



# Submandibular Region-II

# Submandibular Gland

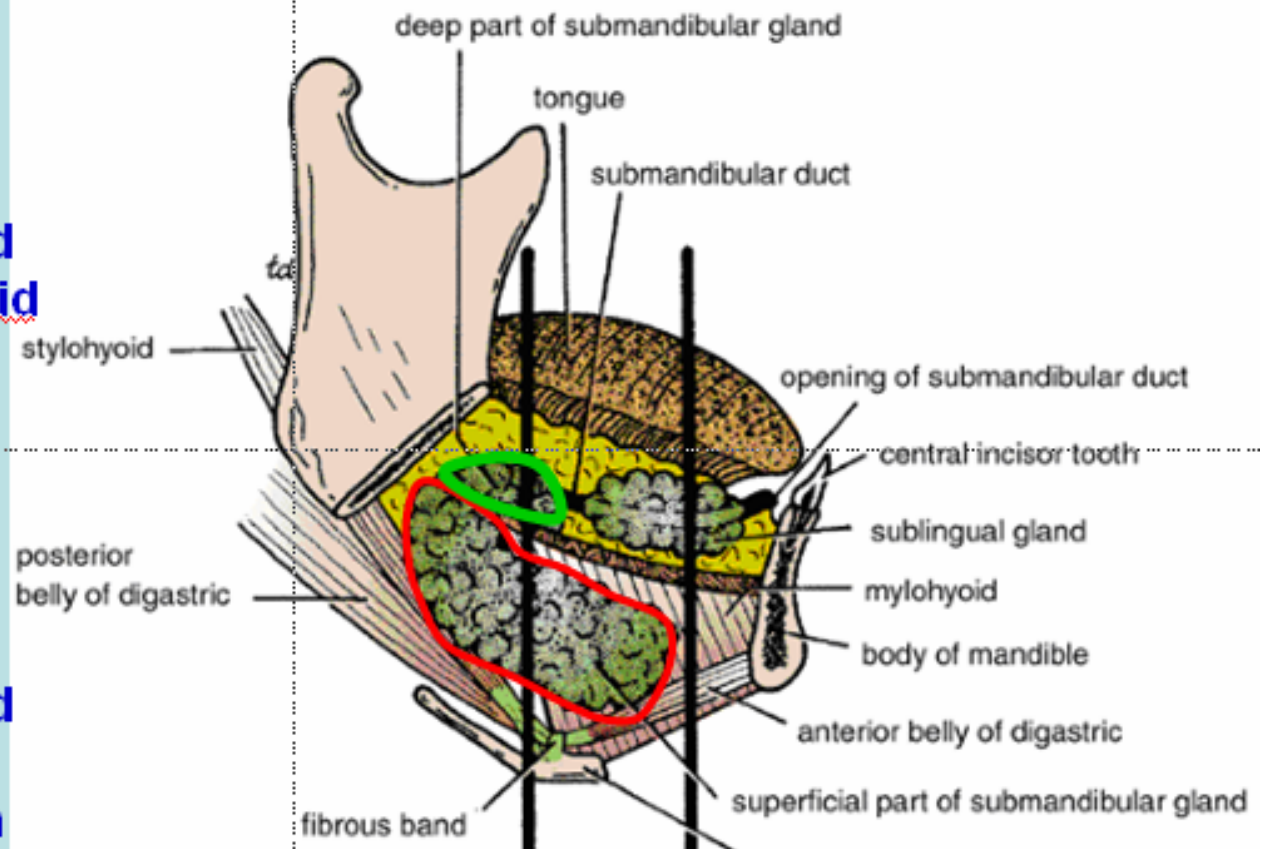
## Introduction

Composed of serous & mucus acini.

Divided into superficial and deep parts by the mylohyoid muscle

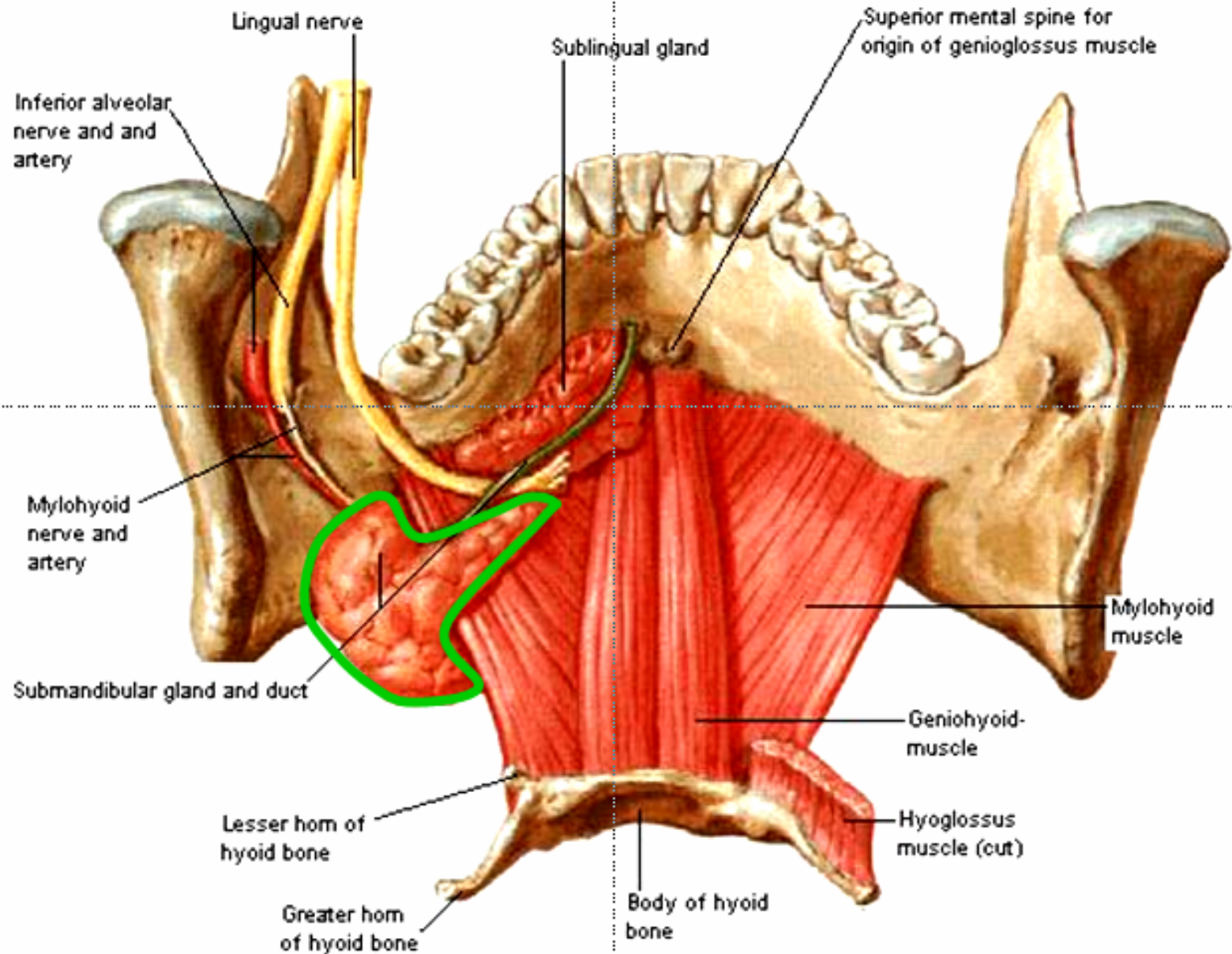
Large superficial part lies under cover of the body of the mandible

Small deep part lies around the posterior border of mylohyoid muscle beneath the mucous membrane of the mouth on the side of the tongue



# Floor of Mouth - Musculature

## Posterosuperior View



# Relations of superficial part

## **Anteriorly**

The anterior belly of digastric

## **Posteriorly**

Stylohyoid, post belly of digastric & parotid gland

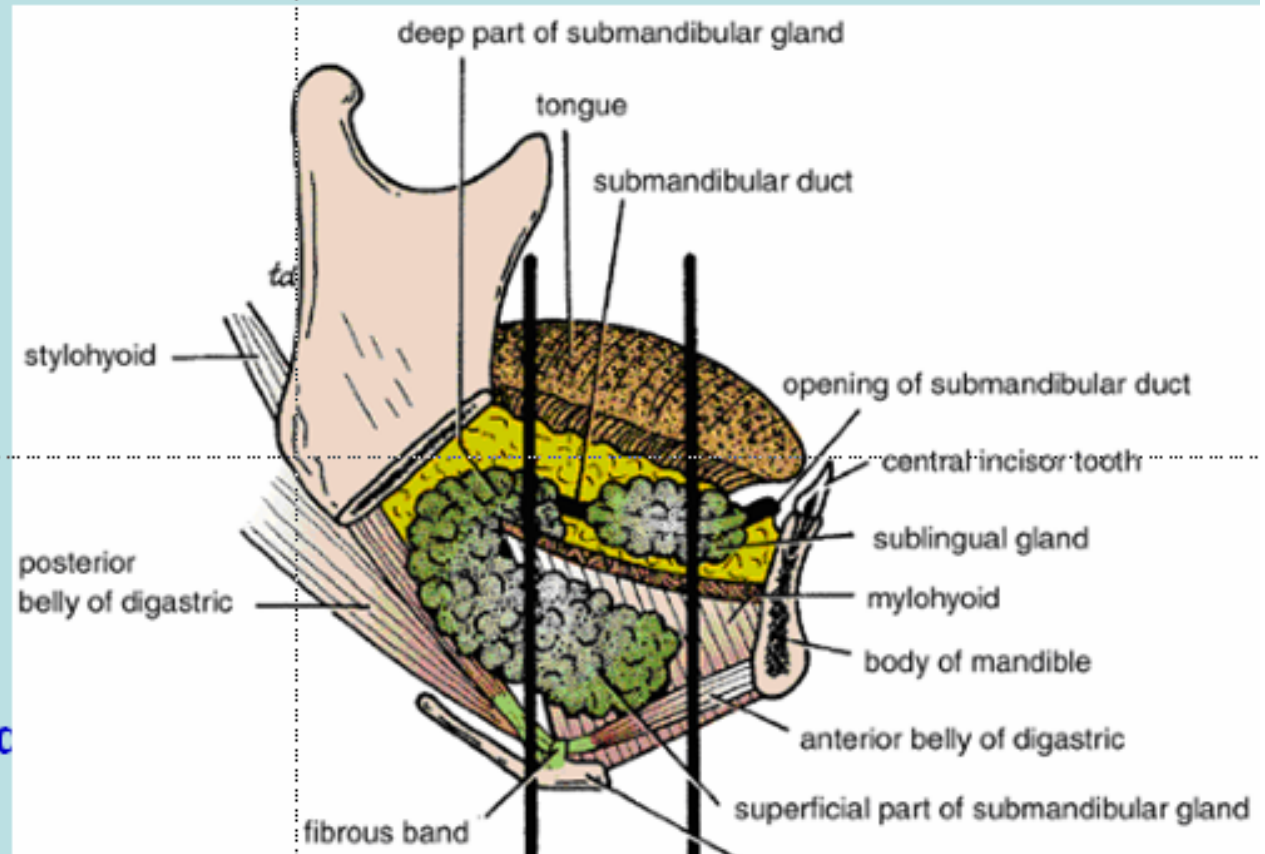
## **Medially**

Mylohyoid, hyoglossus muscles, the lingual & hypoglossal nerves

## **Laterally**

Medial surface of the mandible,  
In inferolateral part covered by investing layer of deep cervical fascia, platysma, lymph nodes & skin.

**Crossed by the cervical branch of facial nerve**



# Relations of deep part

*Anteriorly*

Sublingual gland

*Posteriorly*

Stylohyoid, post belly of digastric & parotid gland

*Medially*

Hyoglossus & styloglossus

*Laterally*

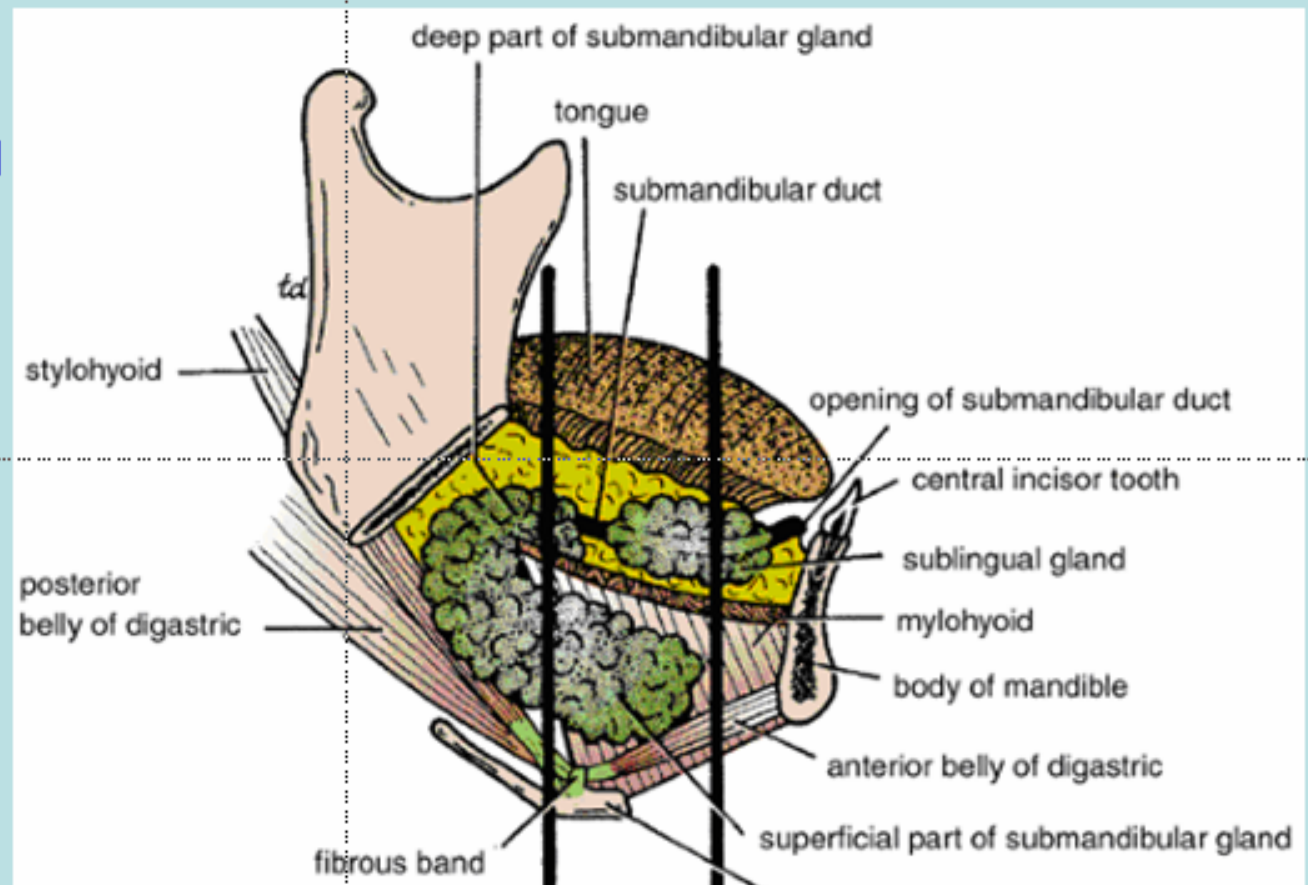
Mylohyoid muscle & superficial part of the gland

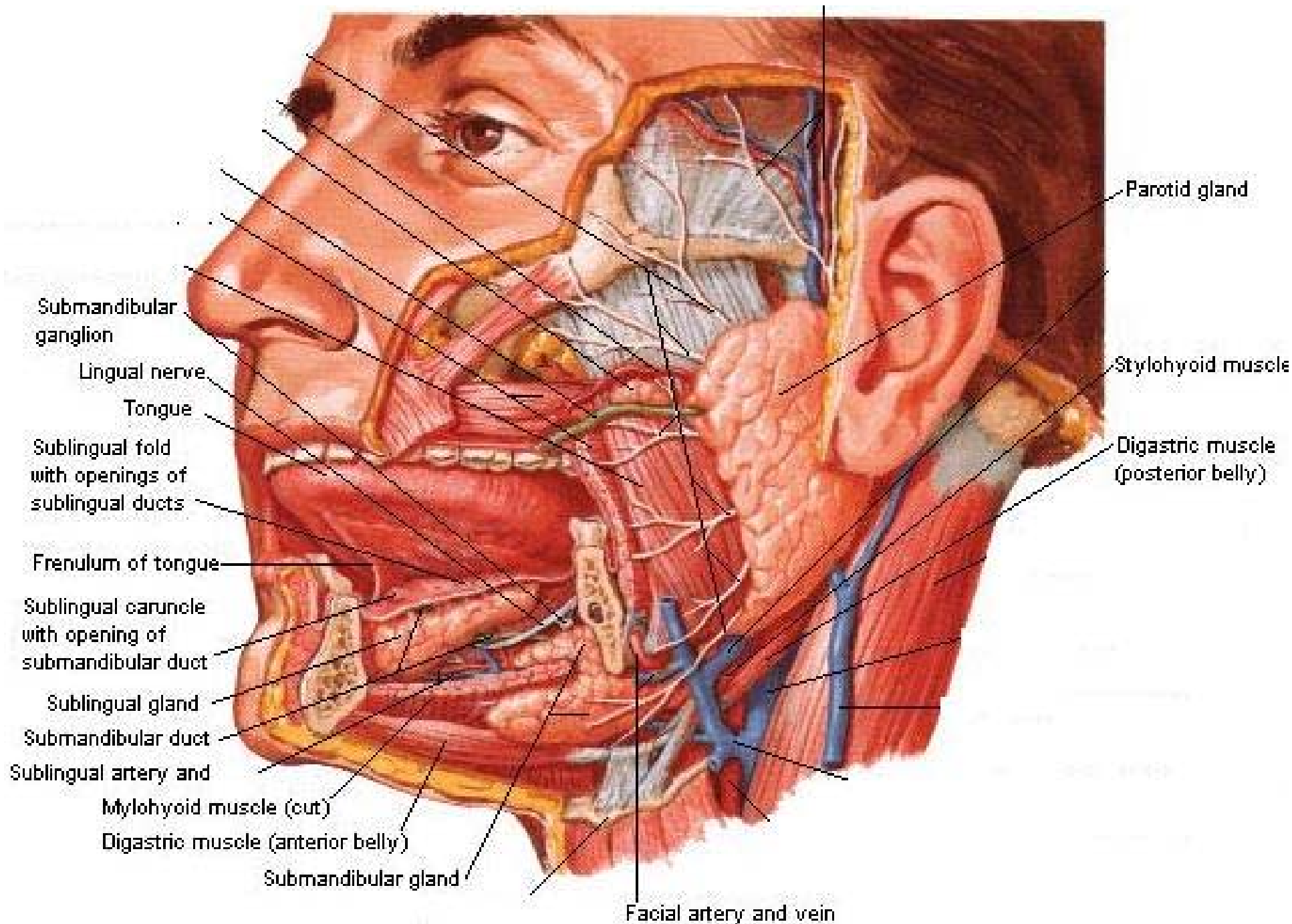
*Superiorly*

Lingual nerve & submandibular ganglion

*Inferiorly*

Hypoglossal nerve





# Capsule of the Gland

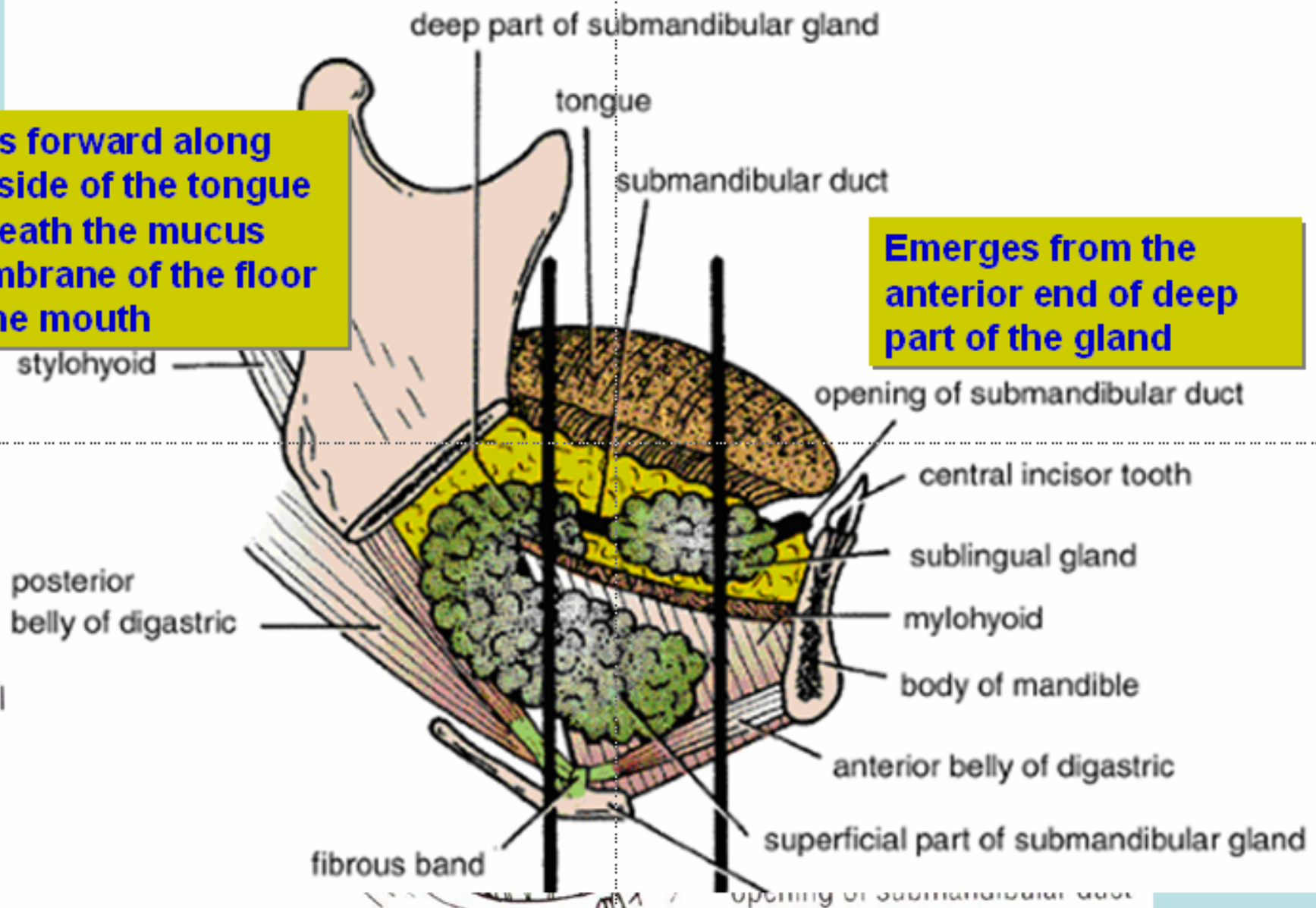
**The gland is lobulated mass, surrounded by a connective tissue capsule. In addition gland is partly enclosed in a dense fibrous capsule derived from the investing layer of deep cervical fascia**



# Submandibular Duct (*Wharton's duct*)

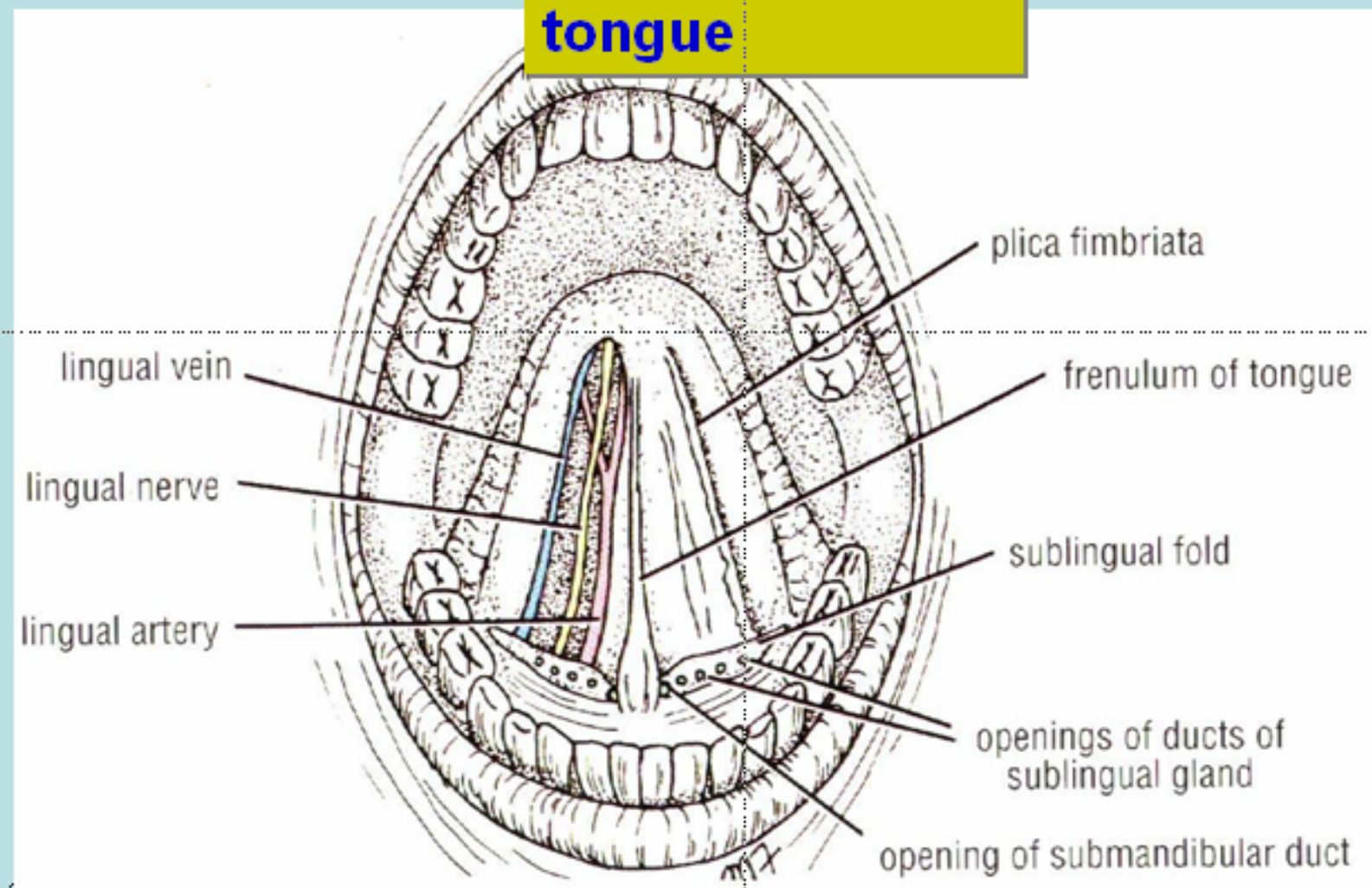
Pass forward along the side of the tongue beneath the mucus membrane of the floor of the mouth

Emerges from the anterior end of deep part of the gland



# Submandibular Duct (*Wharton's duct*)

Opens near the frenulum of the tongue



## Blood Supply

- **Branches of the facial & lingual arteries**
- **The veins drains into facial & lingual veins**

## Lymph Drainage

**To submandibular & deep cervical lymph nodes**

# Nerve Supply

## Parasympathetic

Fibers from superior salivary nucleus of facial nerve pass to the submandibular ganglion via chord tympani nerve & the lingual nerve

The postganglionic fibers reach the gland either directly or along the duct

## Sympathetic

Postganglionic fibers reach the gland as a plexus of nerves around the facial & lingual arteries

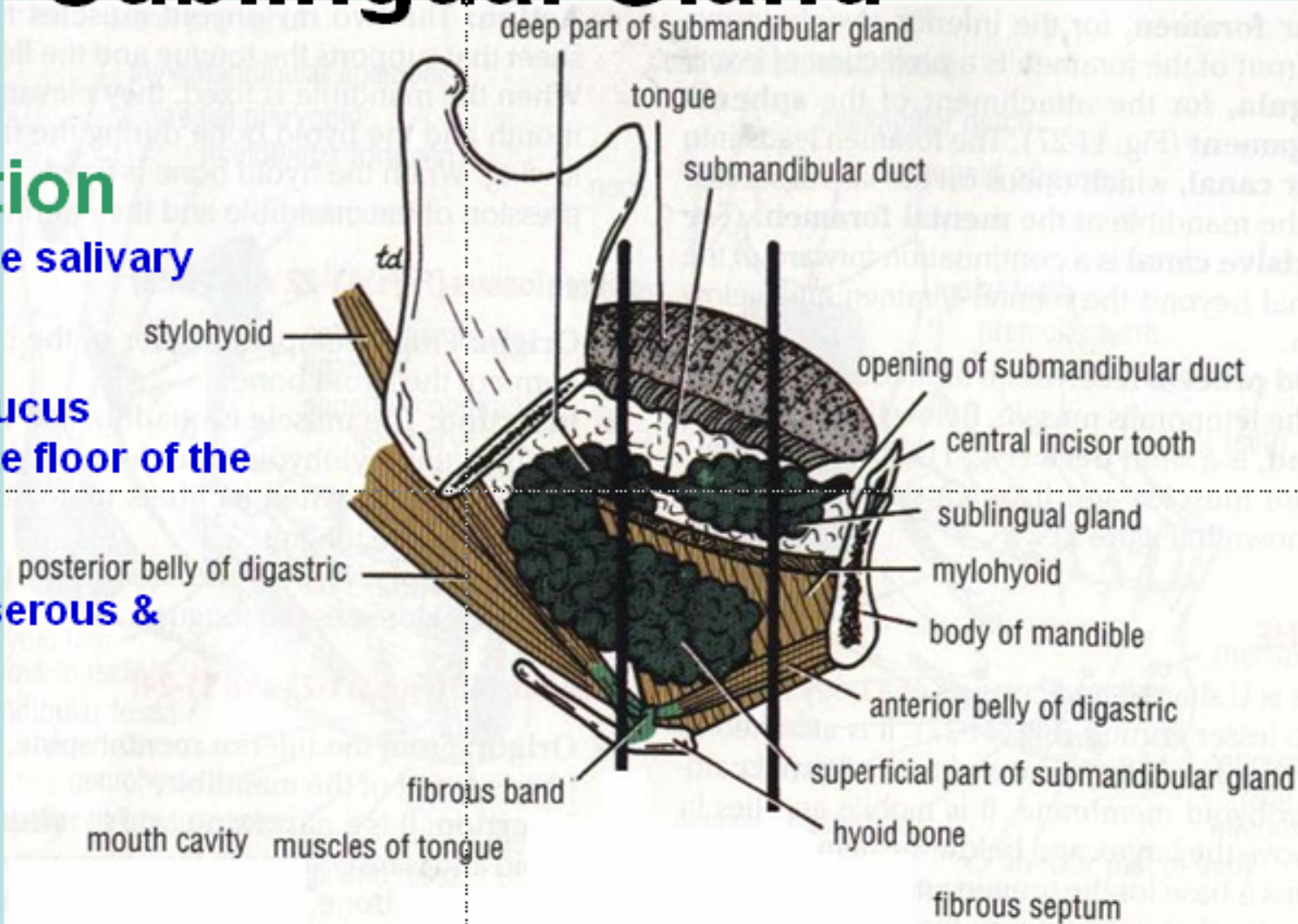
# Sublingual Gland

## Introduction

Smallest of three salivary glands

Lies beneath mucus membrane of the floor of the mouth

Contains both serous & mucus acini



# Relations

## **Anteriorly**

Gland of opposite side

## **Posteriorly**

Deep part of submandibular gland

## **Medially**

Genioglossus muscle, the lingual nerve, & submandibular duct

## **Laterally**

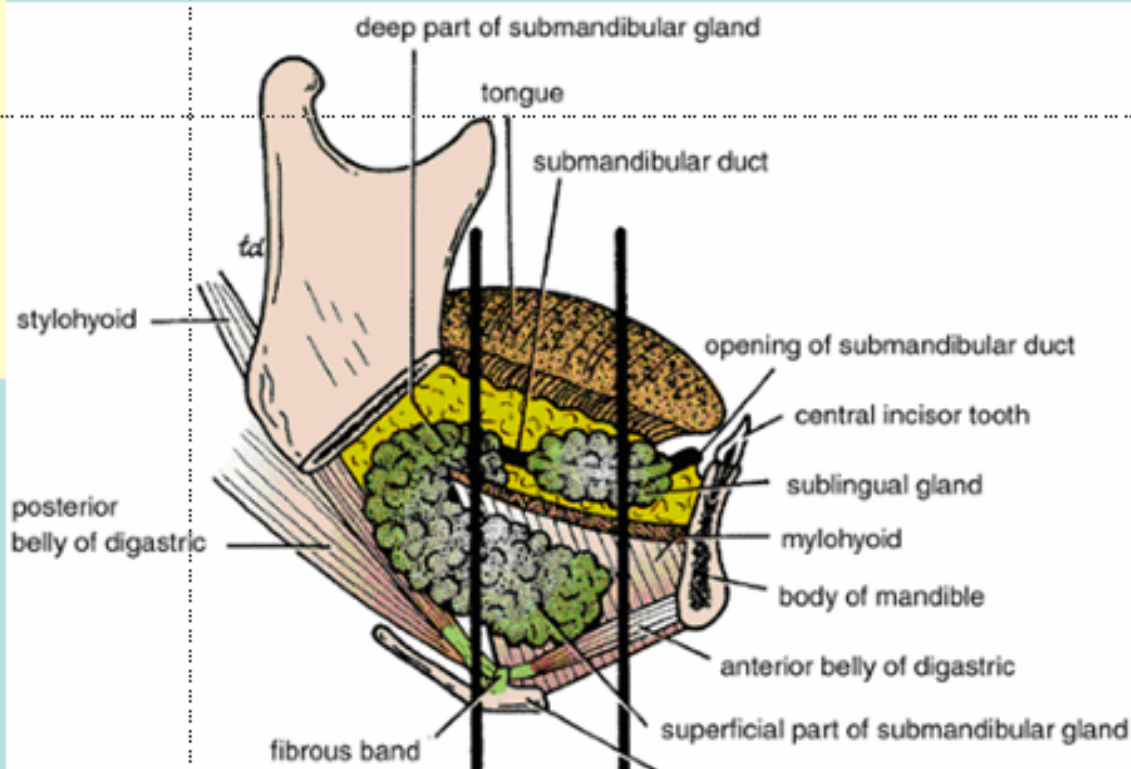
Sublingual fossa of the medial surface of the mandible

## **Superiorly**

Mucus membrane of the floor of the mouth which is elevated by the gland to form the **sublingual fold**

## **Inferiorly**

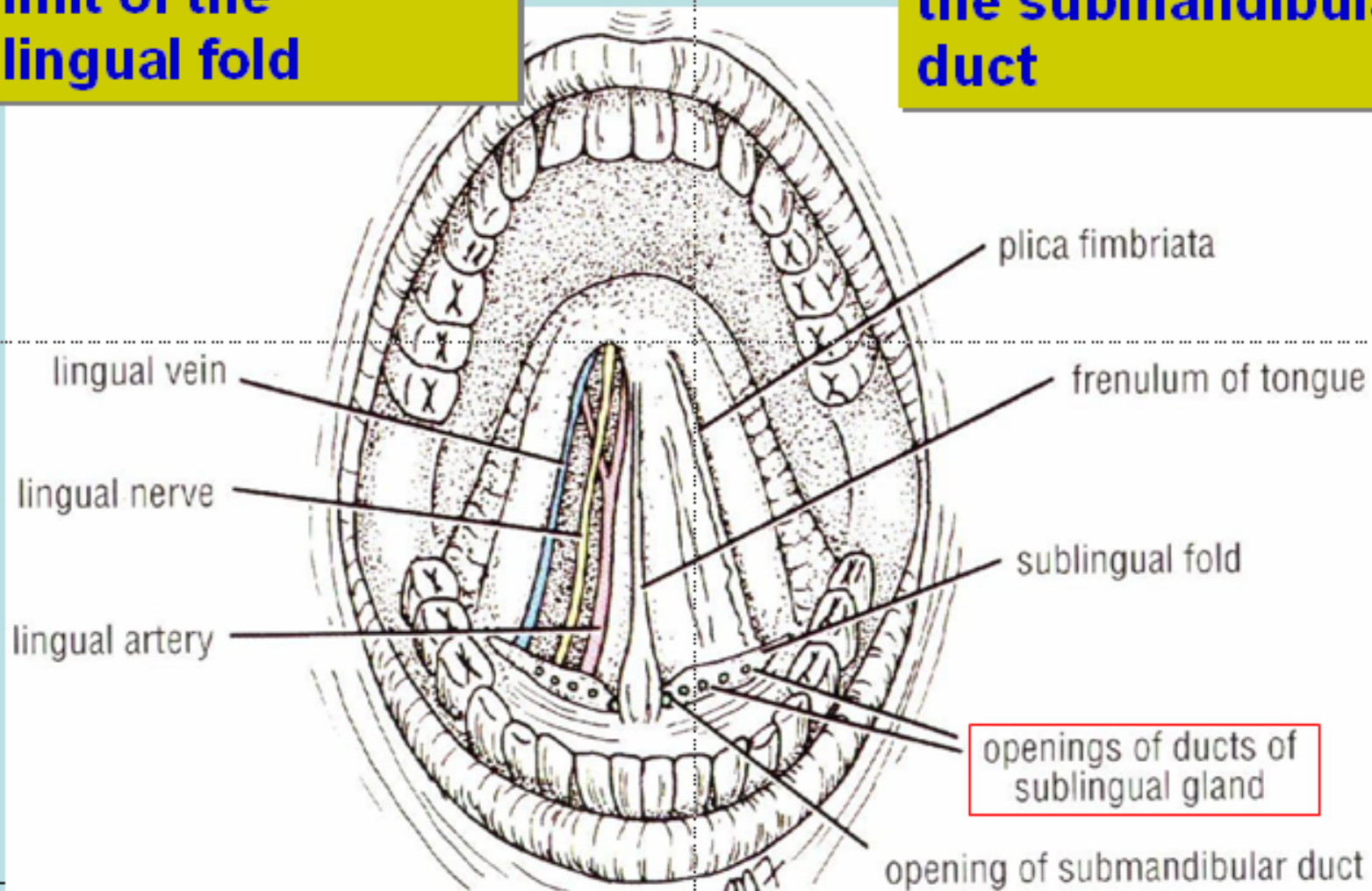
Mylohyoid muscle



# Sublingual Duct

8-20 duct open in the summit of the sublingual fold

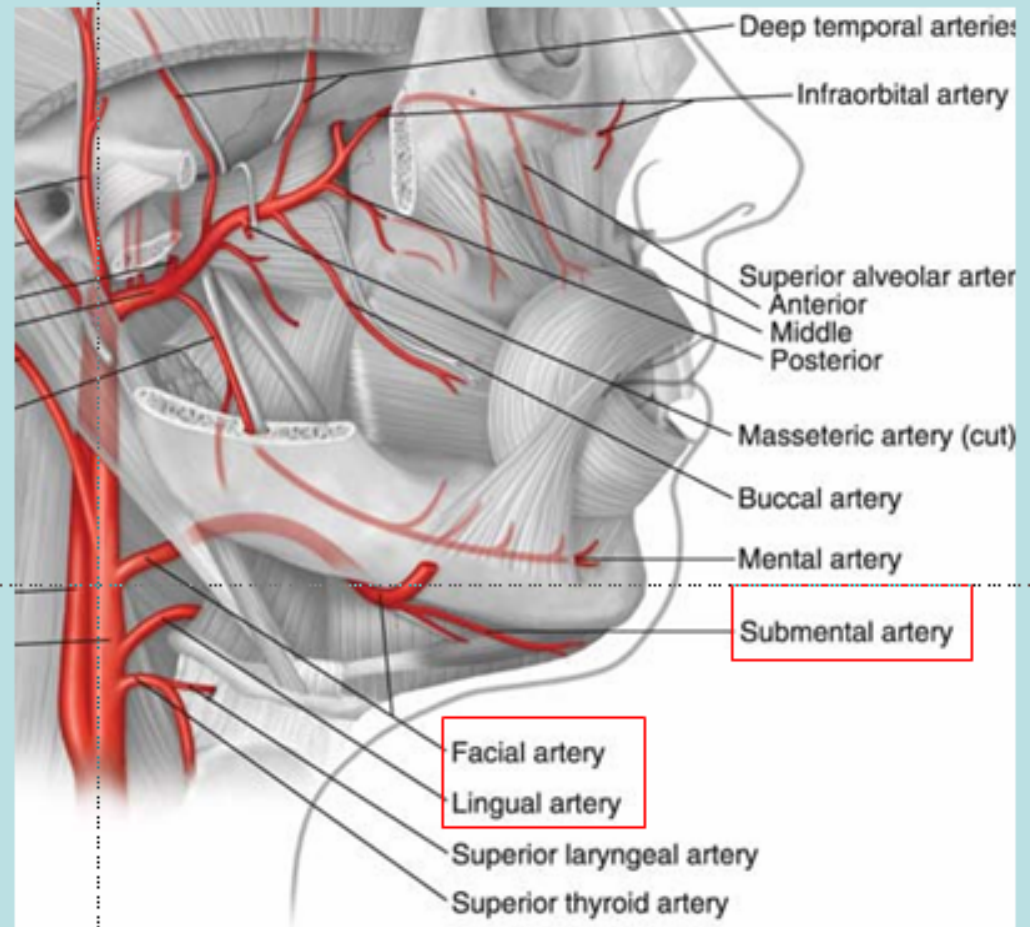
Few may open in the submandibular duct



# Blood Supply

➤ **Branches of the facial & lingual arteries**

➤ **The veins drains into facial & lingual veins**



# Lymph Drainage

To submandibular & deep cervical lymph nodes



# Nerve Supply

## Parasympathetic

Fibers from superior salivary nucleus of facial nerve pass to the submandibular ganglion via cord tympani nerve & the lingual nerve

The postganglionic fibers reach the gland via lingual nerve

## Sympathetic

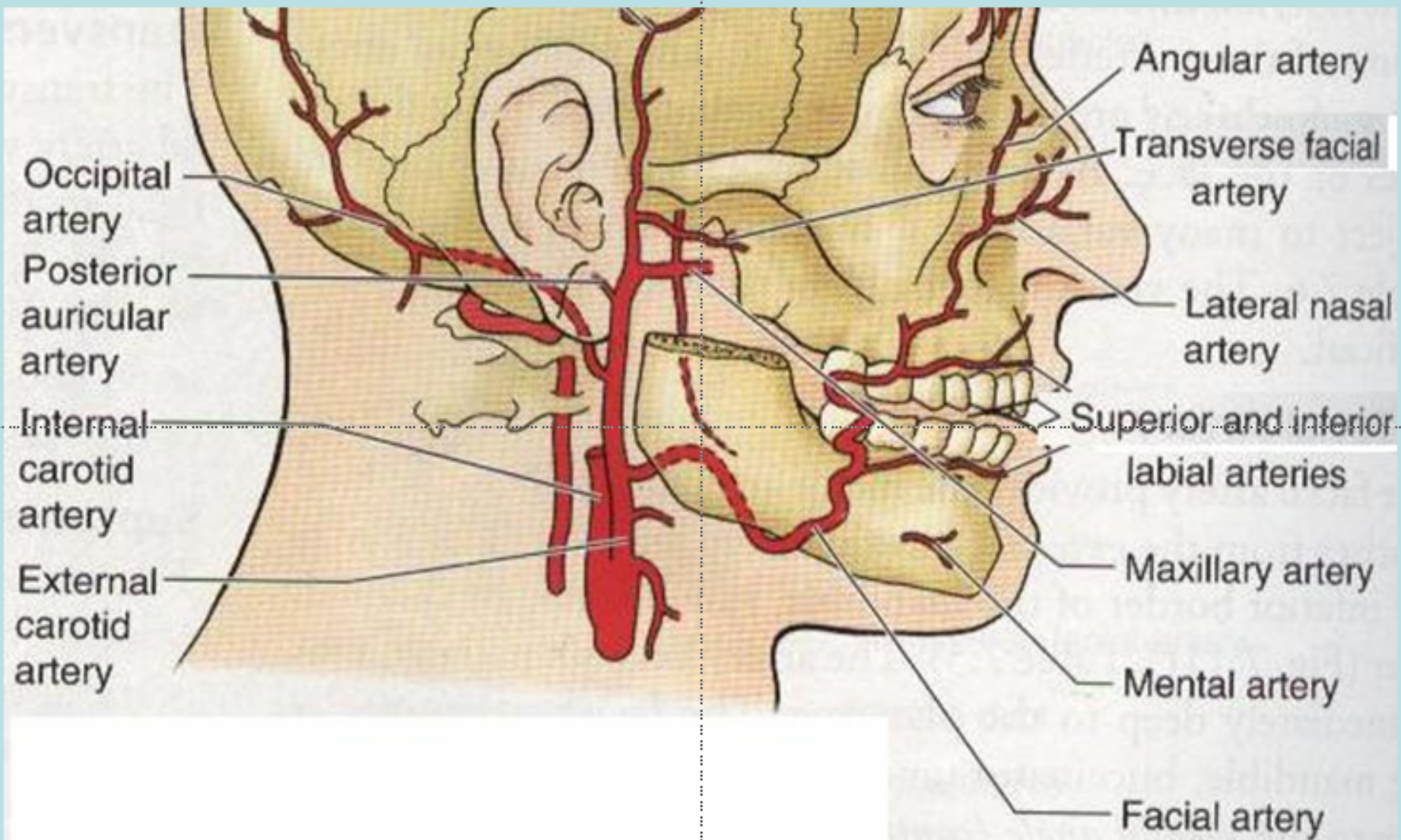
Postganglionic fibers reach the gland as a plexus of nerves around the facial & lingual arteries

# Facial Artery

Arises from the external carotid artery just above the tip of the greater cornu of the hyoid bone  
Grooves the posterior border of the submandibular gland  
Hooks around the lower border of the mandible to enter the face

## *Branches in the submandibular region*

Ascending palatine artery  
Tonsillar artery  
Glandular artery  
Submental artery

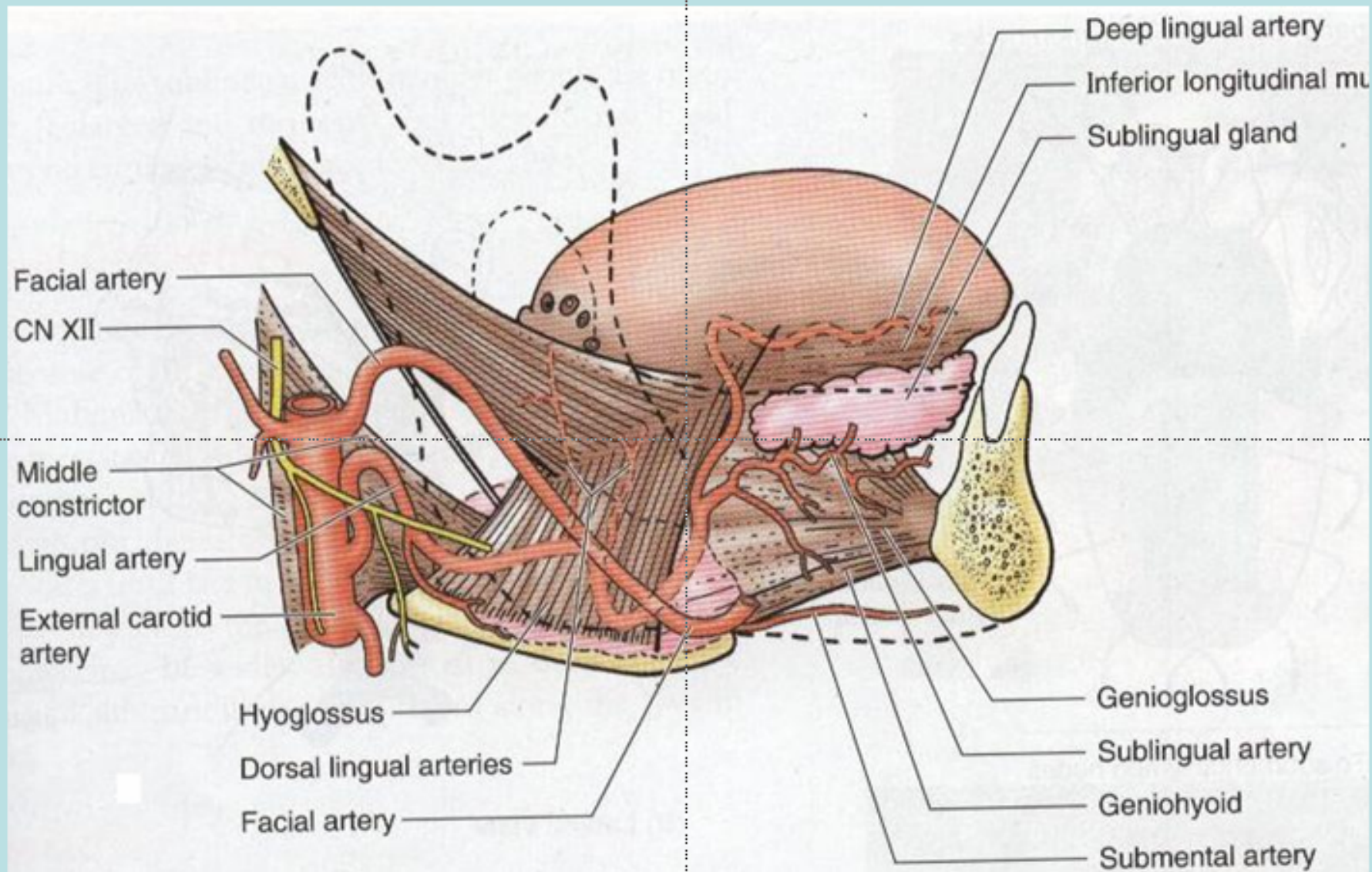


# Lingual Artery

Arises from the external carotid artery opposite to the tip of the greater cornu of the hyoid bone  
Runs forward & forms upward loop which is crossed by the hypoglossal nerve  
Supply the tip of the tongue

## *Branches in the submandibular region*

2-3 Dorsal lingual branches to the dorsum of the tongue  
Sublingual artery to sublingual gland



Thank you