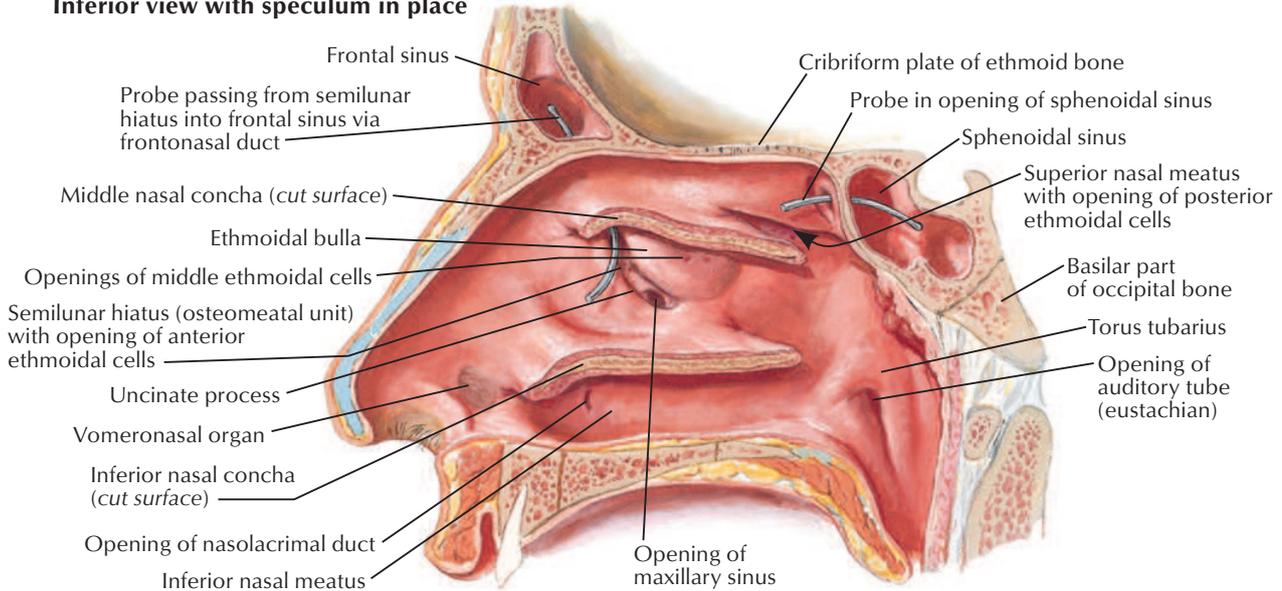
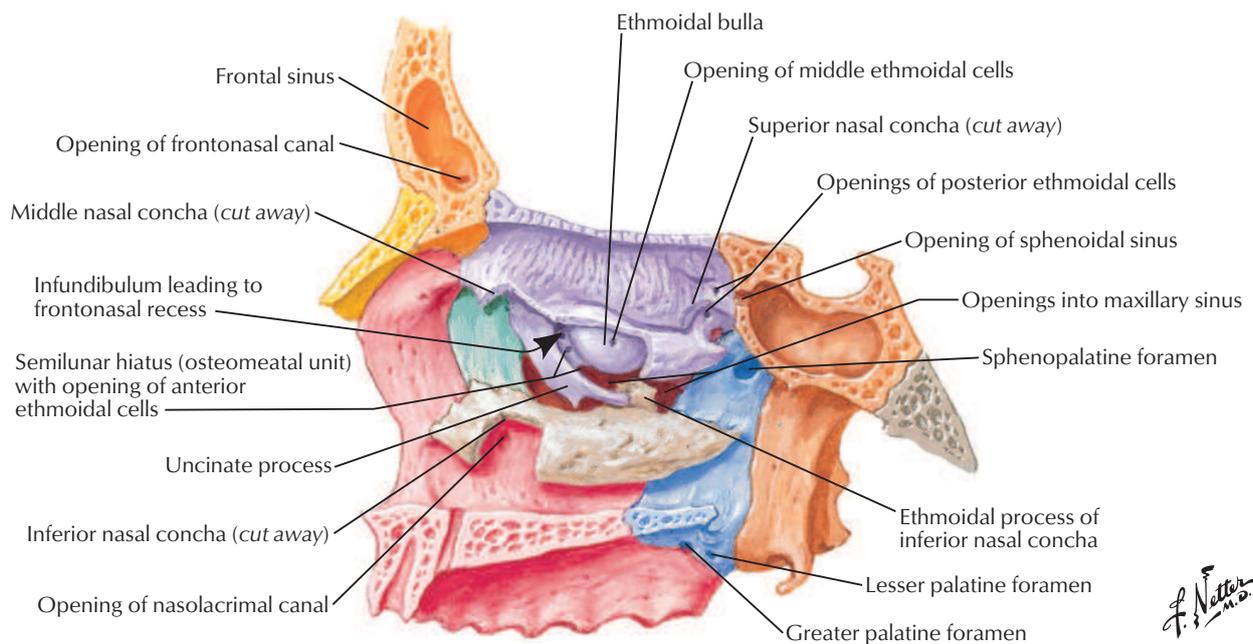
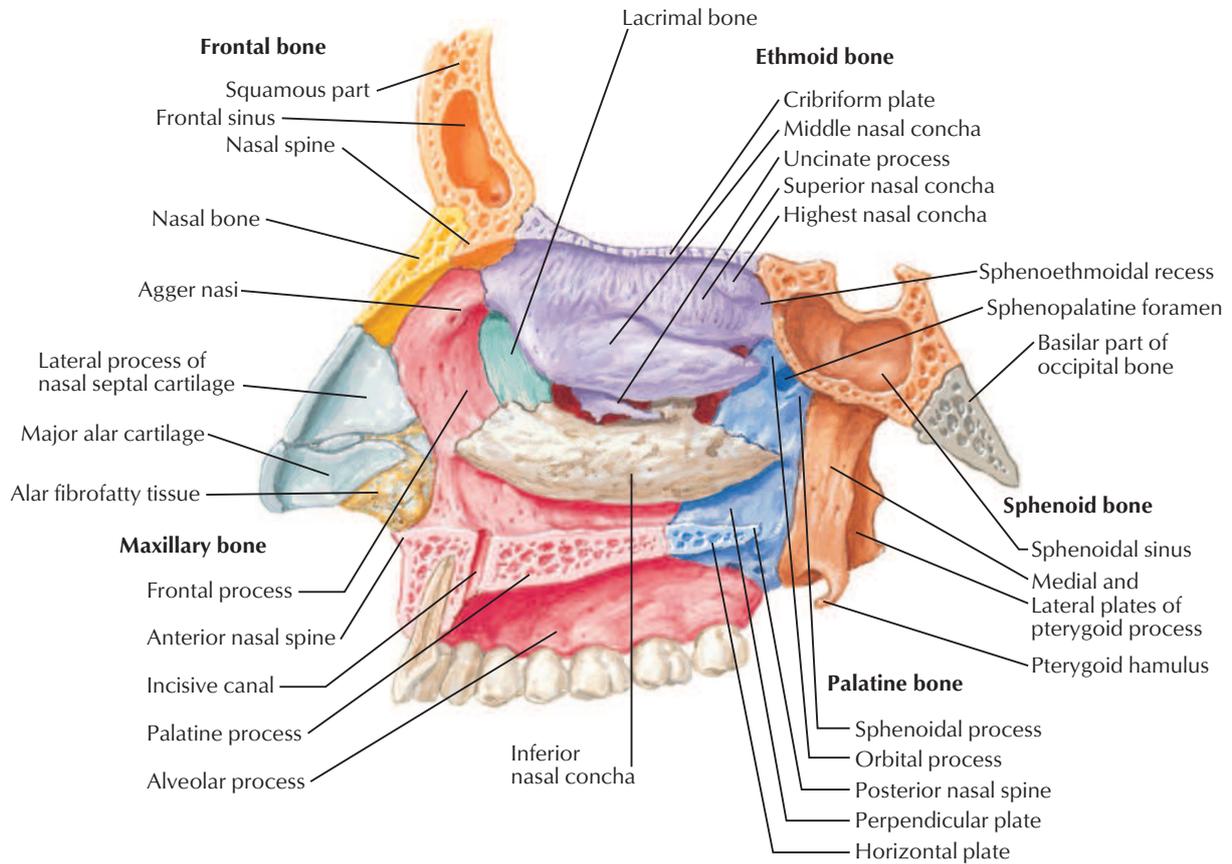


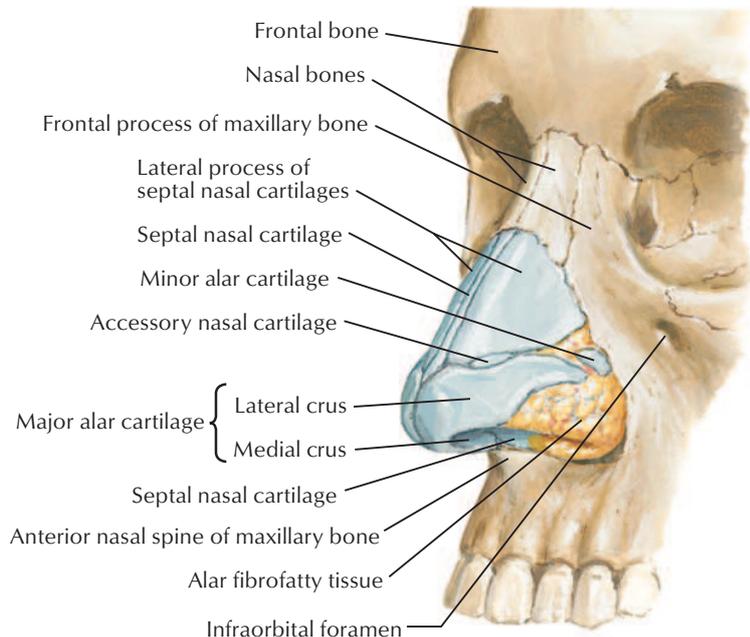
**Inferior view with speculum in place**



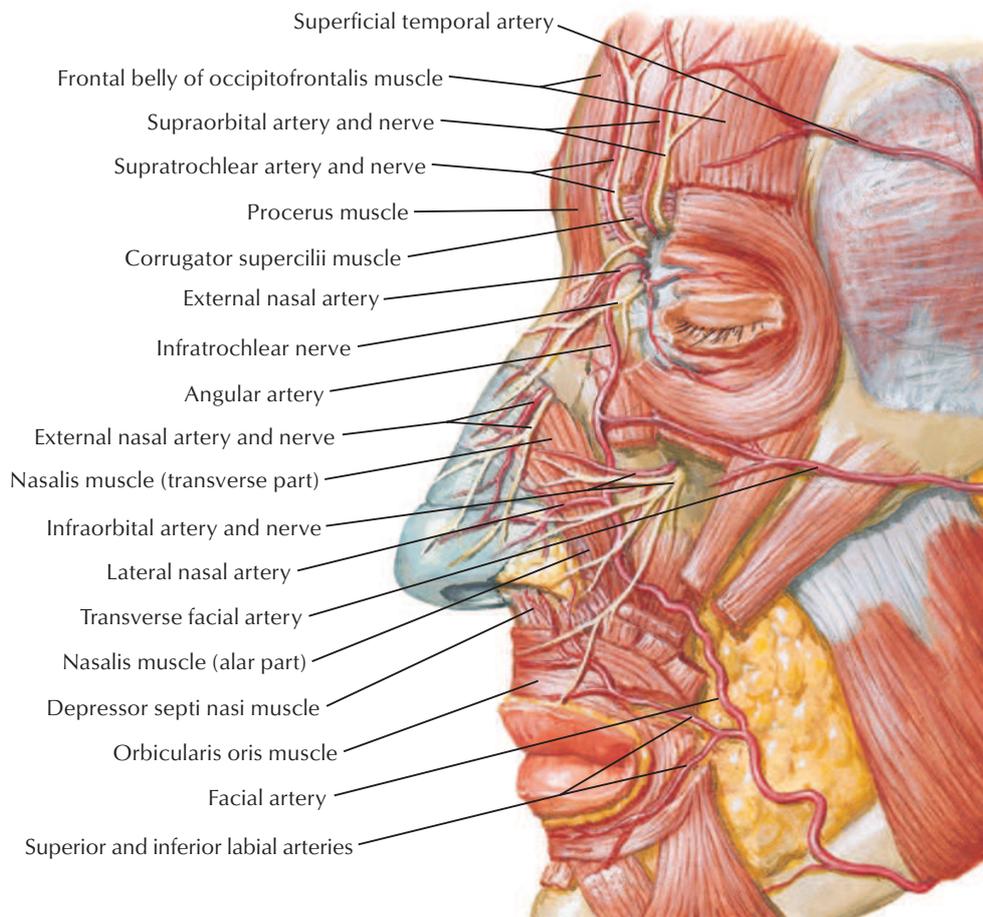
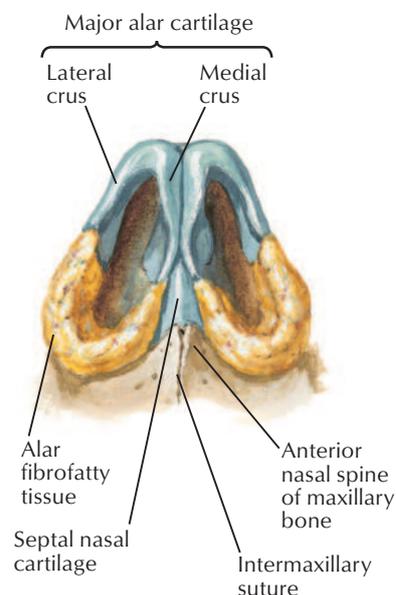


*F. Netter M.D.*

**Anterolateral view**



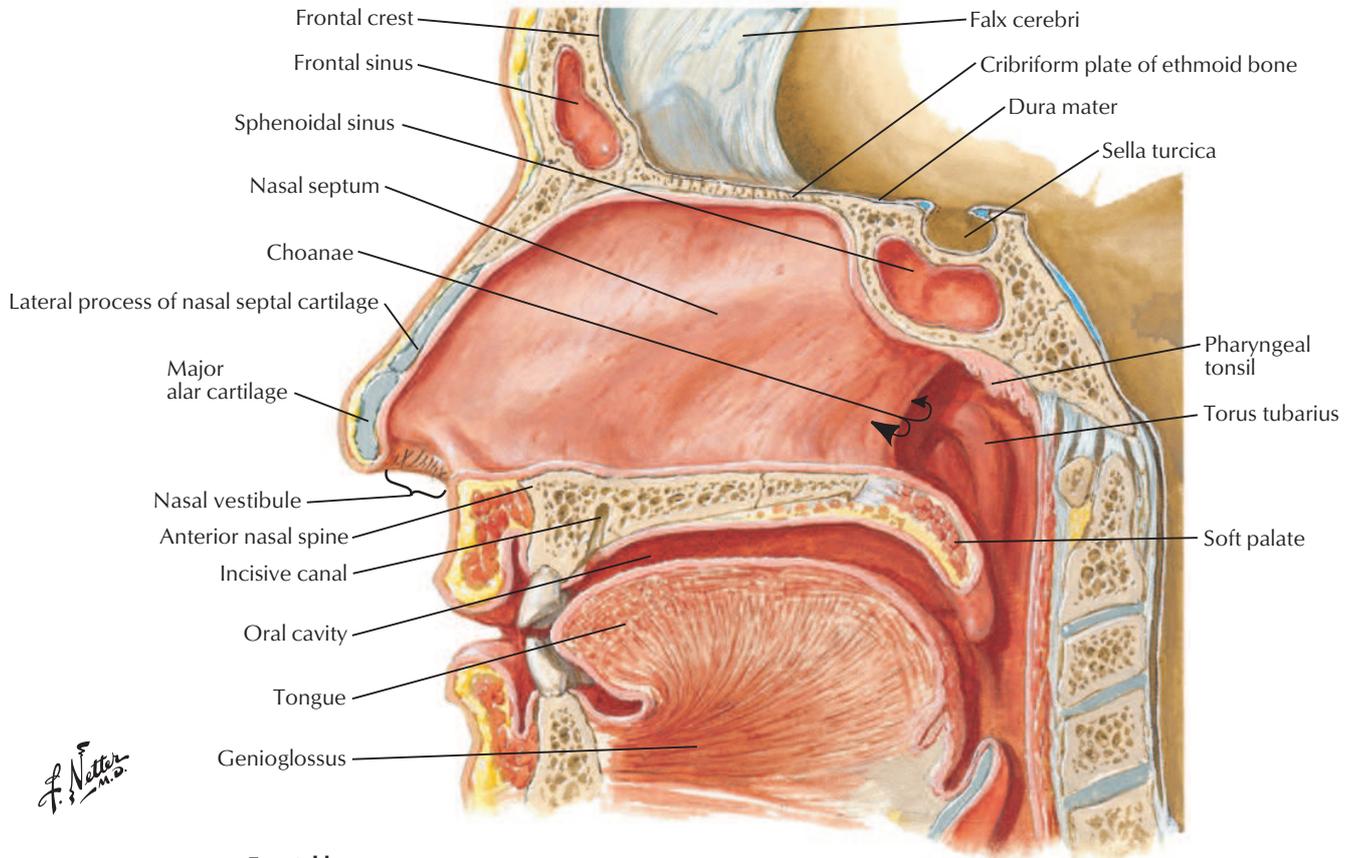
**Inferior view**



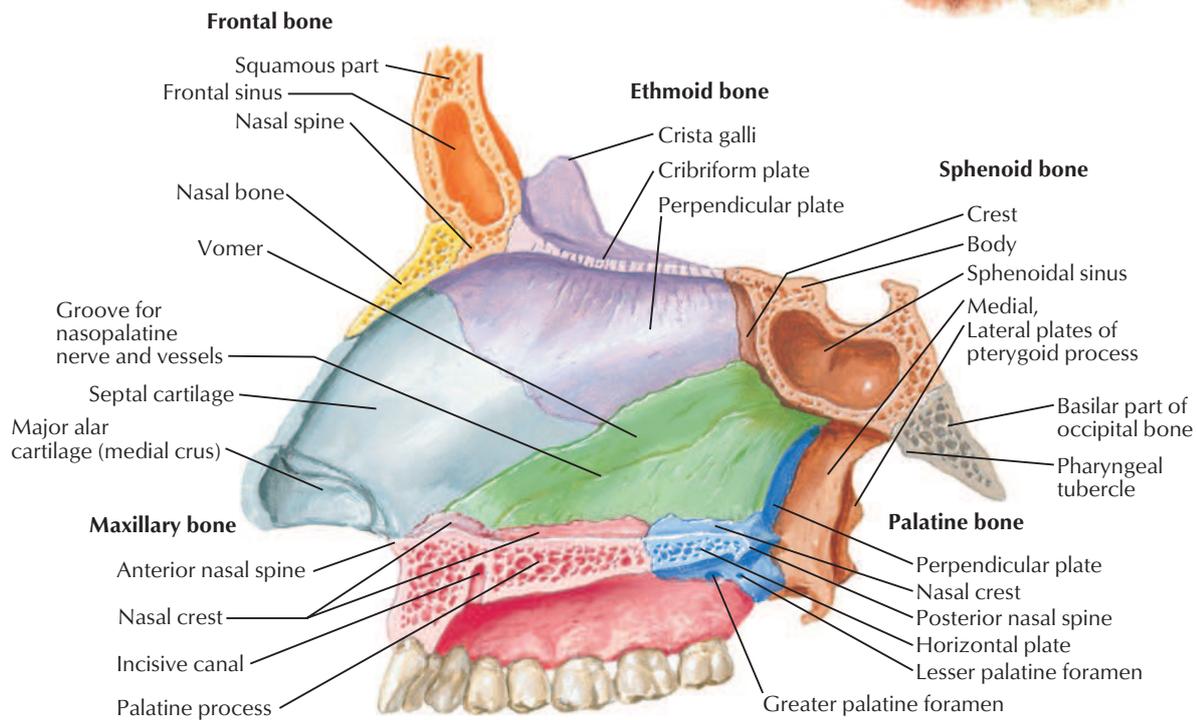
*F. Netter M.D.*

# Medial Wall of Nasal Cavity (Nasal Septum)

See also [Plate 15](#)

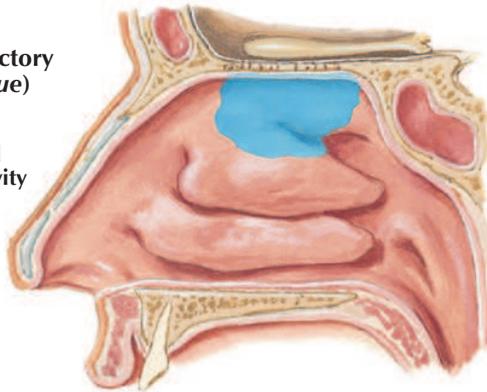


*F. Netter M.D.*

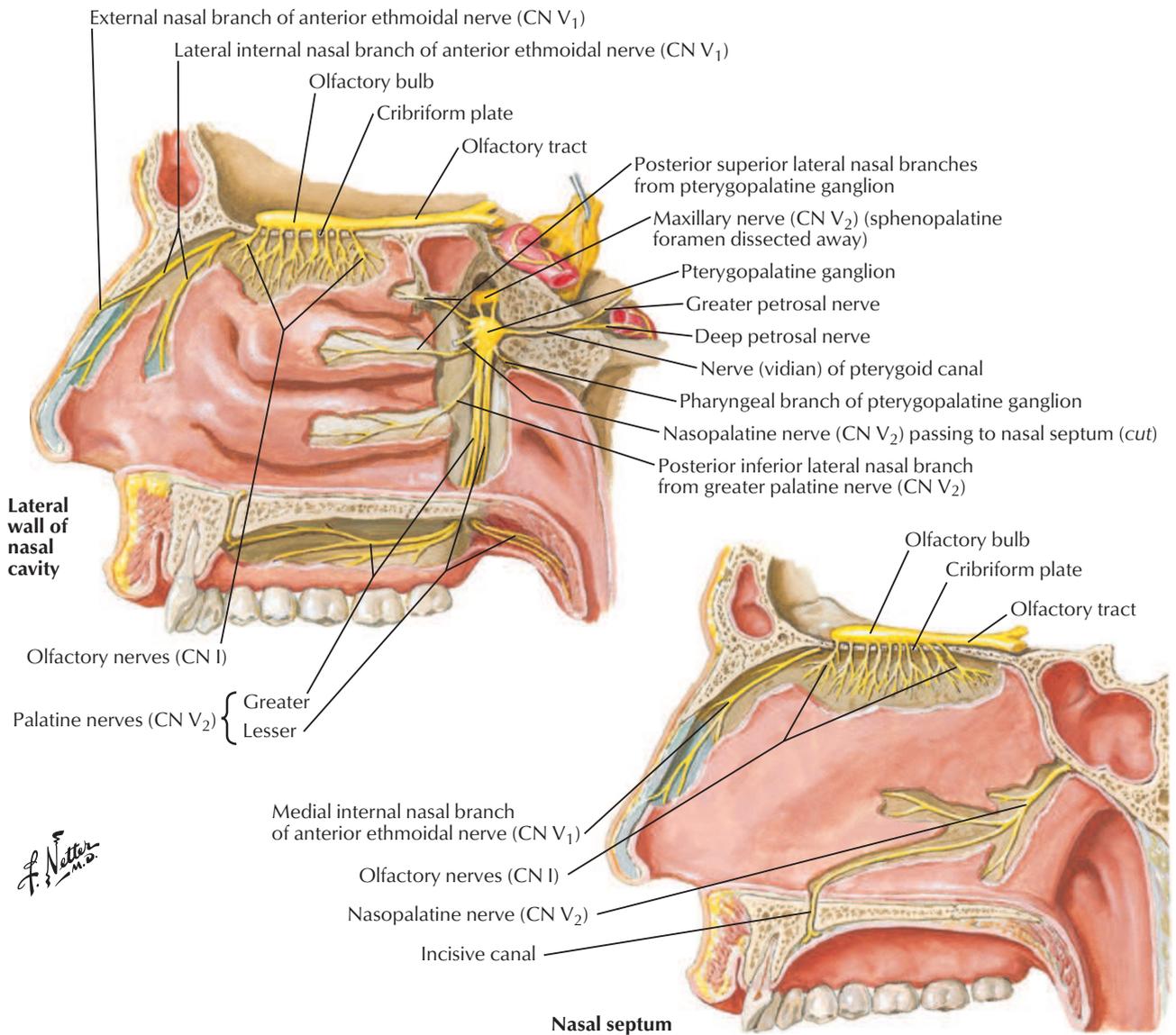
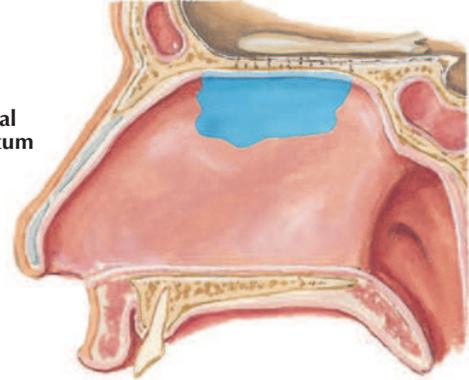


Distribution of olfactory mucosa (shaded blue)

Lateral wall of nasal cavity

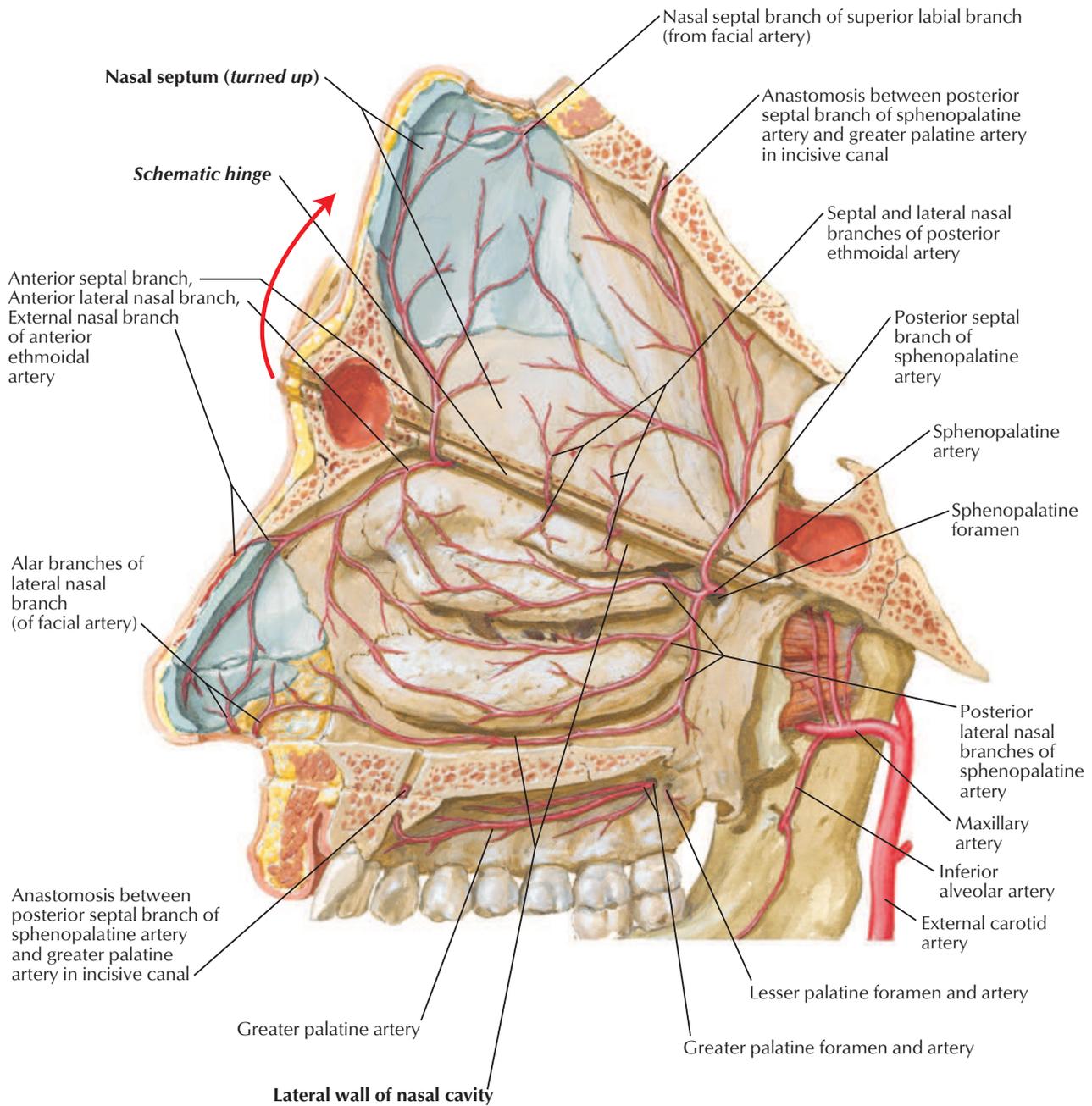


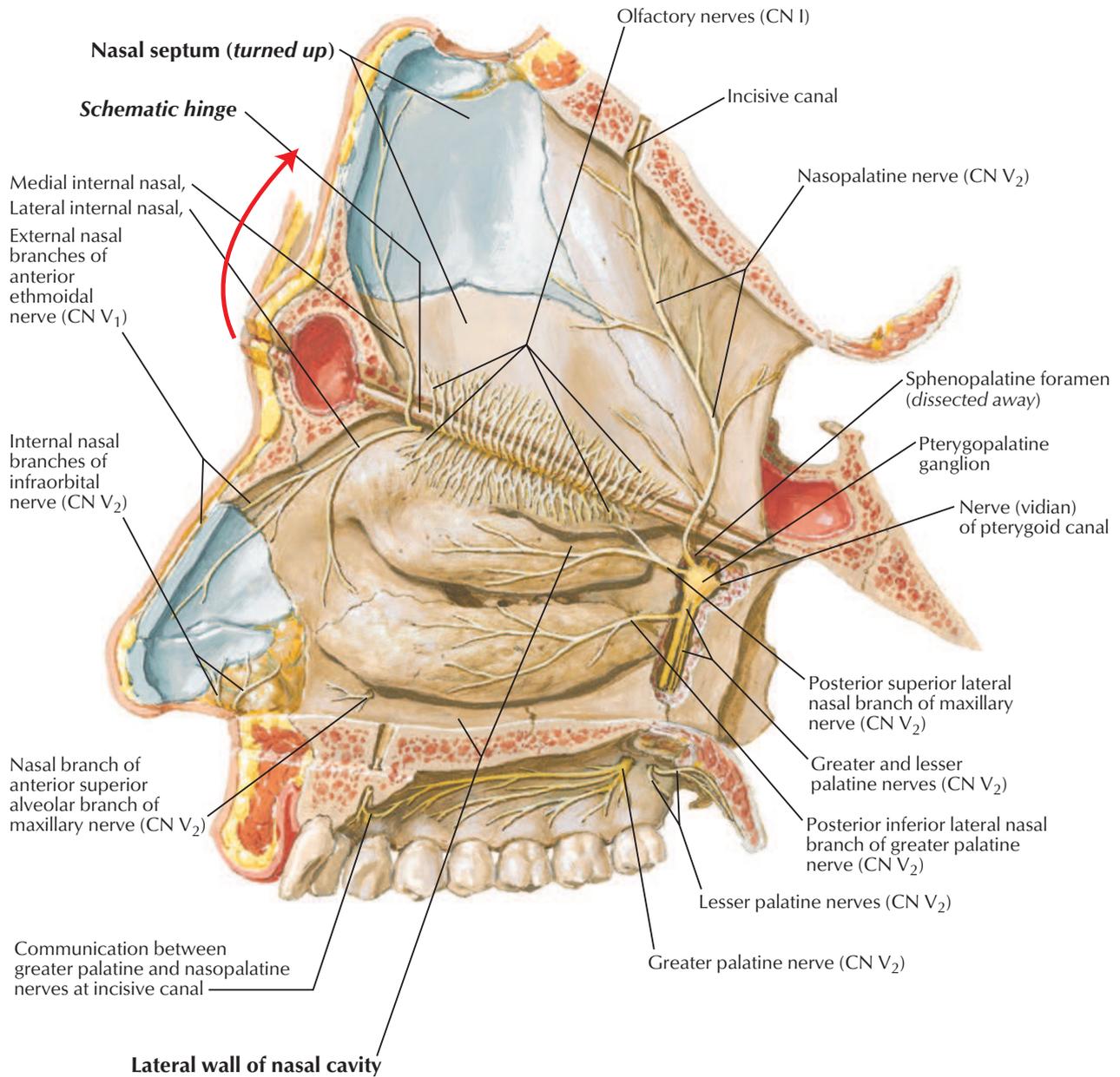
Nasal septum



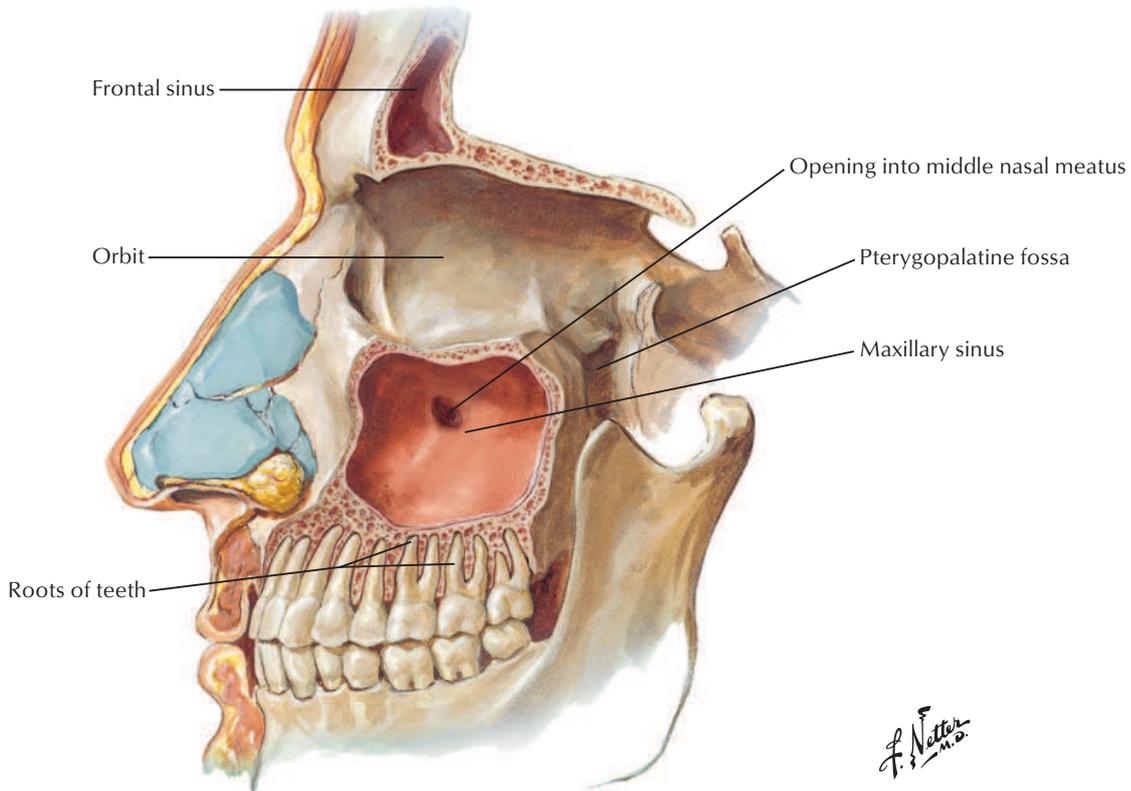
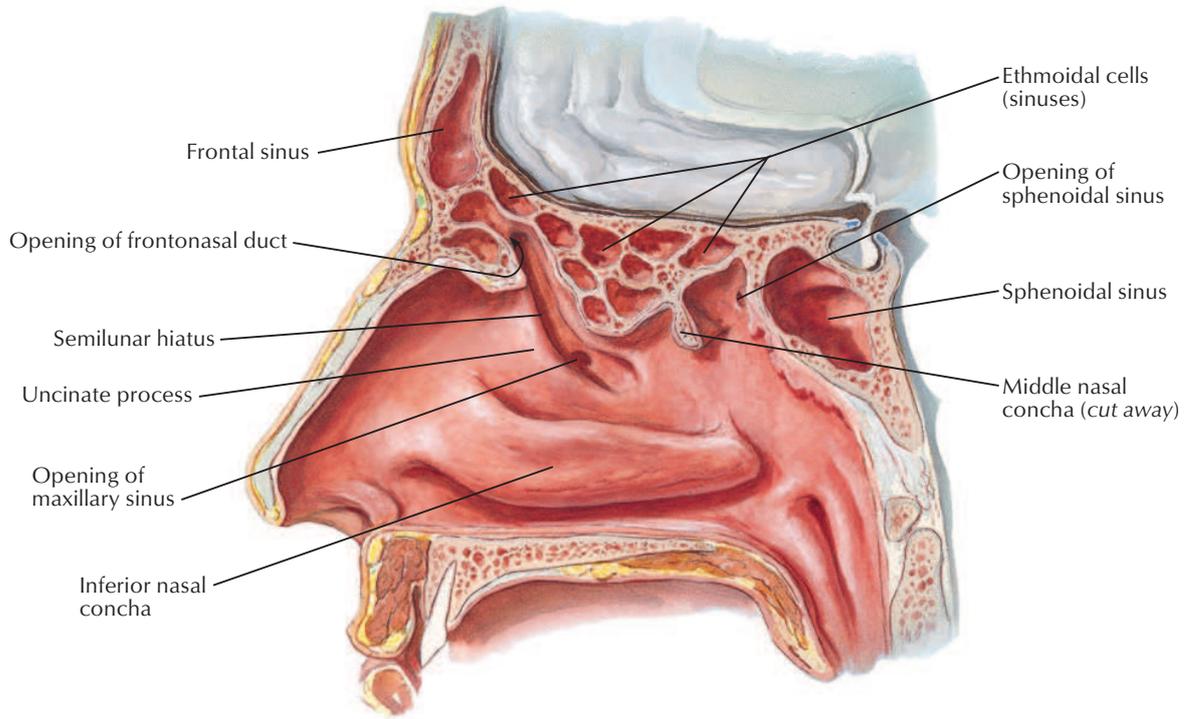
# Arteries of Nasal Cavity: Bony Nasal Septum Turned Up

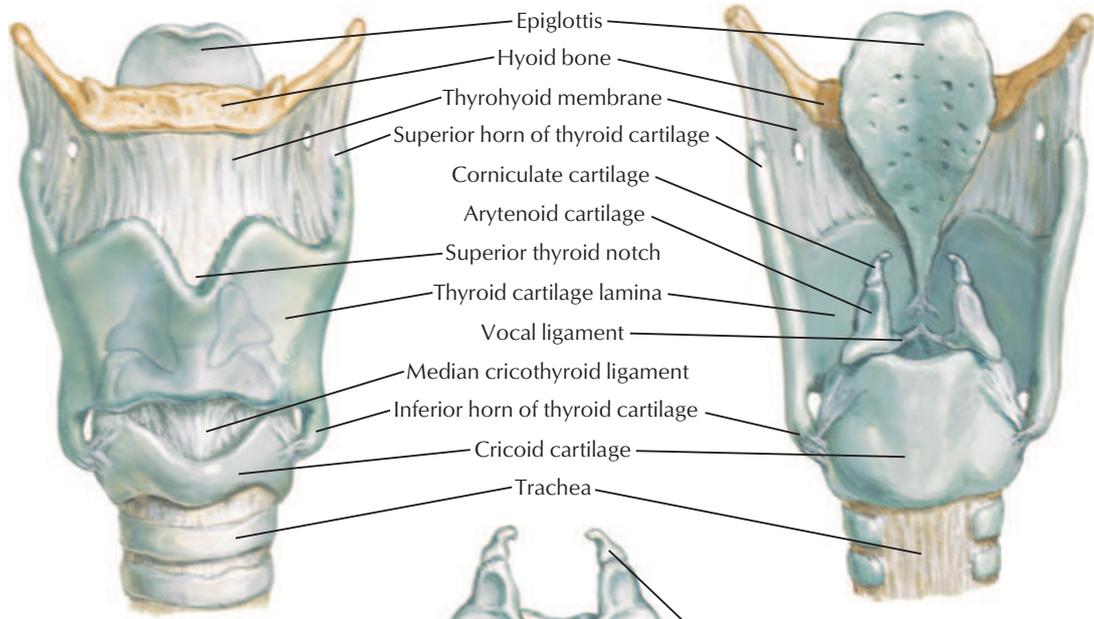
See also [Plates 57, 63](#)





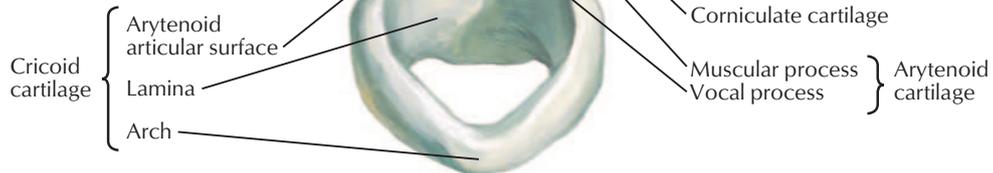
*F. Netter M.D.*



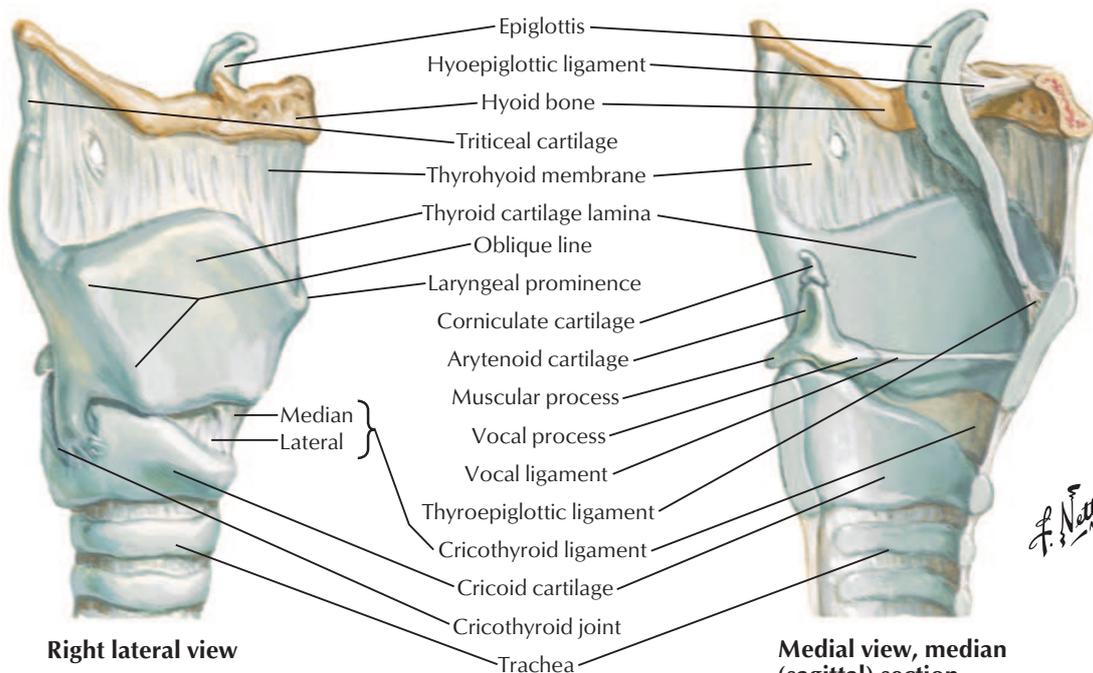


**Anterior view**

**Posterior view**



**Anterosuperior view**



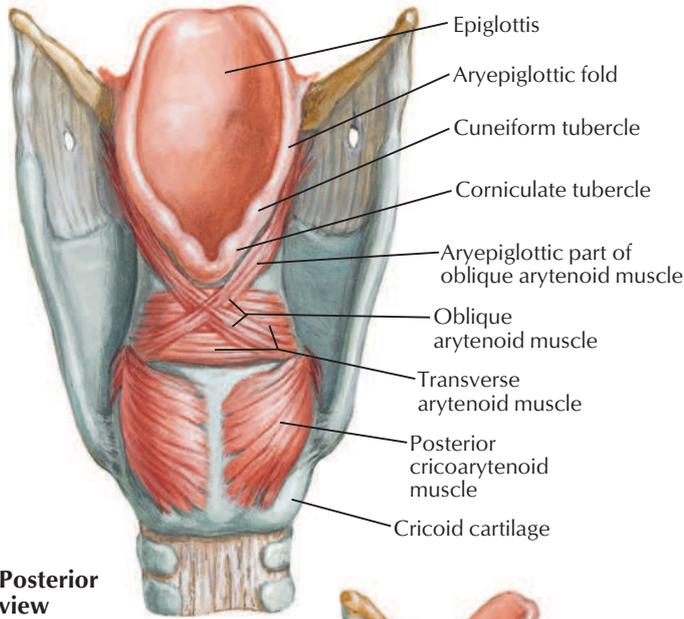
**Right lateral view**

**Medial view, median (sagittal) section**

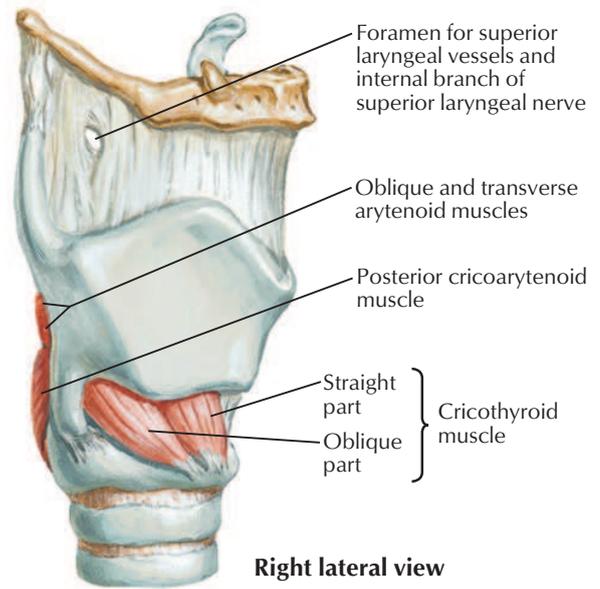
*F. Netter M.D.*

# Intrinsic Muscles of Larynx

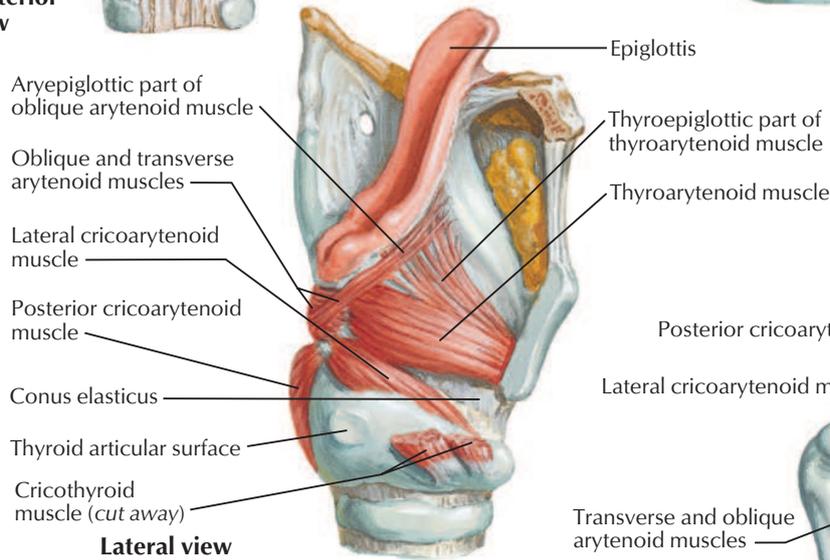
See also [Plates 90, 92, 93](#)



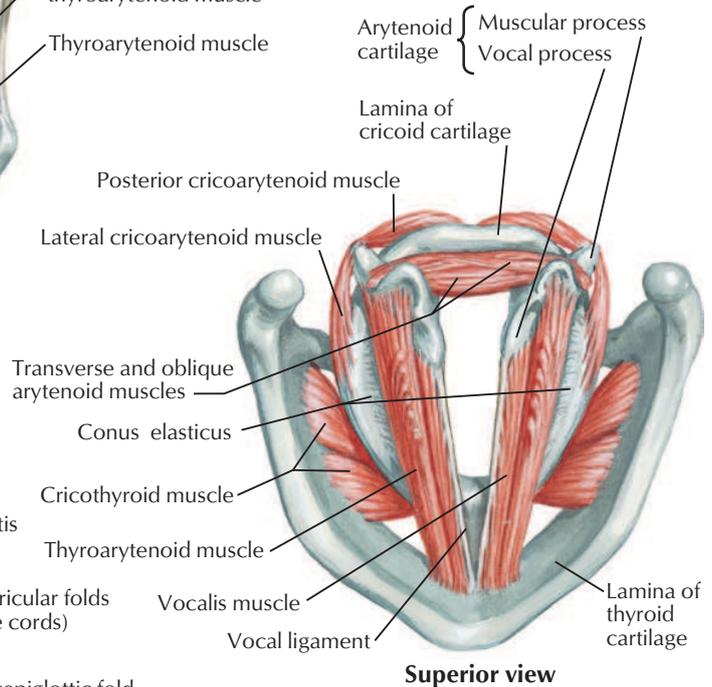
**Posterior view**



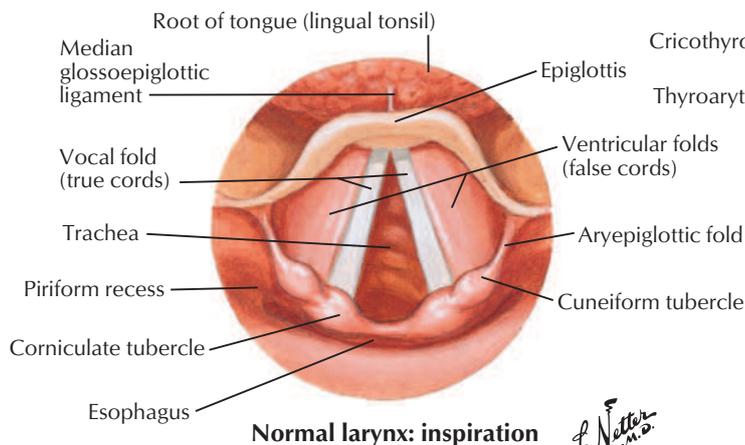
**Right lateral view**



**Lateral view**

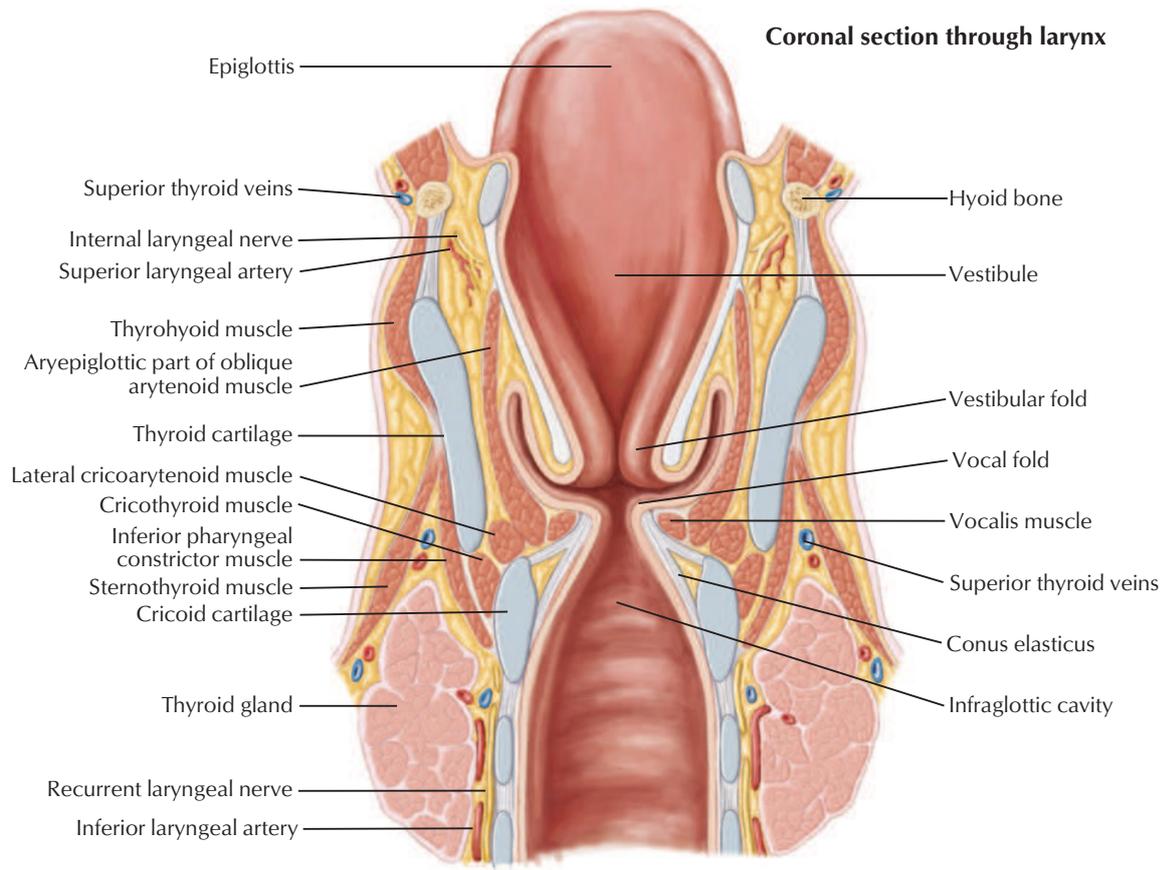
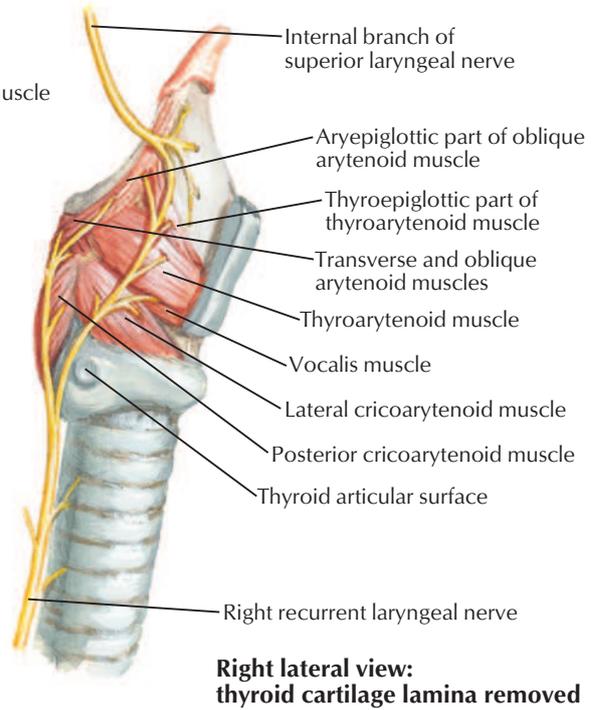
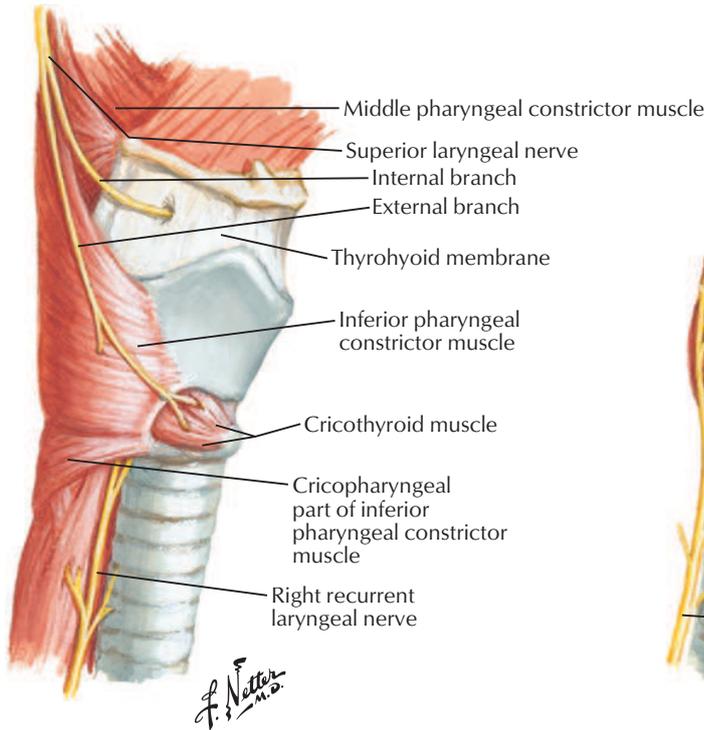


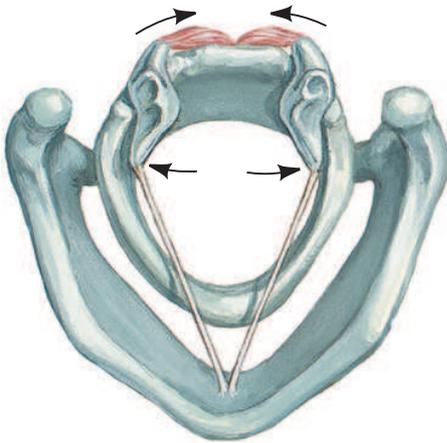
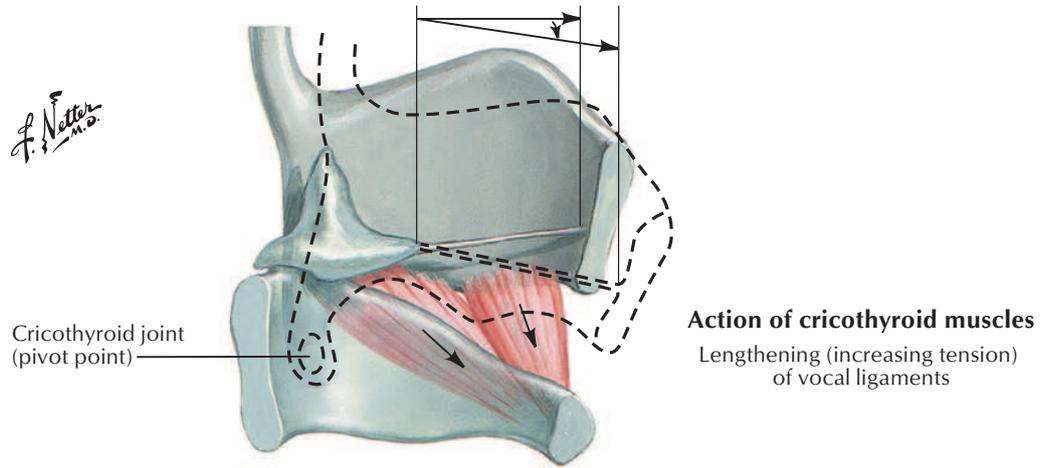
**Superior view**



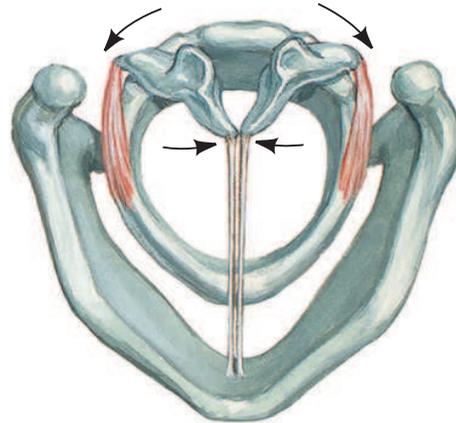
**Normal larynx: inspiration**

See also [Plates 90, 91, 93](#)

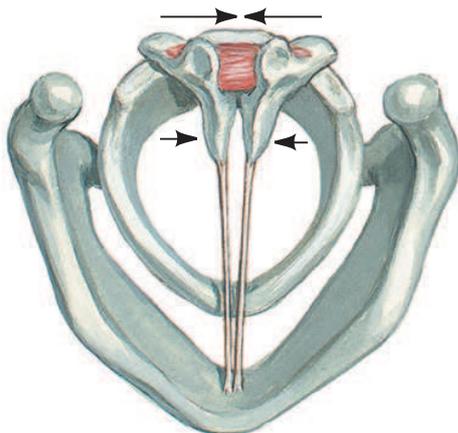




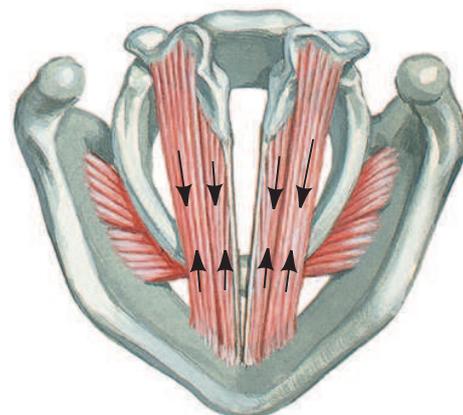
**Action of posterior cricoarytenoid muscles**  
Abduction of vocal ligaments



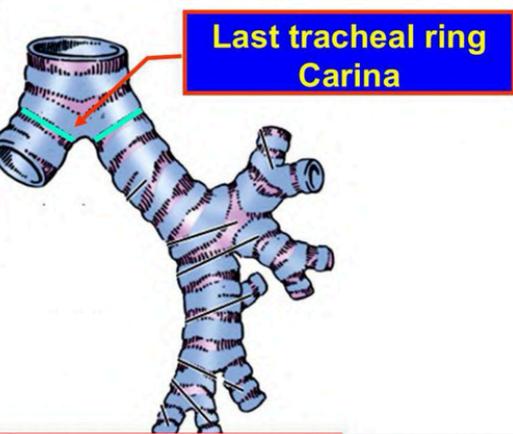
**Action of lateral cricoarytenoid muscles**  
Adduction of vocal ligaments



**Action of transverse and oblique arytenoid muscles**  
Adduction of vocal ligaments

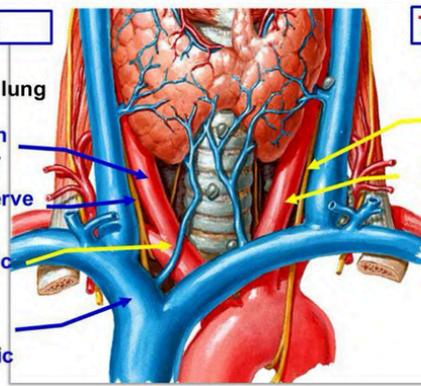


**Action of vocalis and thyroarytenoid muscles**  
Shortening (relaxation) of vocal ligaments



**Right relations**

- Right pleura and lung
- Right common carotid artery
- Right vagus nerve
- Brachiocephalic trunk
- Right Brachiocephalic vein



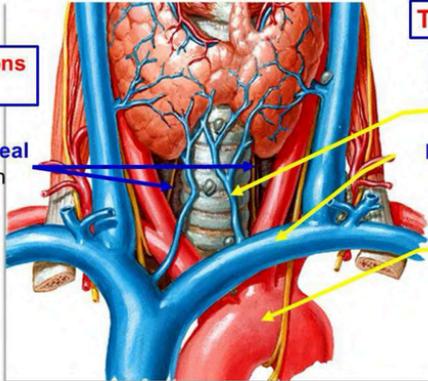
**Thoracic part**

**Left relations**

- Left vagus nerve
- Left common carotid artery
- Left pleura and lung

**Posterior relations - Esophagus**

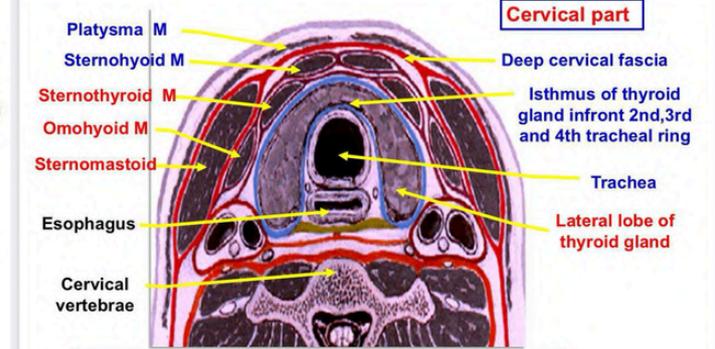
**Recurrent laryngeal nerves** between trachea and esophagus



**Thoracic part**

**Anterior relations**

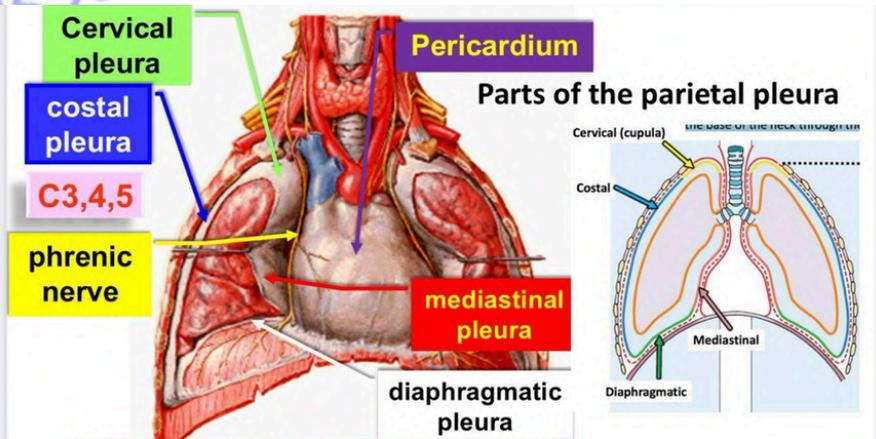
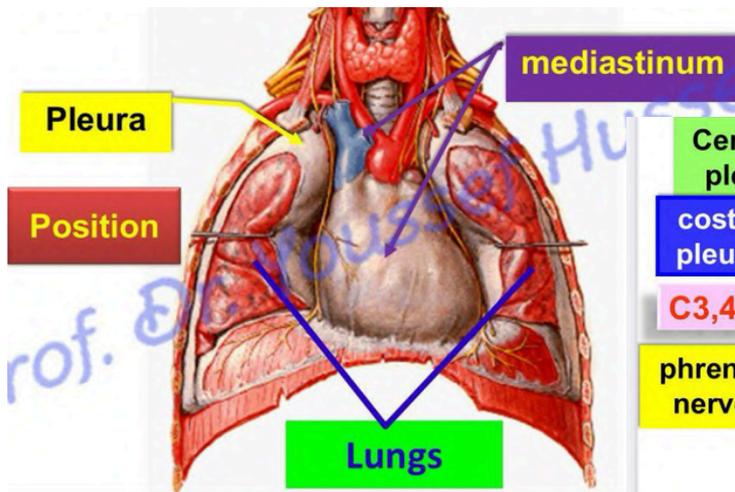
- Inferior thyroid vein
- Left brachiocephalic vein
- Arch of aorta



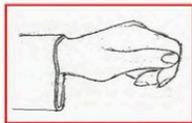
**Cervical part**

Platysma M  
Sternohyoid M  
Sternothyroid M  
Omohyoid M  
Sternomastoid  
Esophagus  
Cervical vertebrae

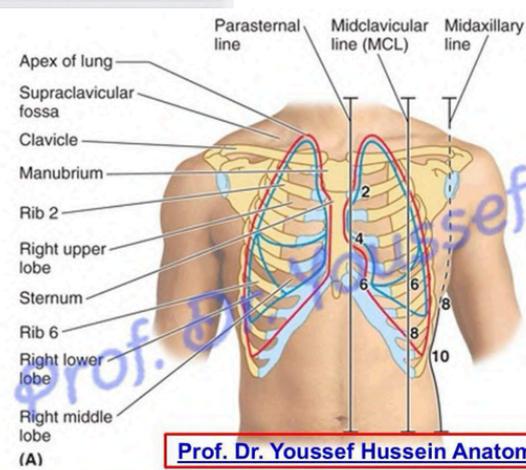
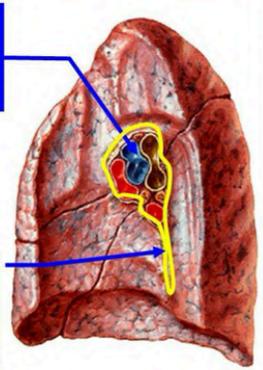
Deep cervical fascia  
Isthmus of thyroid gland in front 2nd, 3rd and 4th tracheal ring  
Trachea  
Lateral lobe of thyroid gland



**Hilum (Root) of lung (Bare area of the lung not covered by pleura)**



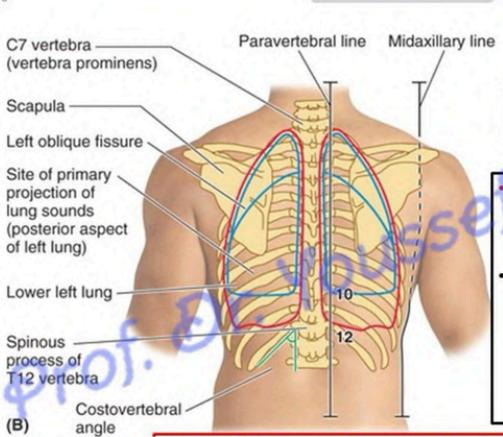
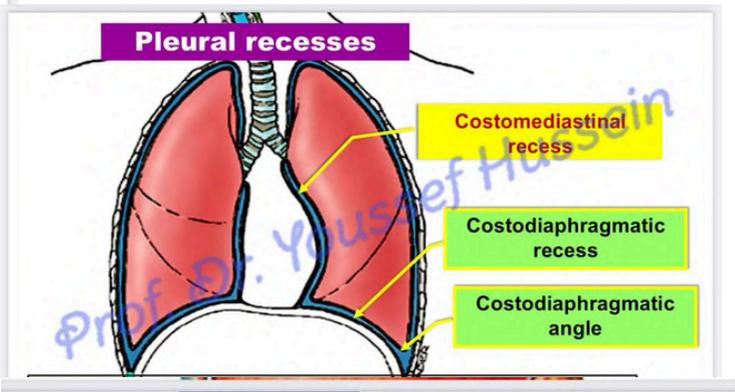
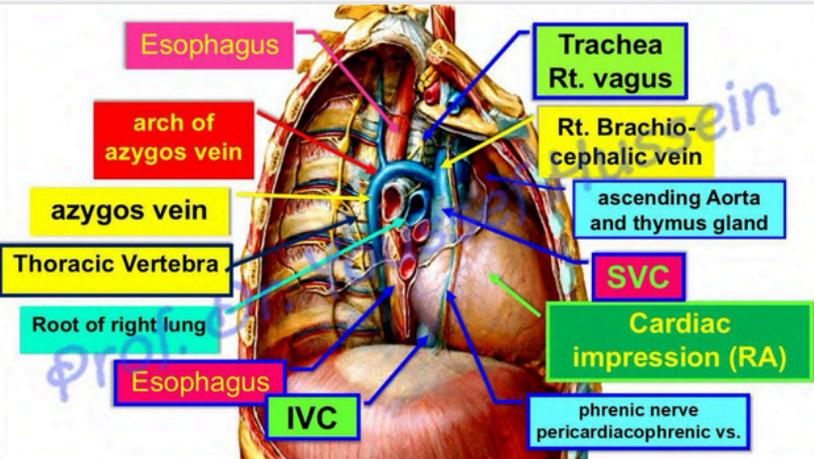
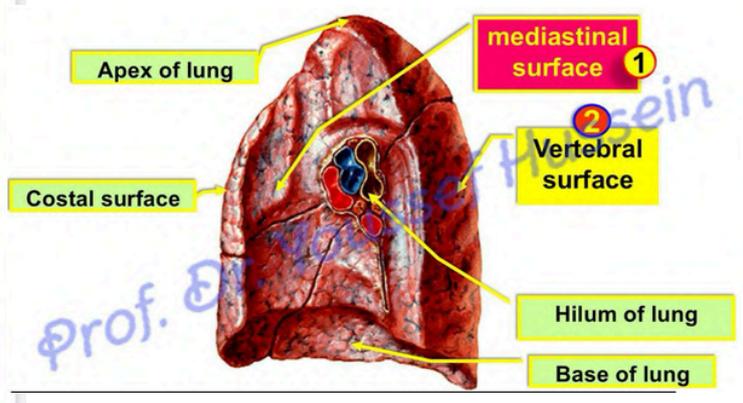
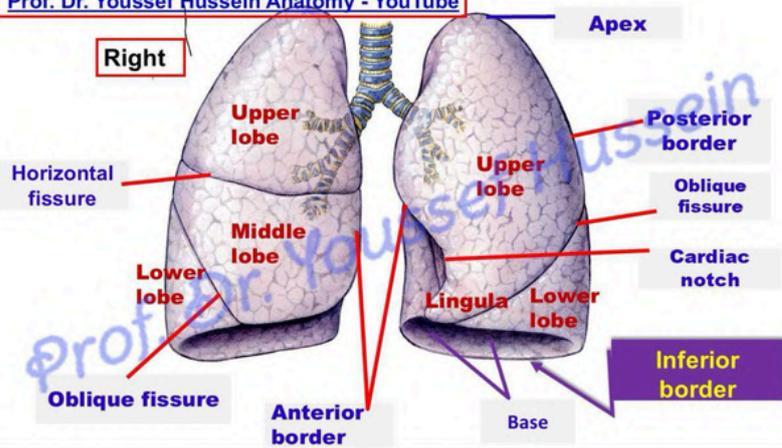
**Pulmonary ligament**  
thickened part of the pleura below the root of the lung



**Surface anatomy left & pleura lung**

**Left Pleura = 0, 2, 4, 6, 8, 10, 12**  
**Left Lung = 0, 2, 4, 6, 8, 10**

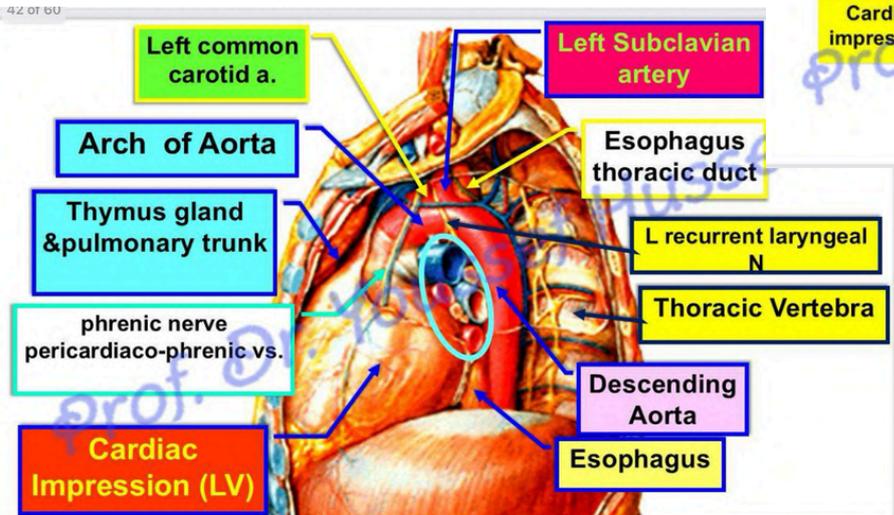
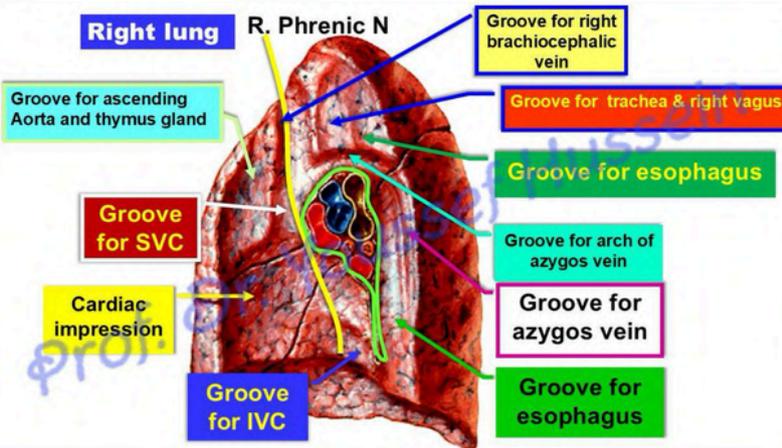
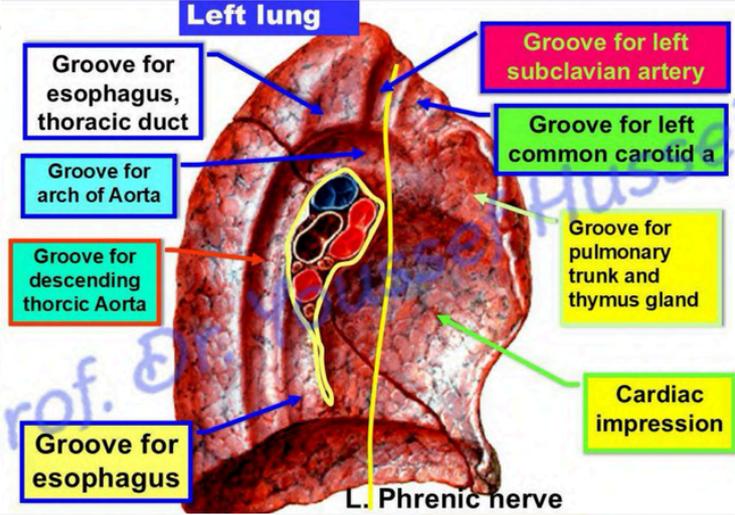
**Prof. Dr. Youssef Hussein Anatomy - YouTube**

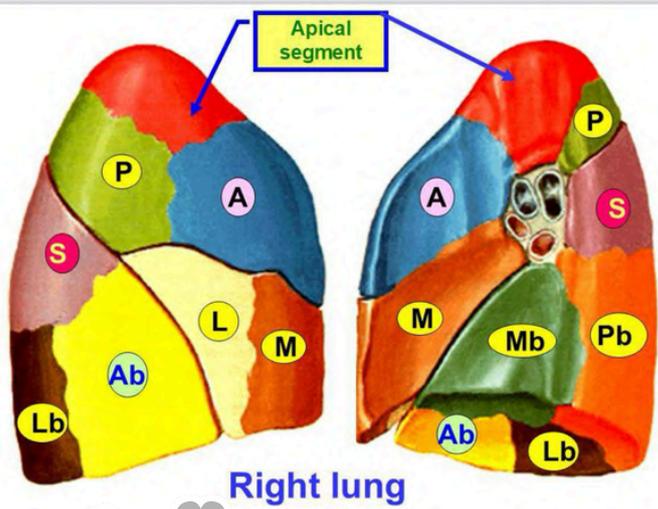


**Surface anatomy left & pleura lung**

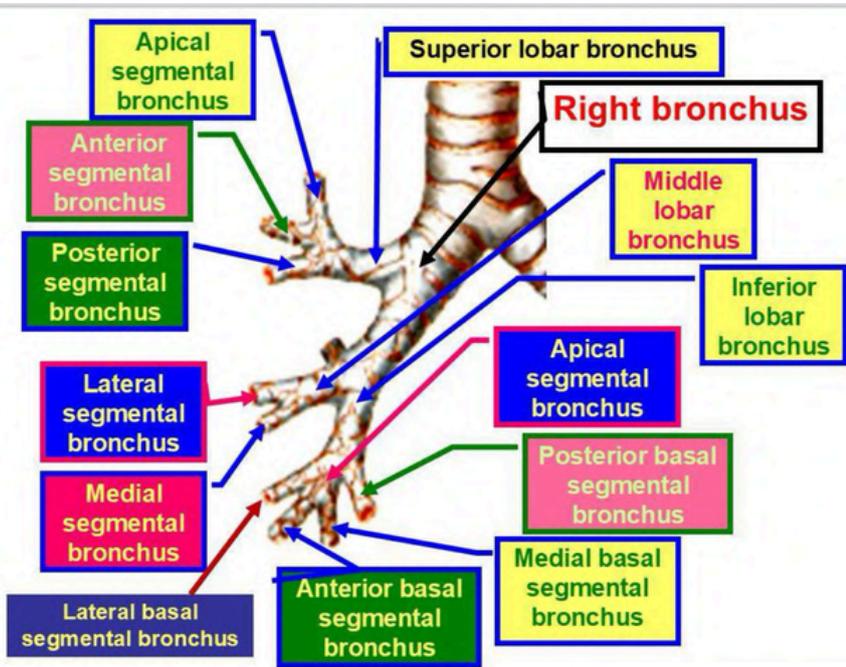
Left Pleura = 0, 2, 4, 6, 8, 10, 12  
 Left Lung = 0, 2, 4, 6, 8, 10

The cervical dome of the pleura and the apex of the lungs extend up into the neck, covered by suprapleural membrane. Consequently, they are vulnerable to stab wounds in the root of the neck or to damage by an anesthetist's needle when a nerve block of the lower trunk of the brachial plexus is being performed.

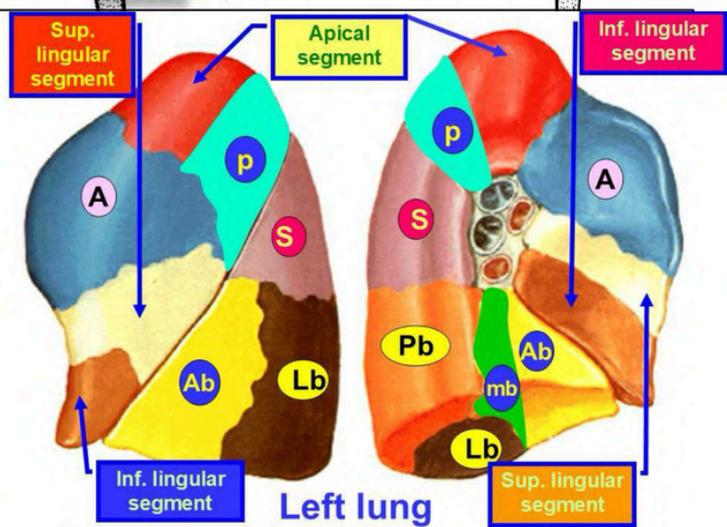
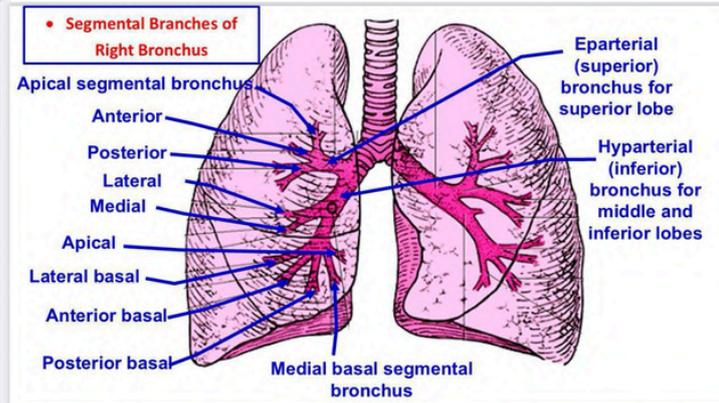
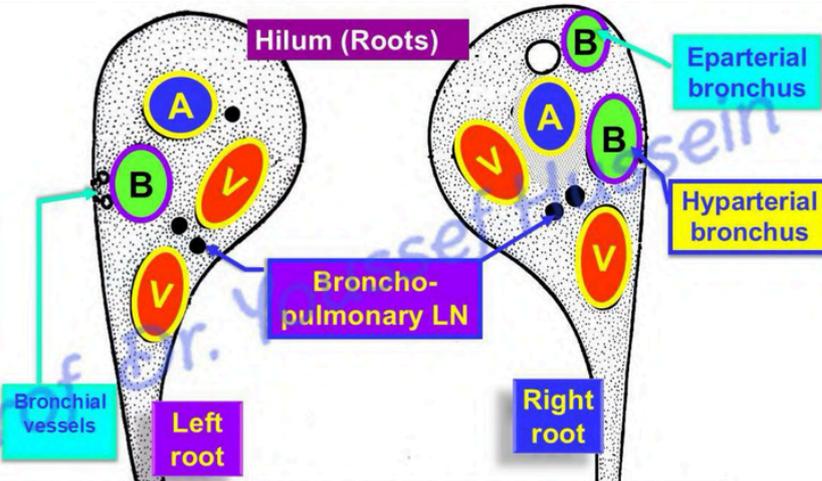




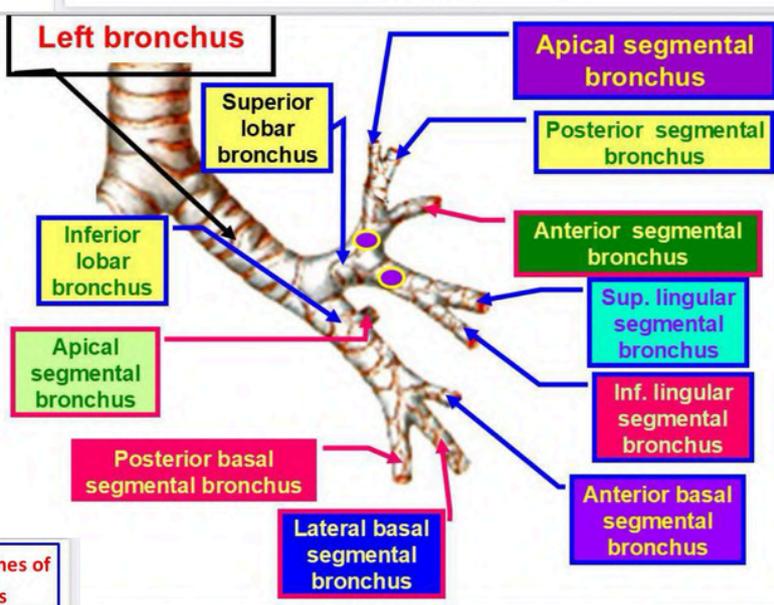
Right lung



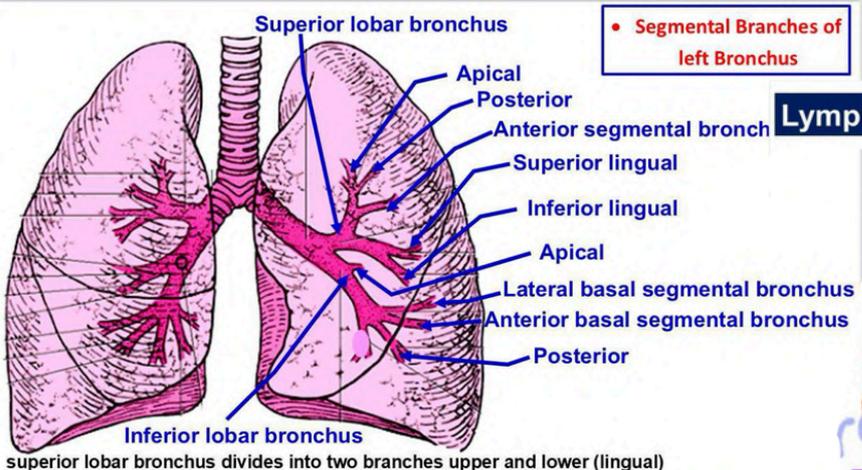
الطبيب الجراحة  
لجنة



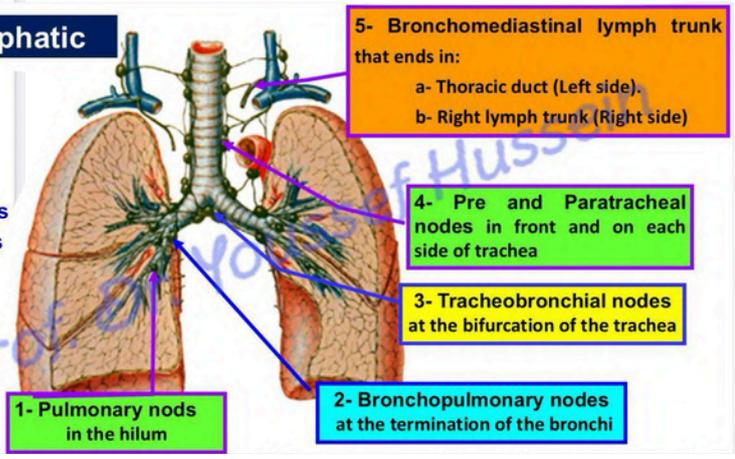
Left lung

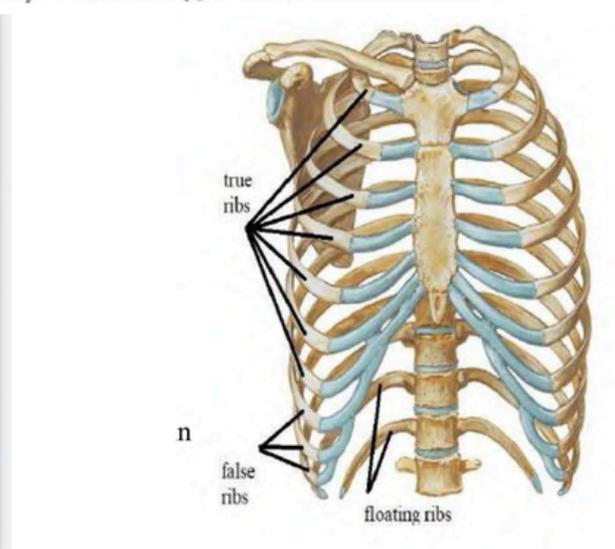
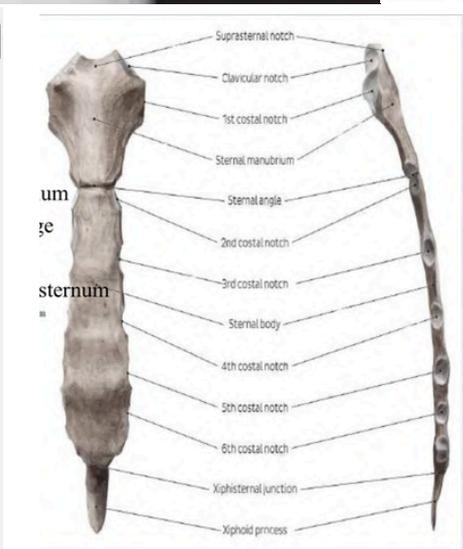
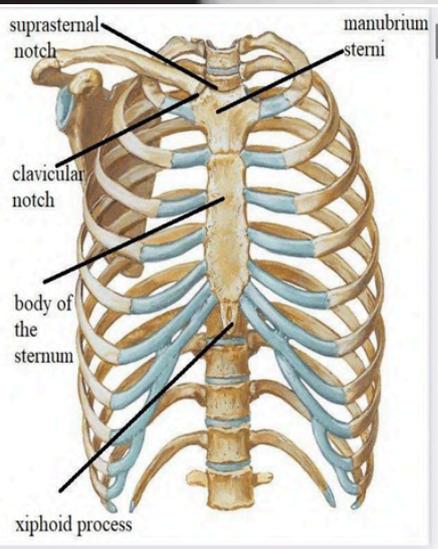
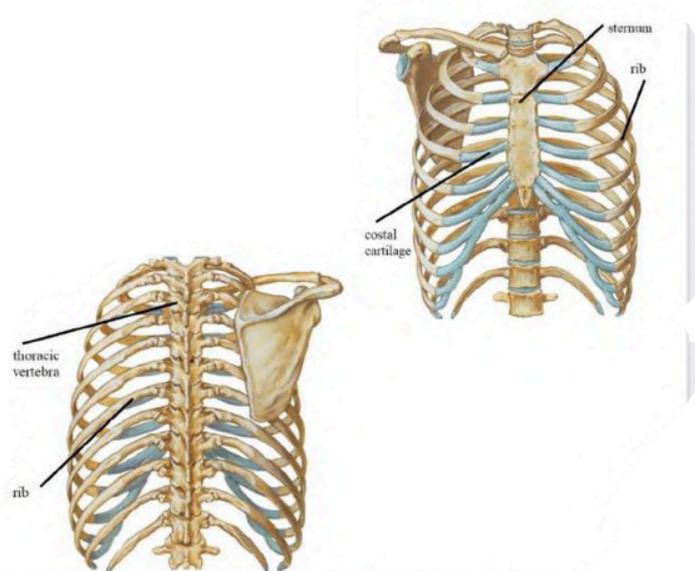
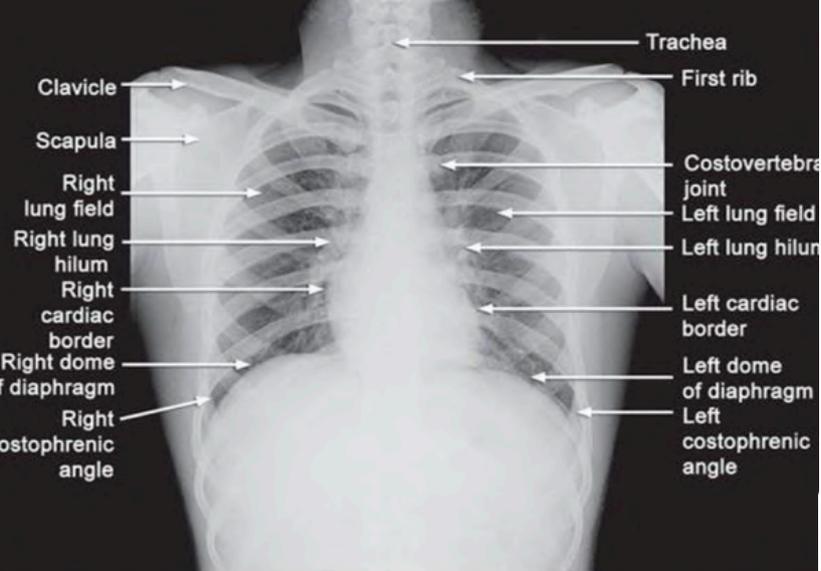


Segmental Branches of left Bronchus



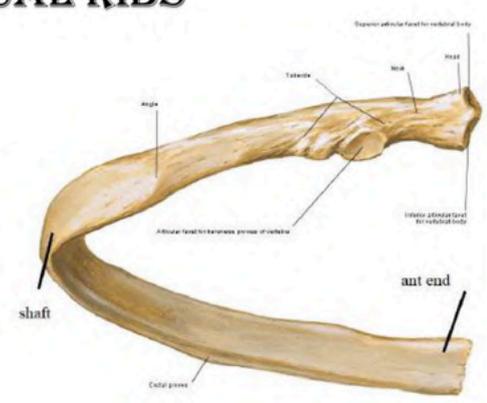
superior lobar bronchus divides into two branches upper and lower (lingual)





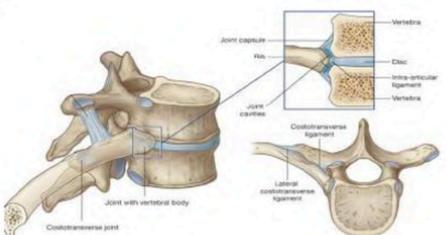
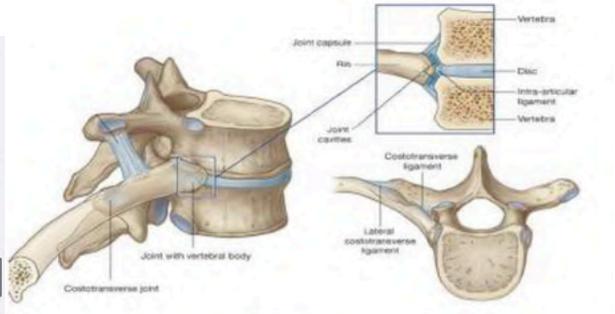
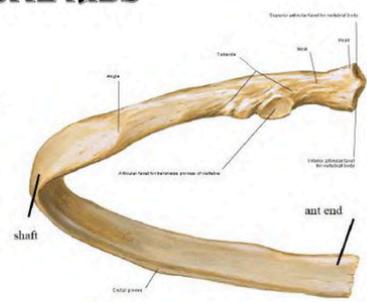
## GENERAL FEATURES OF THE TYPICAL RIBS

الطبيب الجراحة  
لجنة



## GENERAL FEATURES OF THE TYPICAL RIBS

Each typical rib has 3 parts: post. end, shaft & ant. end  
**The posterior end:** formed of head, neck & tubercle  
**the neck:** is the flat part between the head & the tubercle  
**the tubercle:**  
 articulates with the transverse process of the vertebra of the same number  
**lateral rough part:**  
 gives attachment to the lat-costo-transverse lig. Connecting it with the transverse process of the vertebra of the same number.



## THE FEATURES OF THE NONE- TYPICAL RIBS

### 1<sup>st</sup> rib:-

**Head** : has one facet for the body of T1

**Shaft** : flat & has 2 surfaces & 2 borders:

the upper surface

is rough & shows the following features

**scalene tubercle** : a prominent tubercle on the inner border

**groove for subclavian v.** : in front of scalene tubercle.

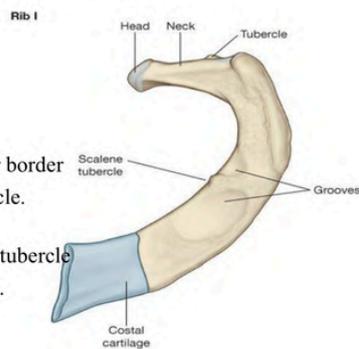
**groove for subclavian a.** &

**lower trunk of brachial plexus**: behind the scalene tubercle

the lower surface is smooth, has no costal groove .

the inner border is Concave

the outer border is convex



## THE FEATURES OF THE NONE- TYPICAL RIBS

### 2<sup>nd</sup> rib:-

The shaft is not twisted

### The 10<sup>th</sup> rib:

its head : has one facet

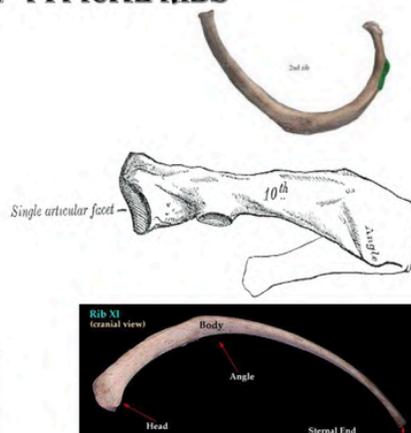
### The 11th & 12 ribs:

each of them has :

- a large head with one facet

- No neck , no tubercle

the 12<sup>th</sup> rib differs from the 11<sup>th</sup> in being shorter & having NO Costal groove



## JOINTS OF THE RIBS

### Joints between the ribs and vertebrae:-

#### Costo vertebral :

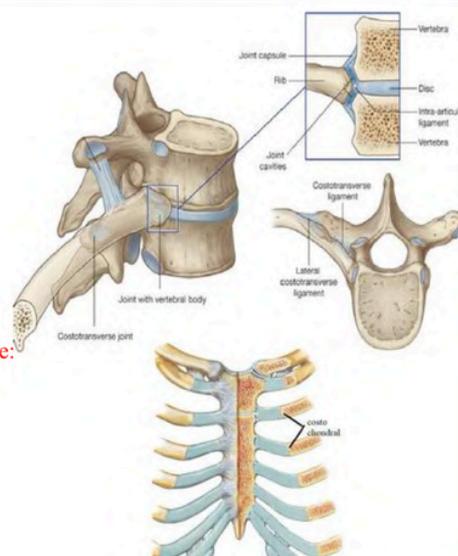
- synovial
- Between the head of the ribs and the body of the thoracic vertebrae

#### Costo transverse :

- synovial
- Between the tubercle of the rib and the transverse process of the vertebra

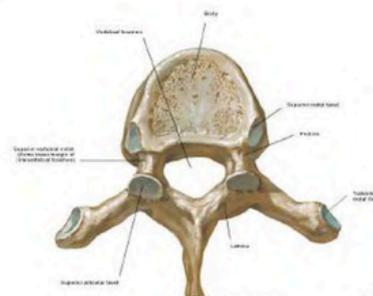
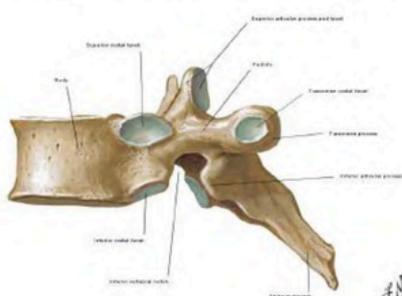
### Joints between the ribs and the costal cartilage:-

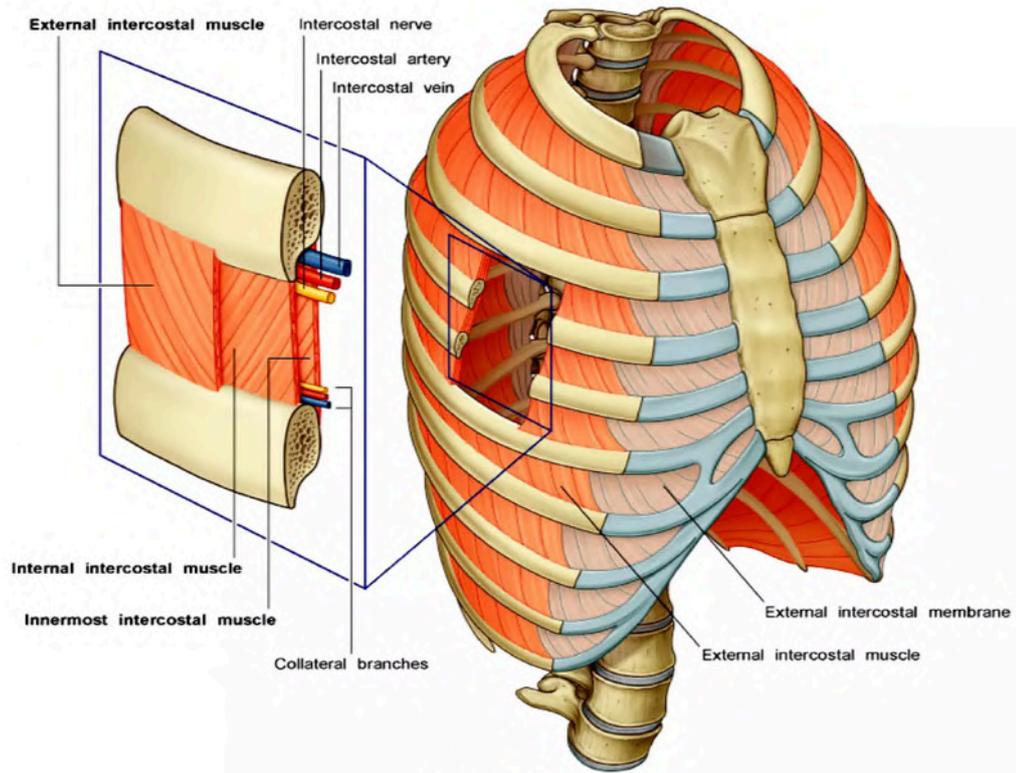
Costo Chondral : Iry cartilaginous



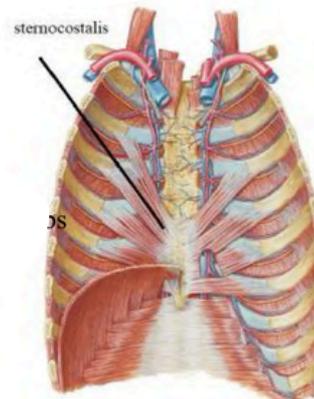
The typical thoracic vertebrae are the 2<sup>nd</sup> till 8<sup>th</sup> vertebrae that has the following features

- 1-Two demi facets (on the side of body)  
the upper for the rib of the same number  
but the lower for the rib below
- 2- An articular facet on transverse process
- 3- Spine is long and directed backwards and downwards





## STERNOCOSTALIS MUSCLE



## SUBCOSTALIS MUSCLE

