tongue Muscles



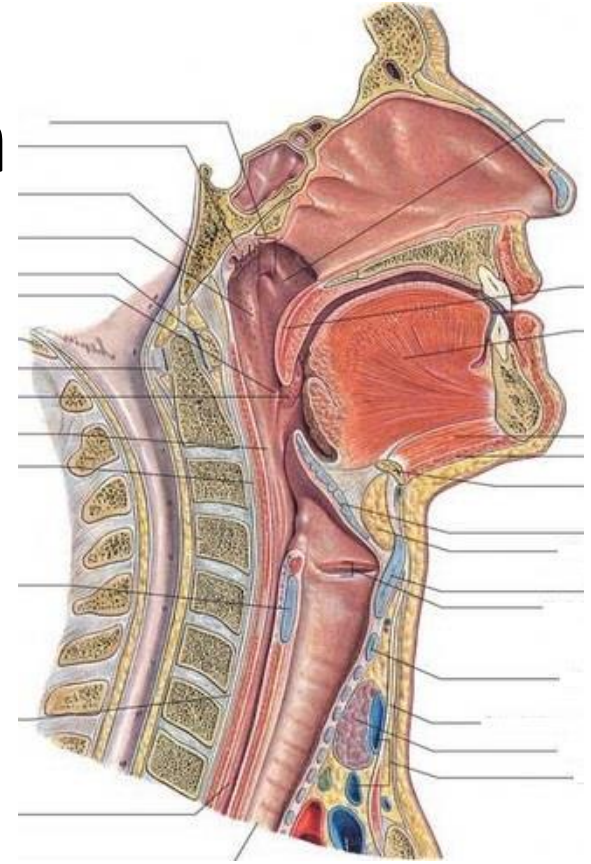
Tongue Extrinsic & intrinsic Muscles



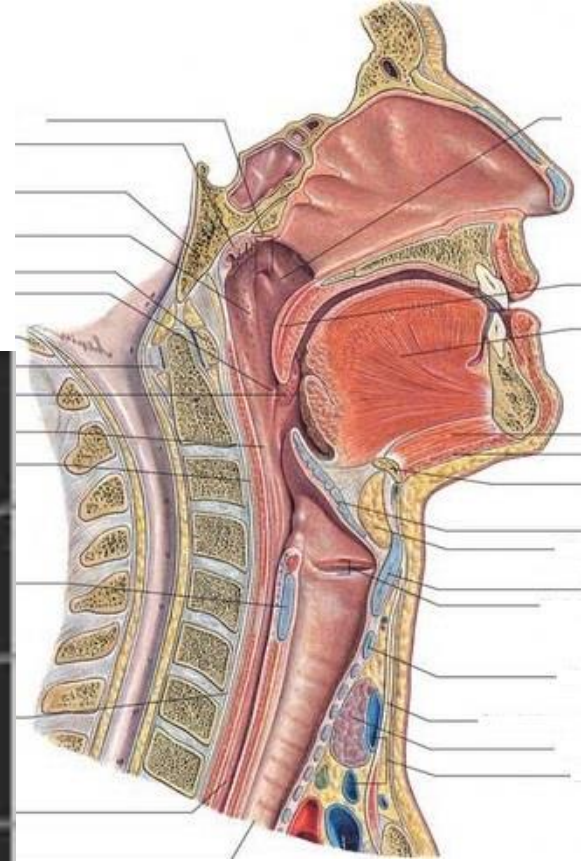
Tongue Innervation



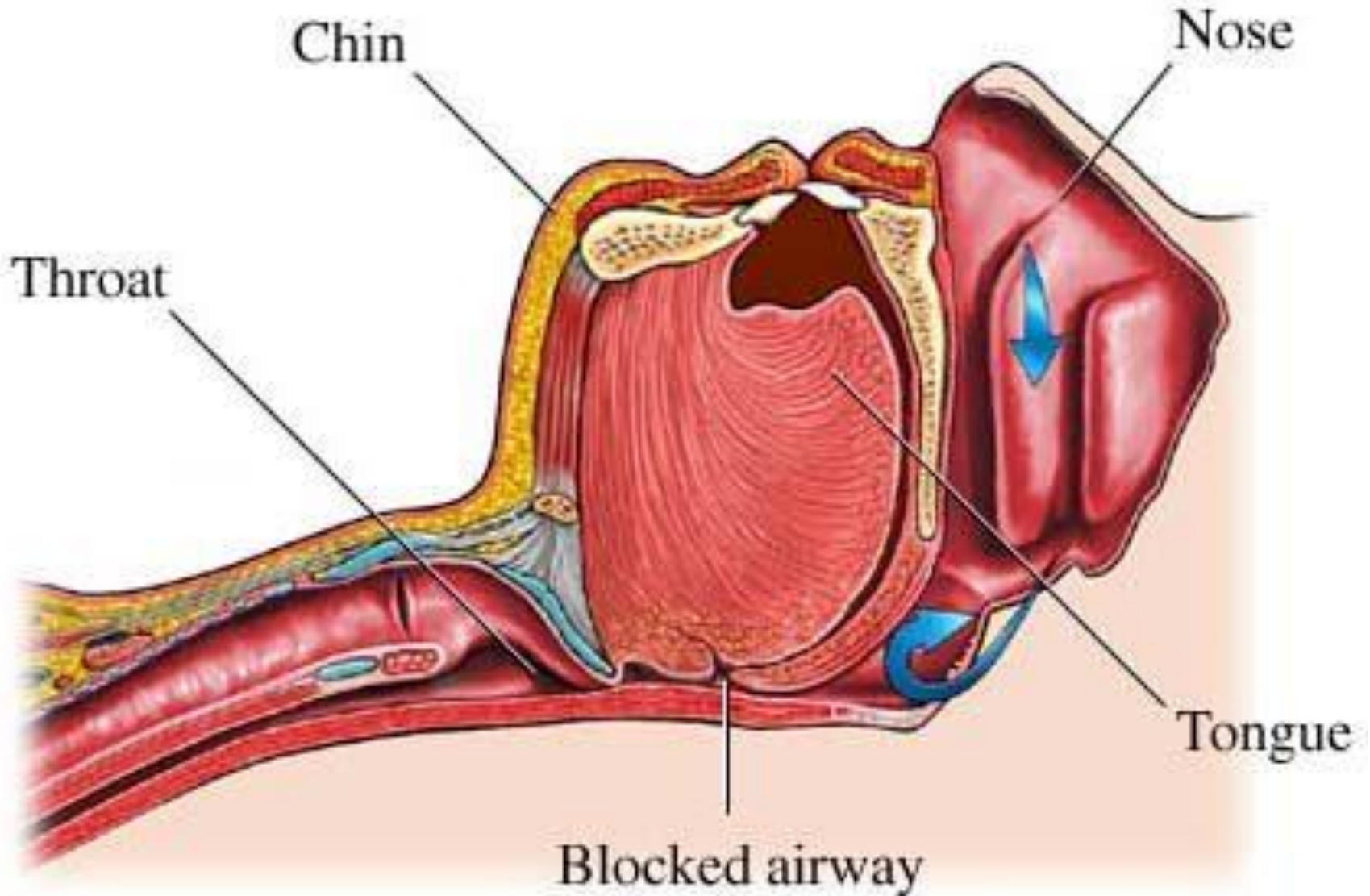
Sagittal Section



Sagittal Section



Airways obstruction by relaxed tongue



First aid: Opening the airways- ADULTS

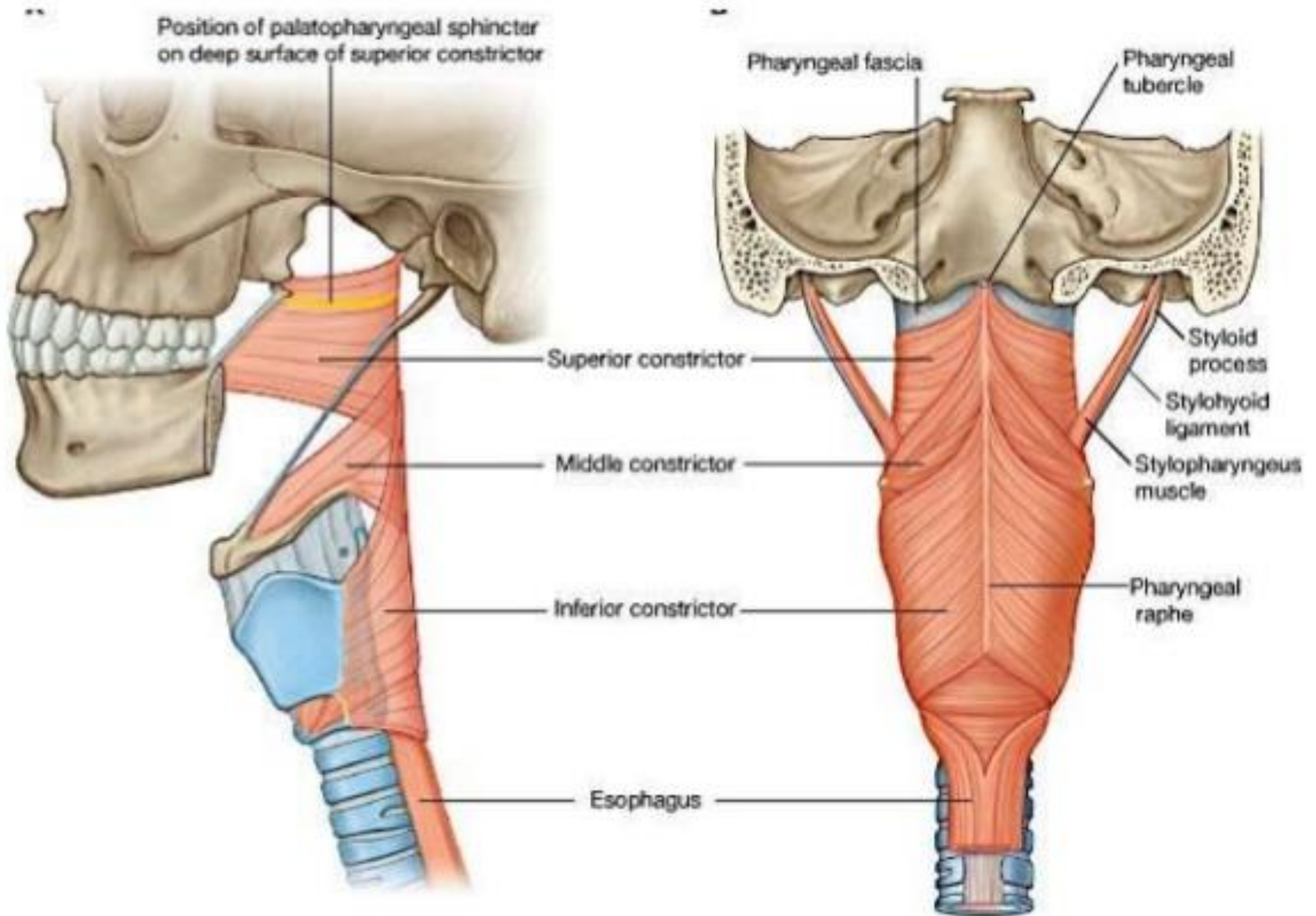


Blocked Airway



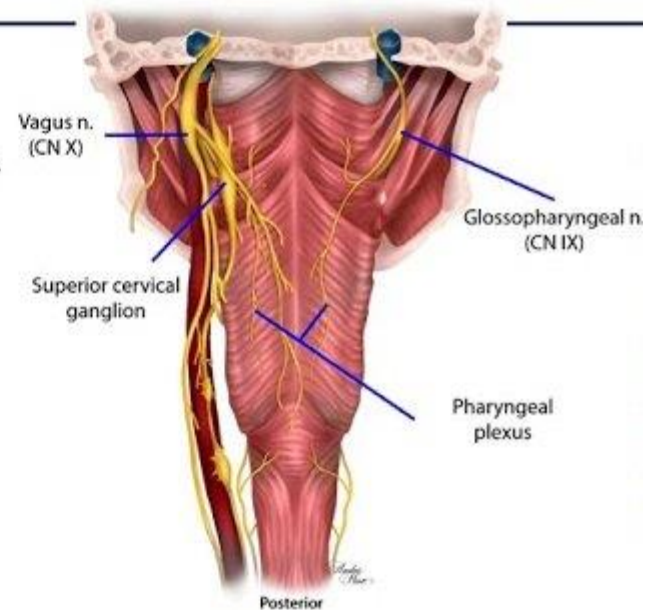
Open Airway

Pharynx

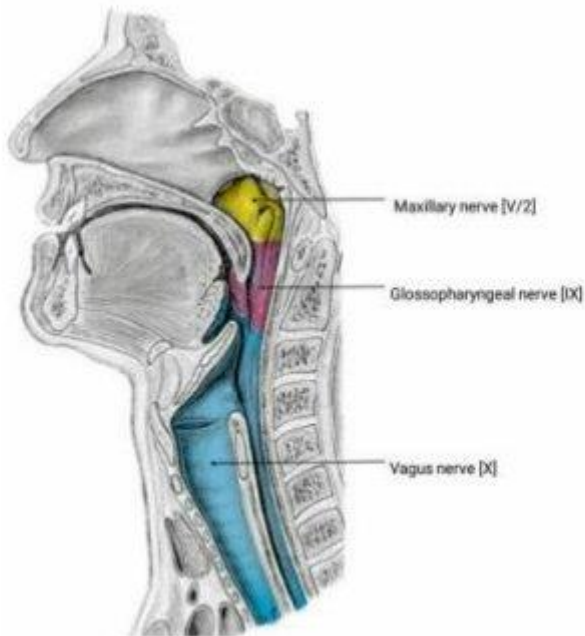


Pharyngeal (Neural) Plexus

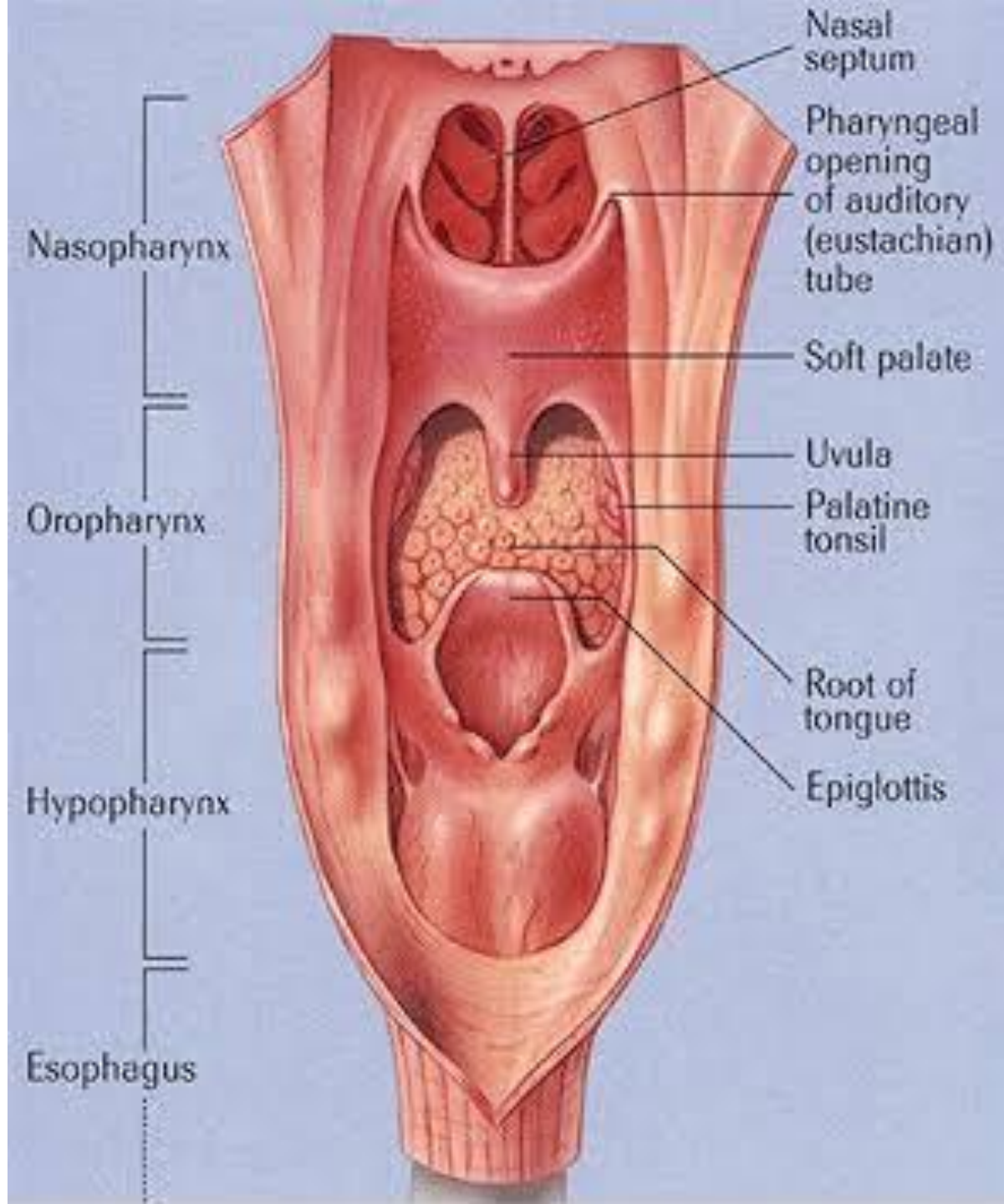
- Most muscles & mucosa of pharynx
 - Excepting:
 - Stylopharyngeus m. – Glossopharyngeal n. (CN IX)
 - Nasopharynx - Pharyngeal n. (V₂)
- Most muscles and mucosa of the soft palate
 - Excepting:
 - Tensor veli palatini m. - N. to medial pterygoid (V₃)



Sensory innervation to pharynx

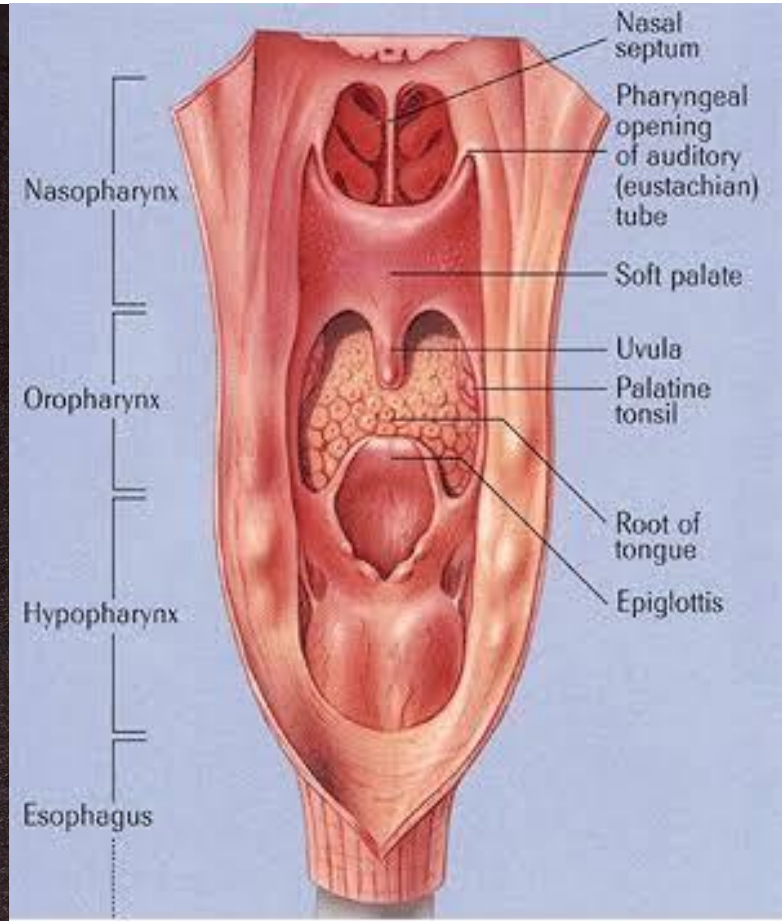
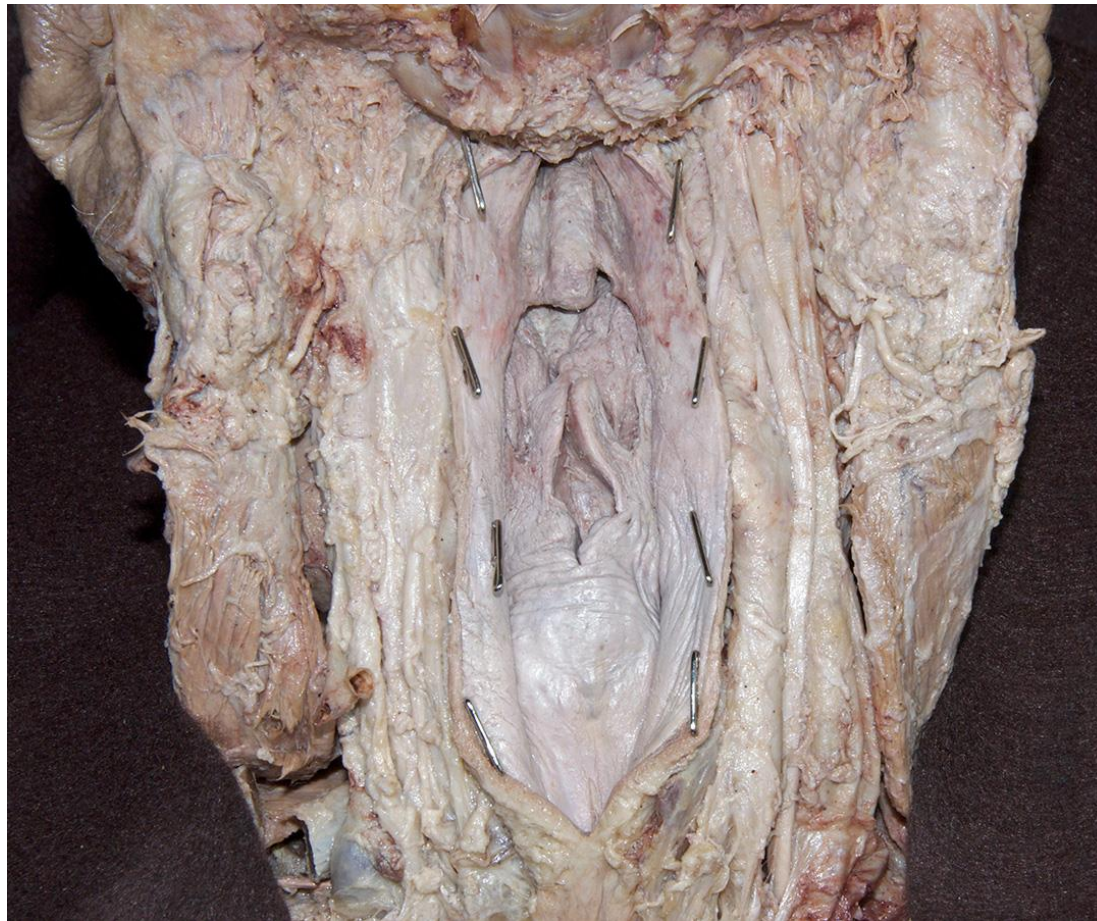


Internal Pharynx Posterior view



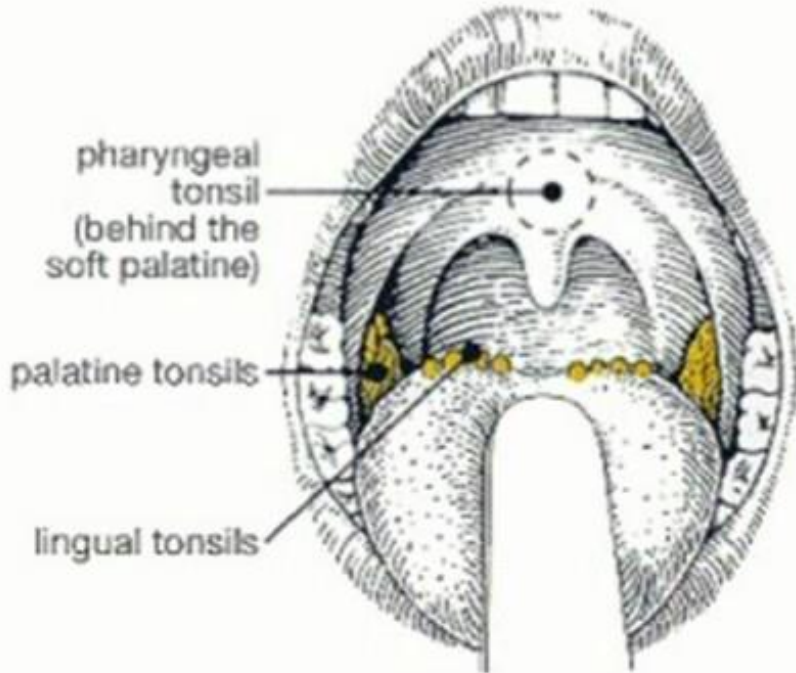
Internal Pharynx

Posterior view

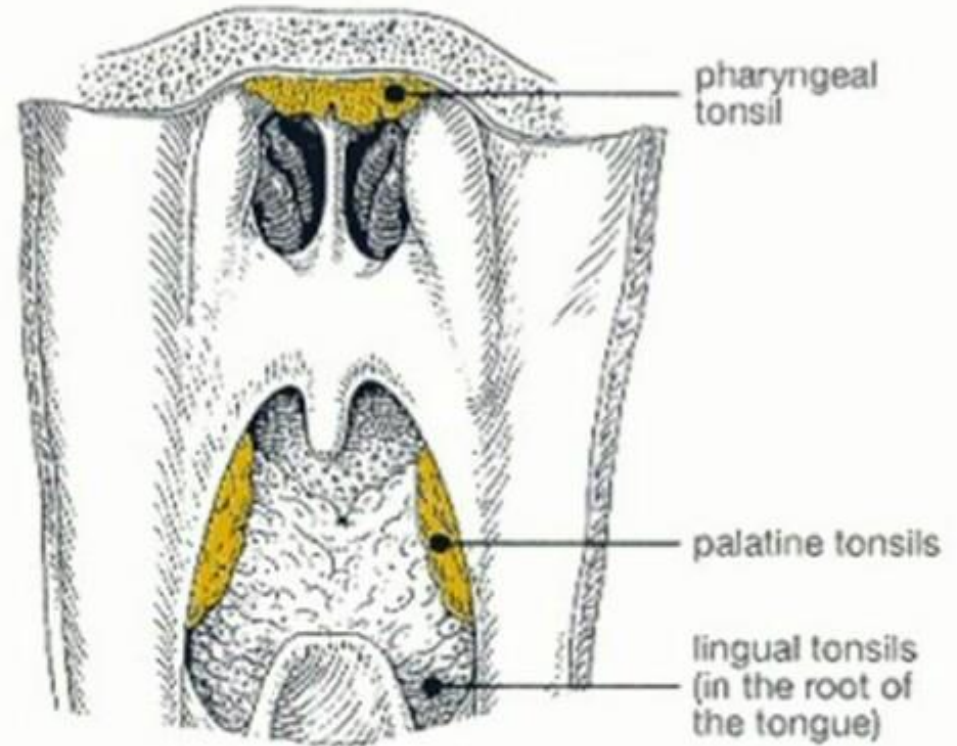


Waldeyer's Ring

FROM THE FRONT
-anterior view



FROM THE BACK
-posterior view



Sagittal Section



Food choking

