

# PALATINE TONSILS

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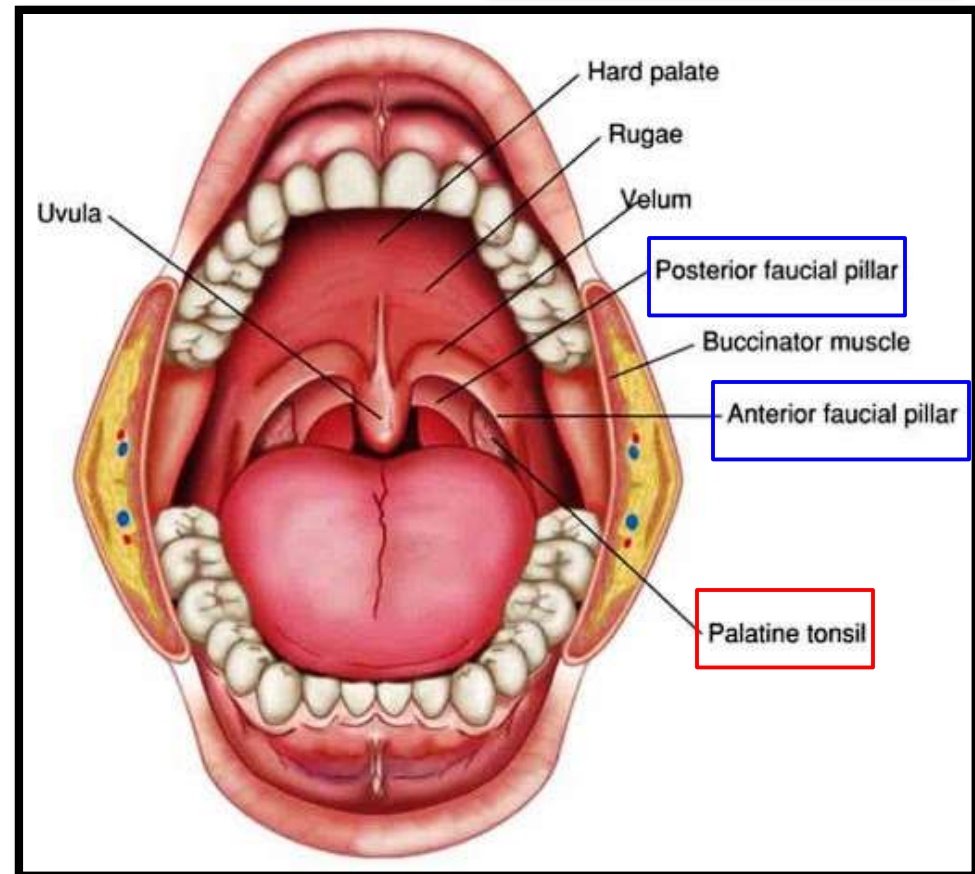
# Introduction



- There are two palatine tonsils.
- Each palatine tonsil is a mass of lymphoid tissue.

## Location-

- In **tonsillar fossa**, which is situated in the lateral wall of oropharynx between anterior and posterior faucial pillars.



**Shape-** Almond shaped.

# Boundaries of Tonsillar Fossa

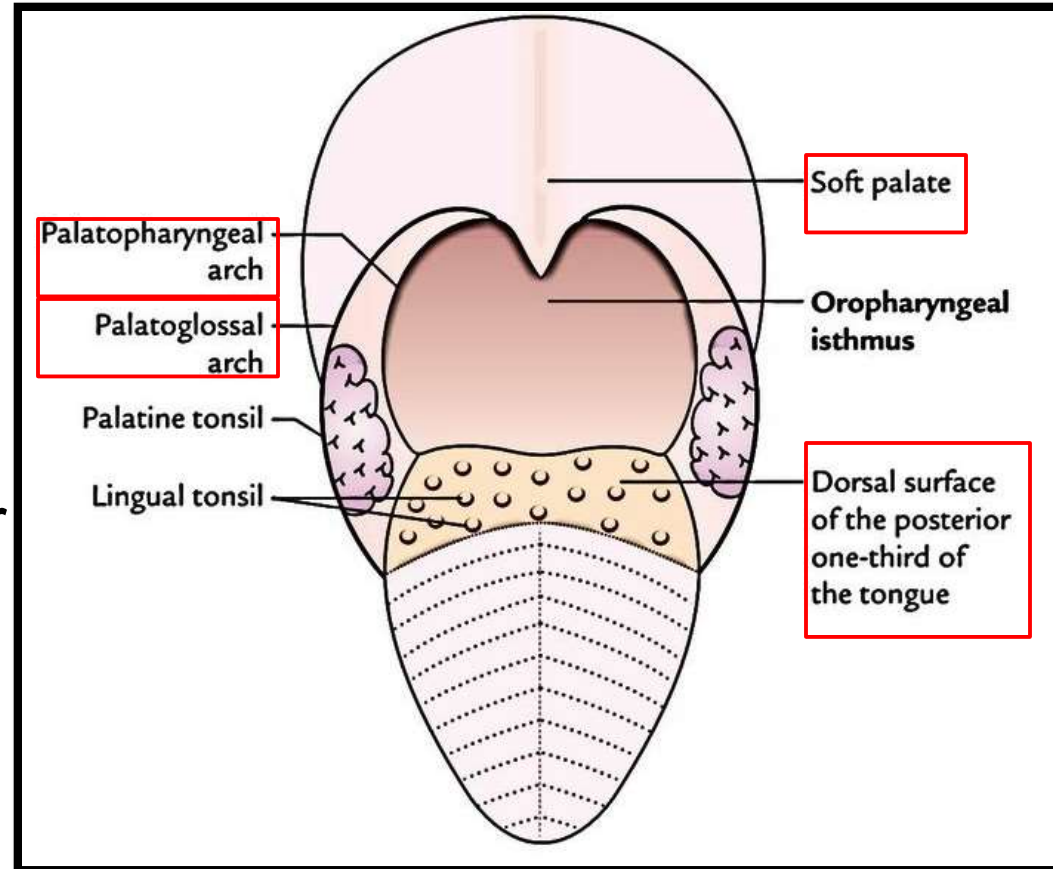
**Anterior-** Anterior faucial pillar  
(palatoglossal arch).

**Posterior-** Posterior faucial pillar  
(palatopharyngeal arch).

**Apex-** Soft palate.

**Base-** Dorsal surface of posterior  
1/3<sup>rd</sup> of tongue.

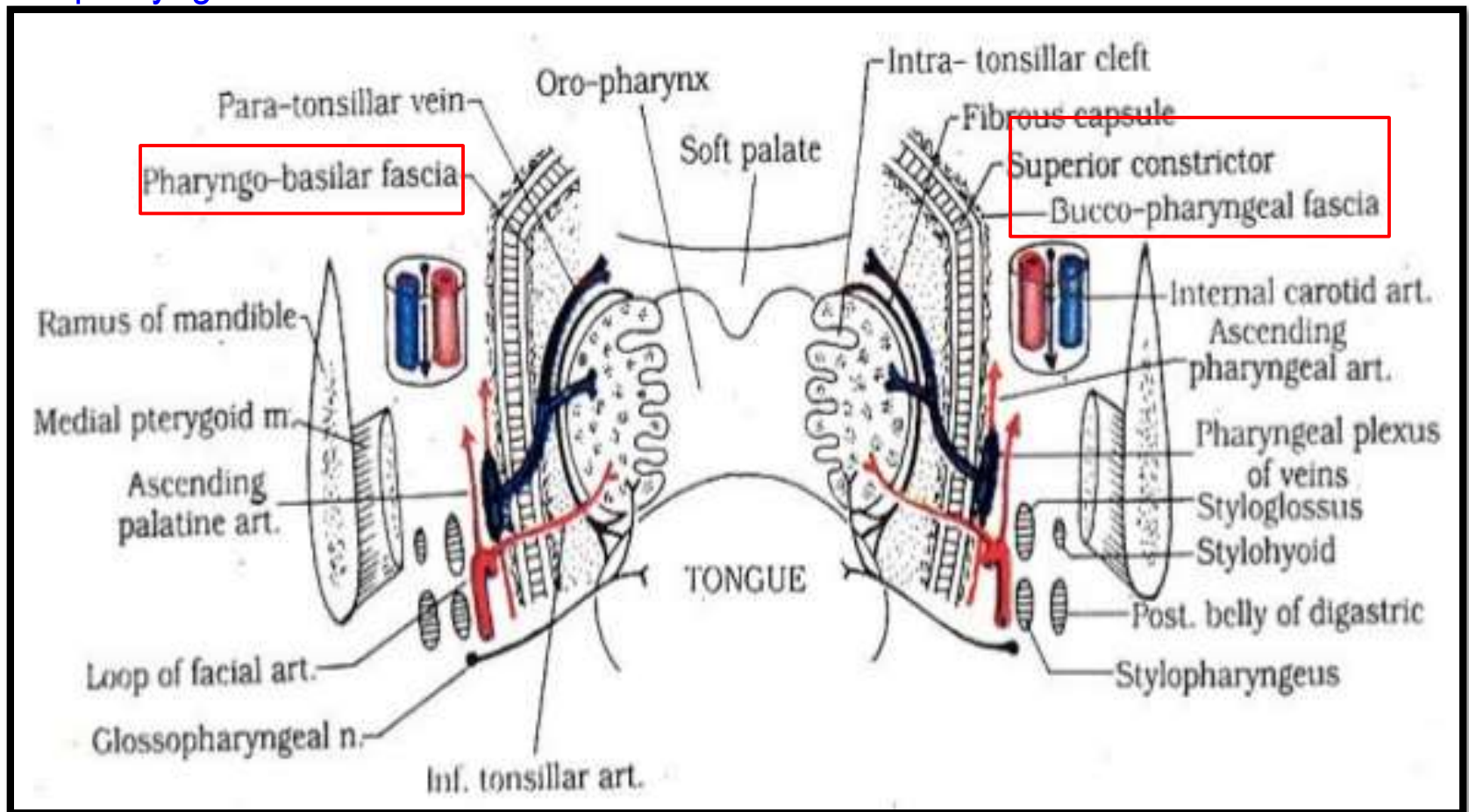
**Lateral wall [Tonsillar Bed]-**  
Superior Constrictor Muscle  
(mainly).



# Tonsillar Bed

❖ Following structures form the tonsillar bed ( from inside outwards):

- Pharyngobasilar fascia.
- Superior Constrictor muscle.
- Buccopharyngeal fascia.



# Presenting Parts

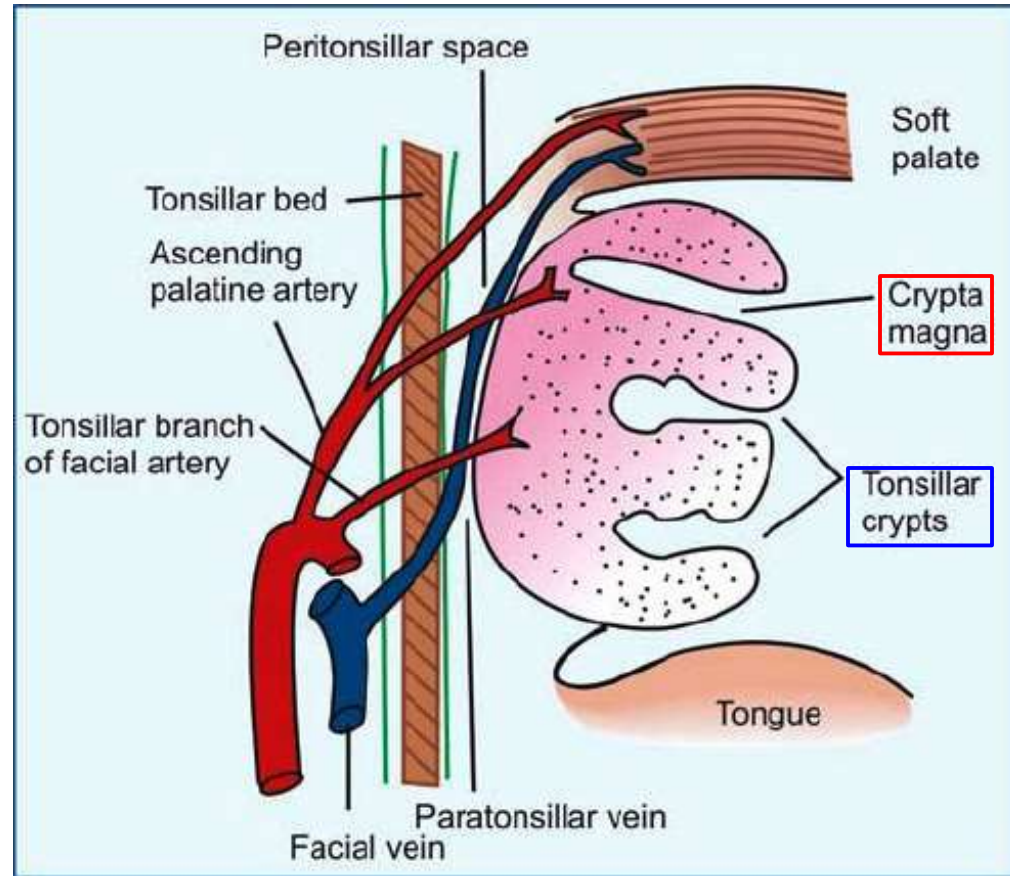
- 2 surfaces- Medial & Lateral
- 2 borders- Anterior & Posterior
- 2 Poles- Upper & Lower

## Medial Surface-

- It bulges into oropharynx.
- It is covered by epithelium.
- It has crypts.
- There are ~ 12-15 crypts.

## Crypta Magna-

- A very large and deep crypt located near upper pole.
- It represents the remnant of 2<sup>nd</sup> pharyngeal pouch.

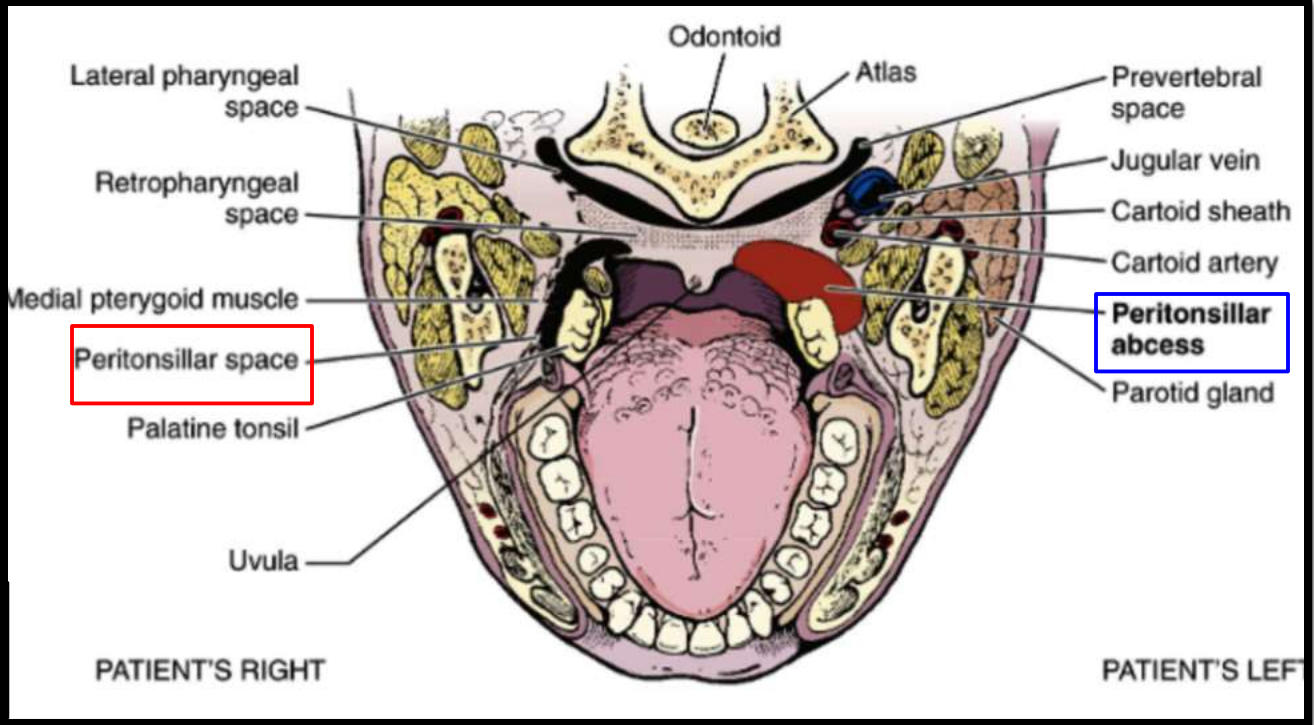
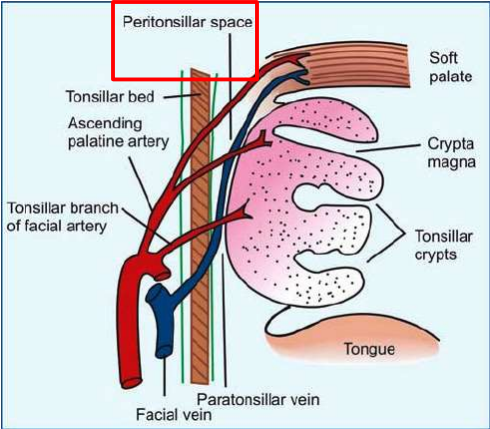
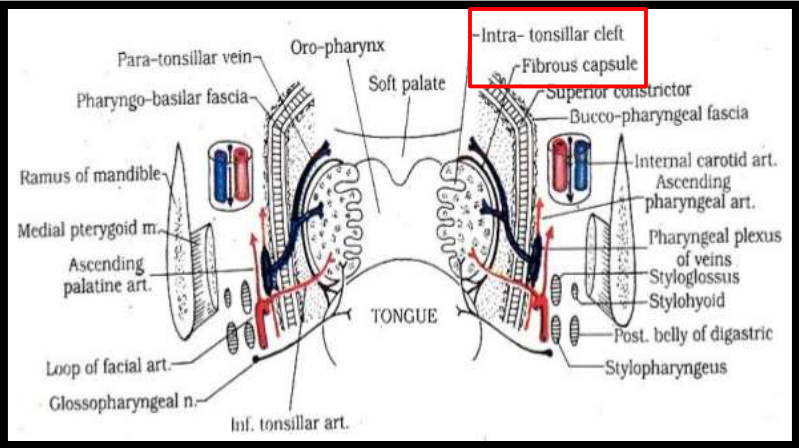


# Lateral Surface

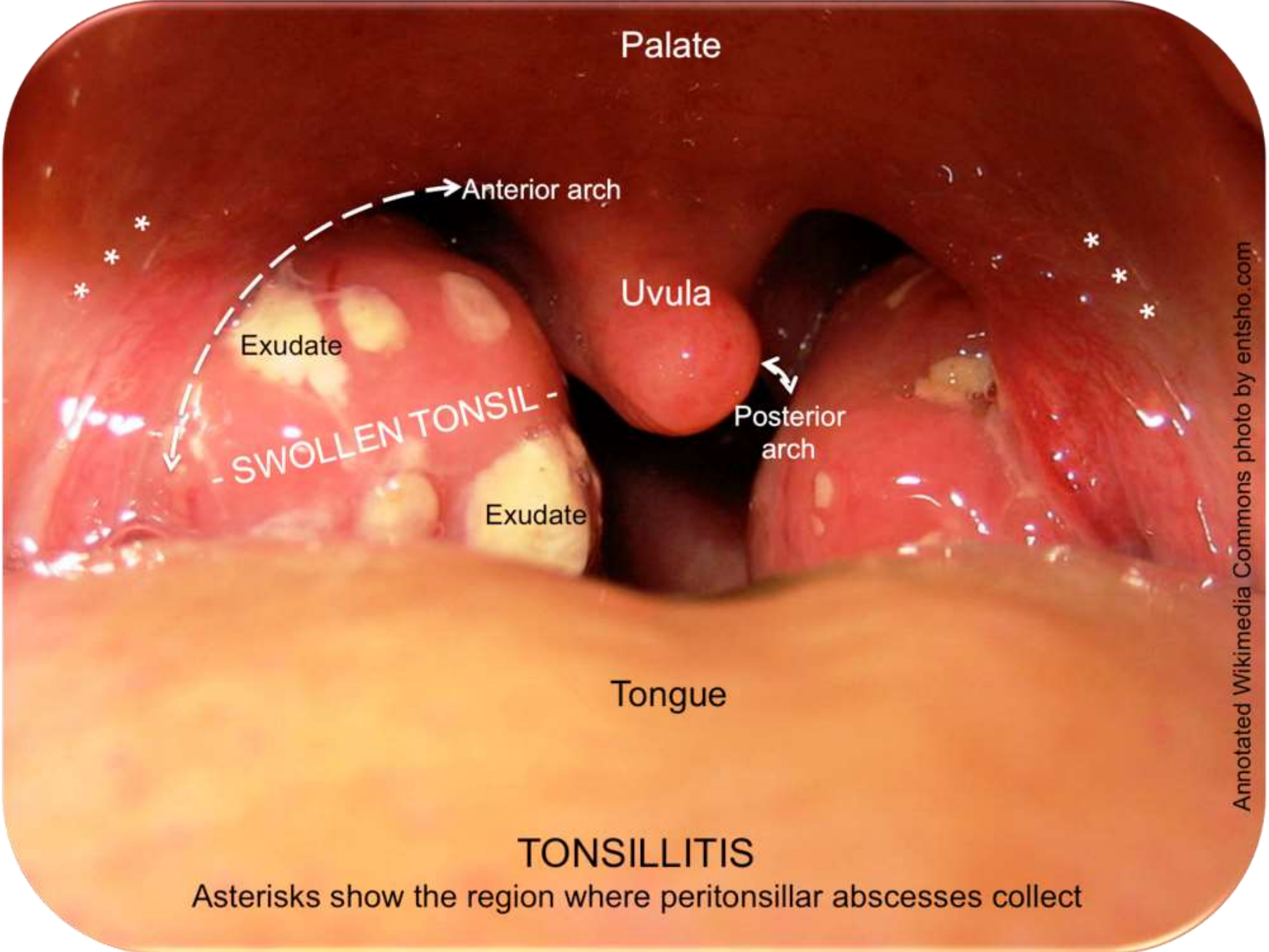
- It is covered by fibrous capsule.

## Peritonsillar Space-

- A space between fibrous capsule and tonsillar bed.
- It is filled with loose areolar tissue.
- It is the site of collection of pus in **peritonsillar abscess**.
- During **tonsillectomy**, tonsil is dissected in this plane.



Internal Carotid Artery is ~2.5 cm posterolateral to the tonsil



Palate

Anterior arch

Uvula

Posterior arch

Exudate

Exudate

SWOLLEN TONSIL

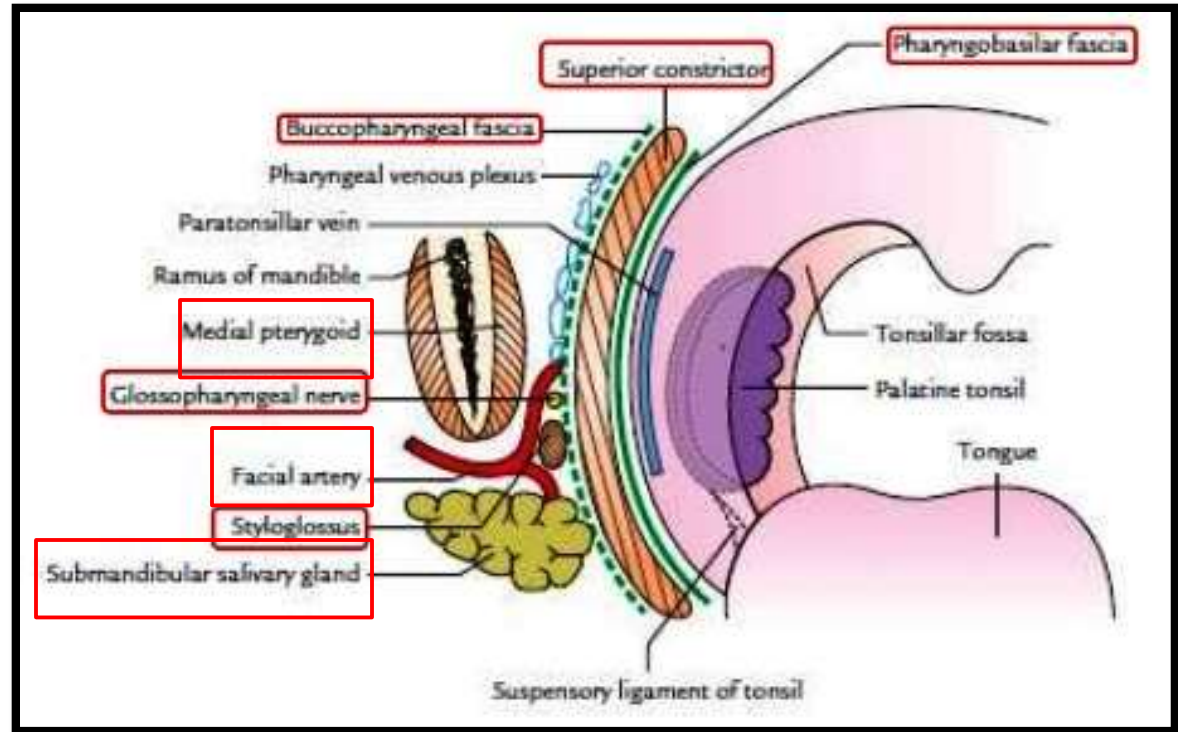
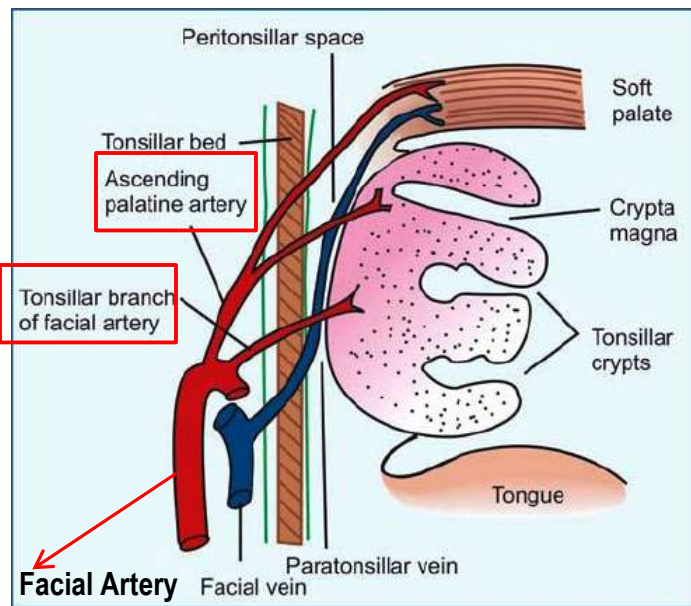
Tongue

### TONSILLITIS

Asterisks show the region where peritonsillar abscesses collect

# Lateral Surface contd...

- ❖ Superior constrictor separates the lateral surface from following structures:
  - Facial artery and its ascending palatine and tonsillar branches.
  - Styloglossus muscle.
  - Glossopharyngeal nerve.
  - Angle of mandible.
  - Medial Pterygoid muscle.
  - Submandibular salivary gland.





# Presenting Parts contd...

## Anterior Border-

- Passes underneath the palatoglossal arch.

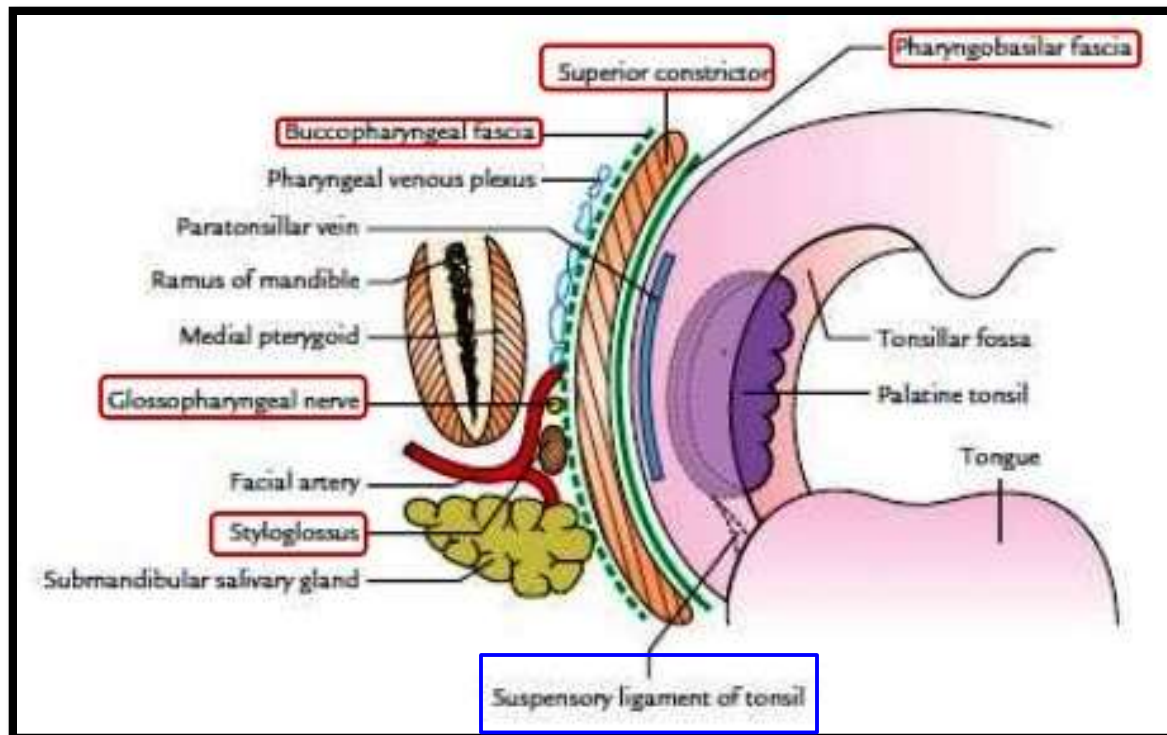
## Posterior Border-

- Passes underneath the palatopharyngeal arch.

**Upper Pole-** extends up into the soft palate.

## Lower Pole-

- It is attached to the tongue by a band of fibrous tissue called *suspensory ligament of tonsil*.



# Arterial Supply

## ❖ Facial Artery-

- Tonsillar branch.
- Ascending Palatine branch.

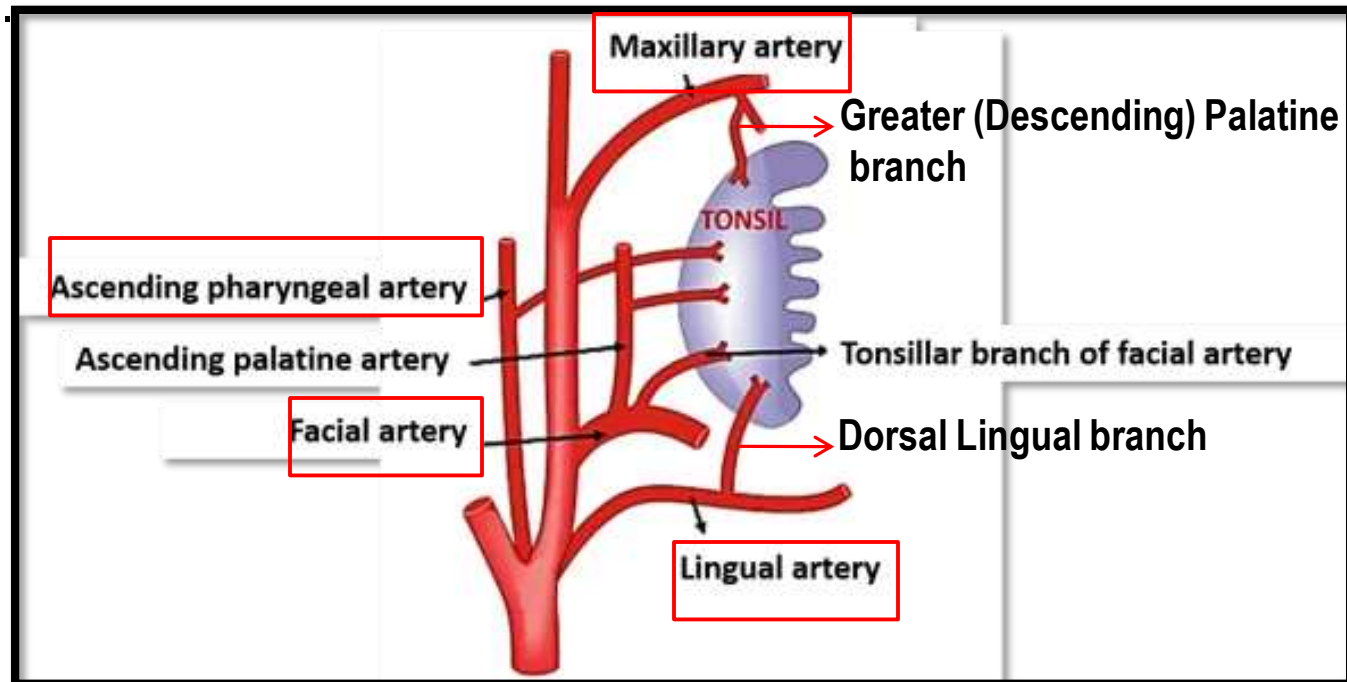
## ❖ Lingual Artery-

- Dorsalis Linguae branches.

## ❖ Ascending Pharyngeal Artery.

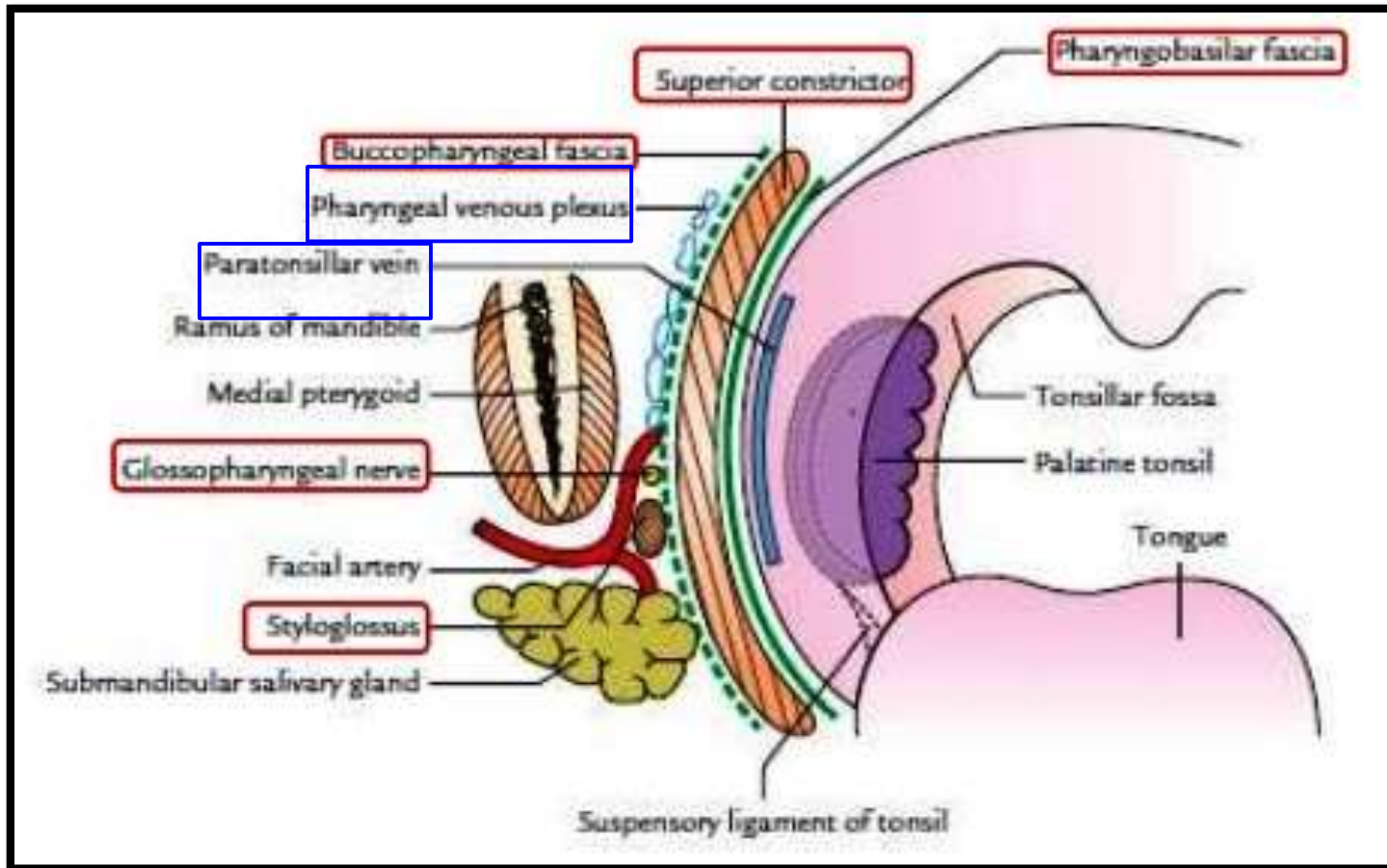
## ❖ Maxillary Artery-

- Greater Palatine Branch.



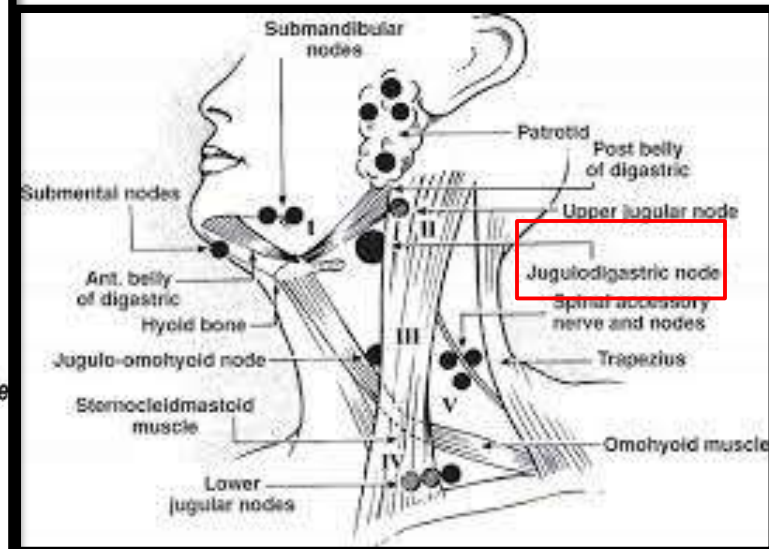
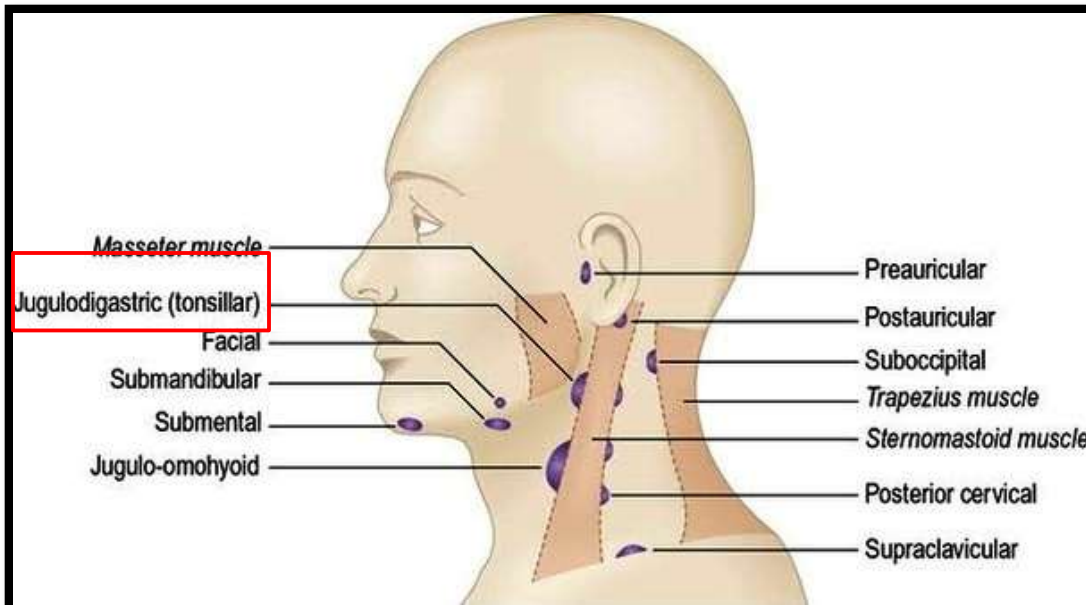
# Venous Drainage

- Paratonsillar Vein.
- Paratonsillar Vein drains into pharyngeal venous plexus.



# Lymphatic Drainage

- Upper deep cervical lymph nodes [mainly **Jugulo-digastric nodes**].
- Jugulo-digastric nodes are called '**Tonsillar Lymph Nodes**'.



# Nerve Supply

- ❖ Glossopharyngeal nerve.
- ❖ Pterygopalatine ganglion-
  - Lesser palatine branches.

# Applied Aspects

## Acute Tonsillitis-

- Palatine tonsils are frequent sites of acute infection.

## Age group-

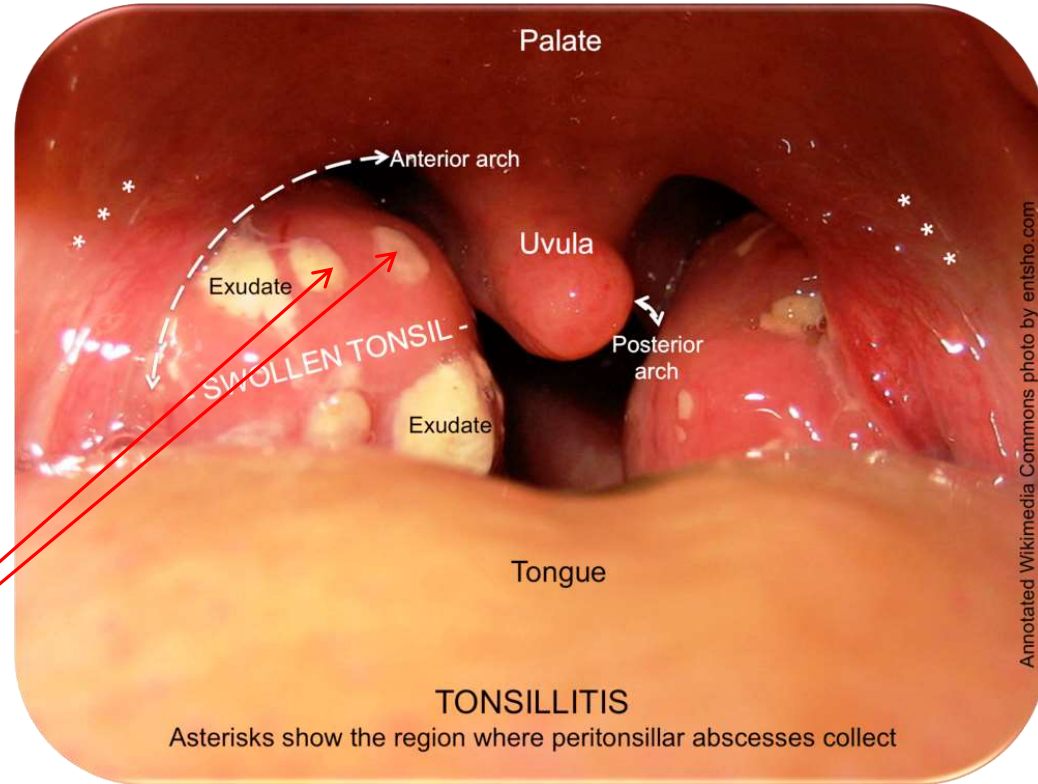
- School-going children.

## Etiology-

- Mostly viral.

## Acute Follicular Tonsillitis-

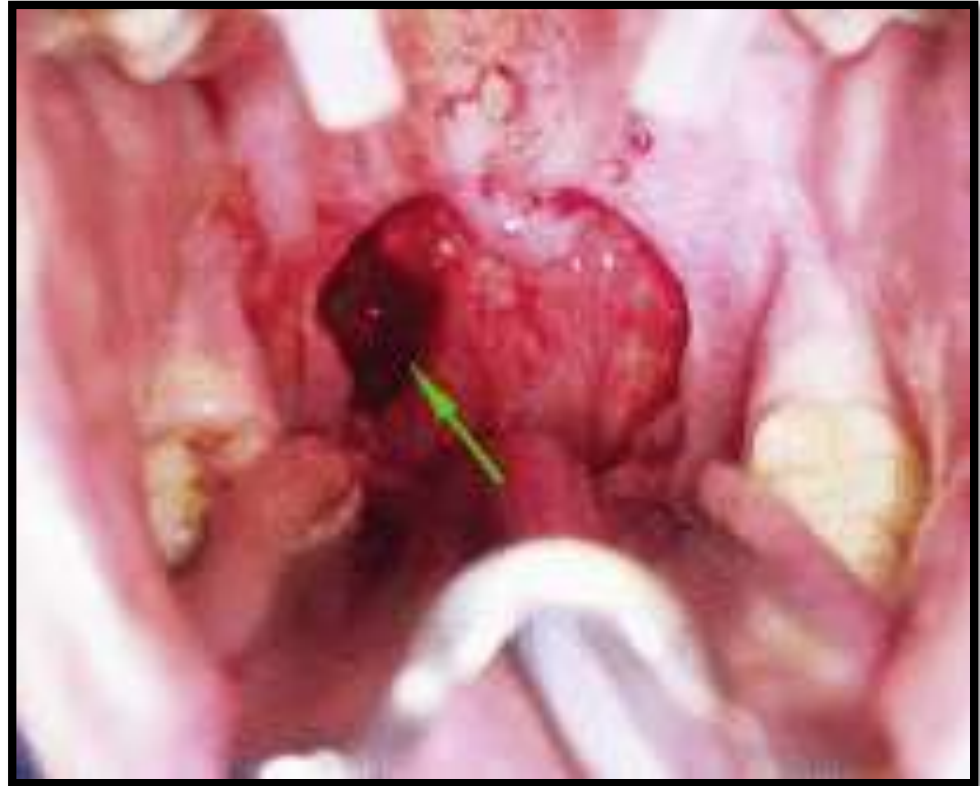
- Infection spreads into crypts.
- Crypts become filled with purulent material, which presents at the opening of the crypt as yellowish spots.



# Applied Aspects contd...

## Tonsillectomy-

- Surgical removal of tonsil.
- If paratonsillar vein gets damaged during tonsillectomy, severe bleeding occurs from tonsillar fossa.
- To check bleeding, blood clots should be removed because they interfere with retraction of walls of vein.
- Blood clots prevent the contraction of surrounding muscles.
- After tonsillectomy, postoperative edema of tonsillar bed can affect the Glossopharyngeal nerve.





Thank  
you!