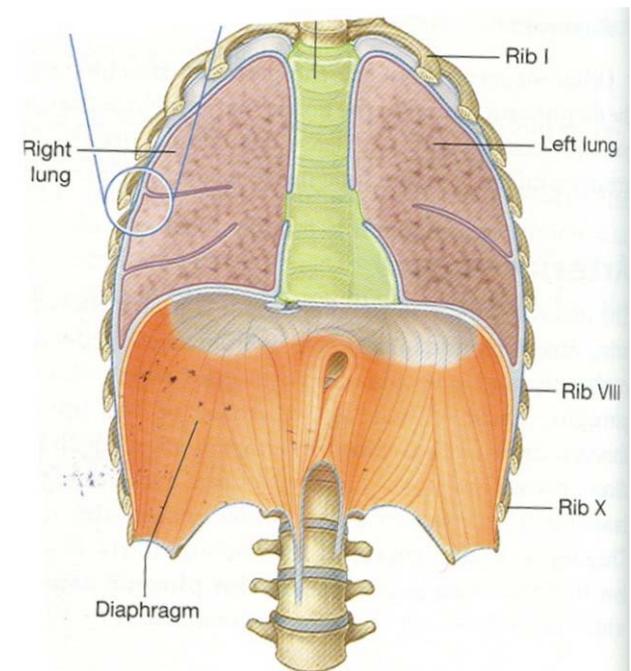
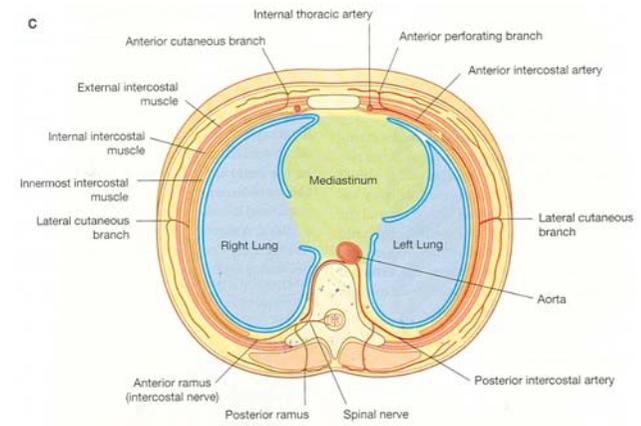
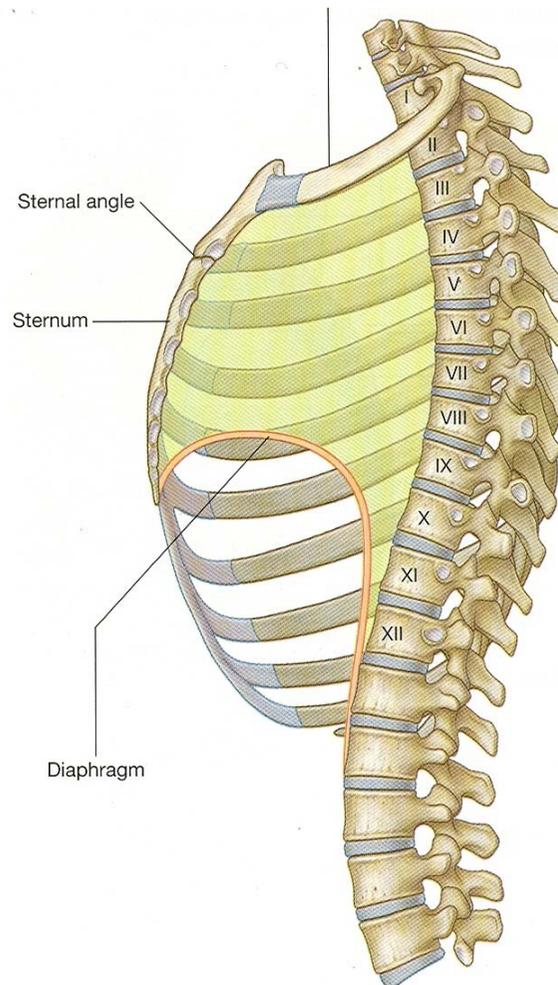


# Mediastinum

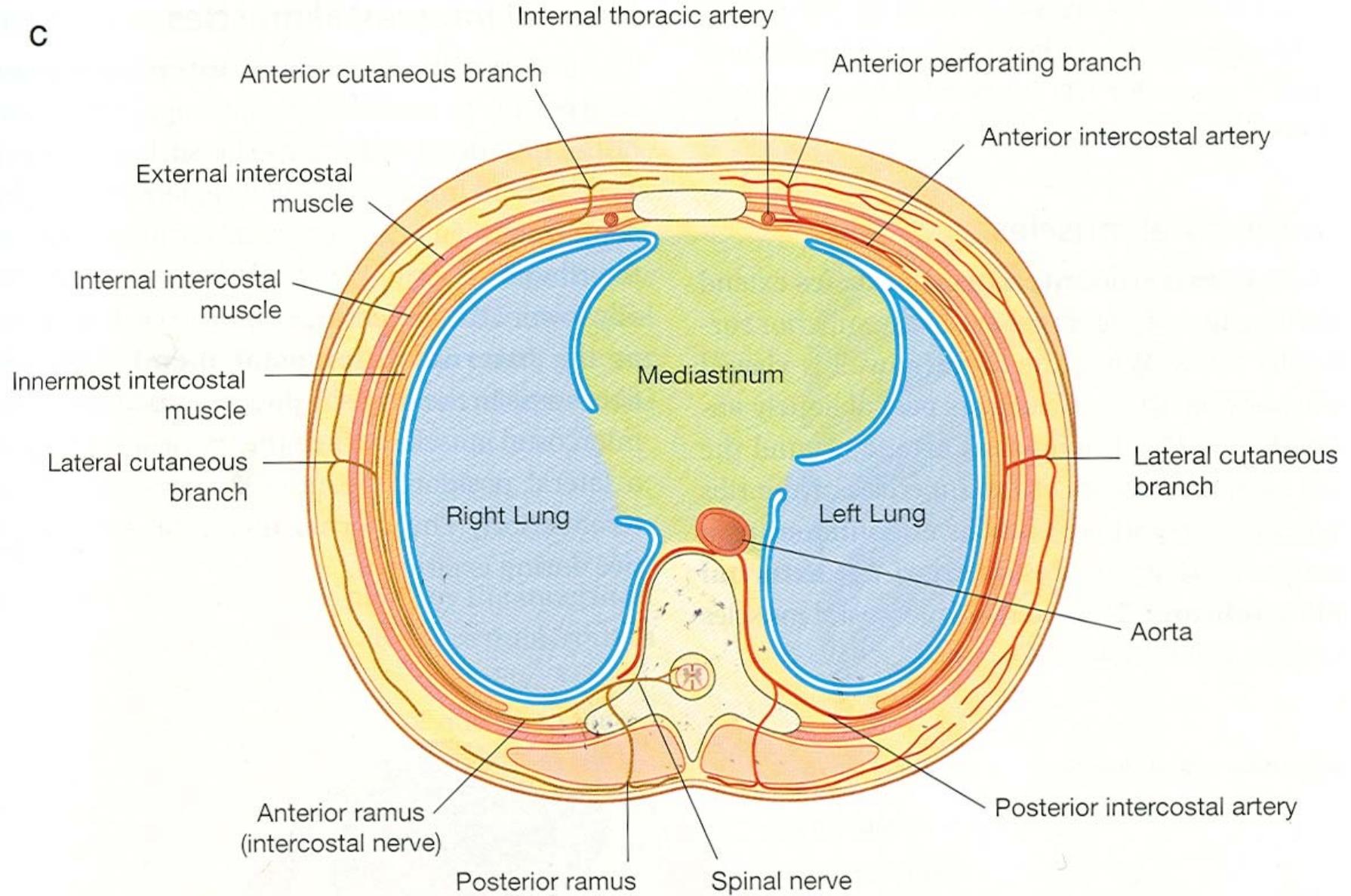
- Bulky septum between the pleural cavities & lungs

Extends-

- Root of the neck to diaphragm
- From the sternum to vertebral column

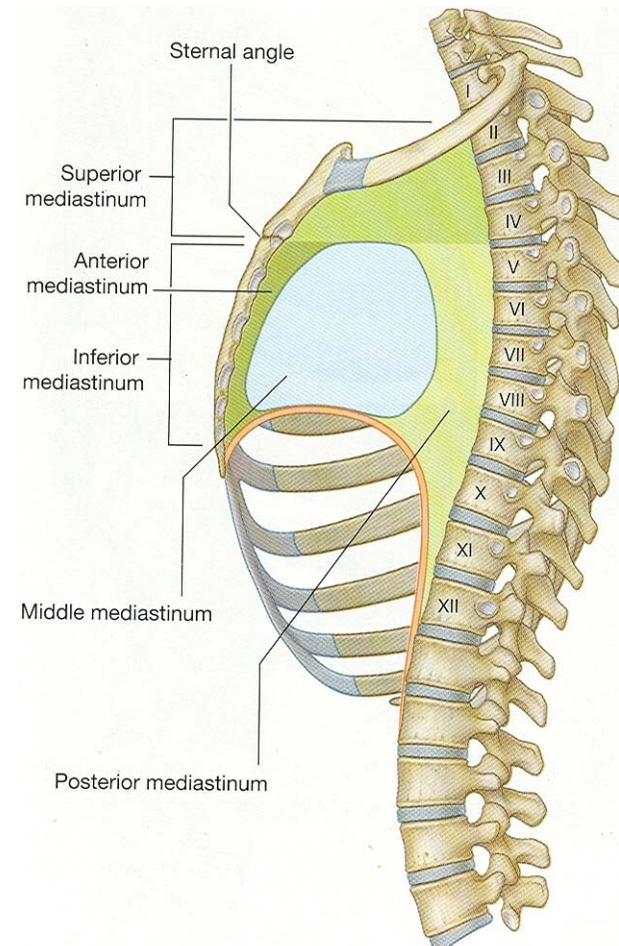


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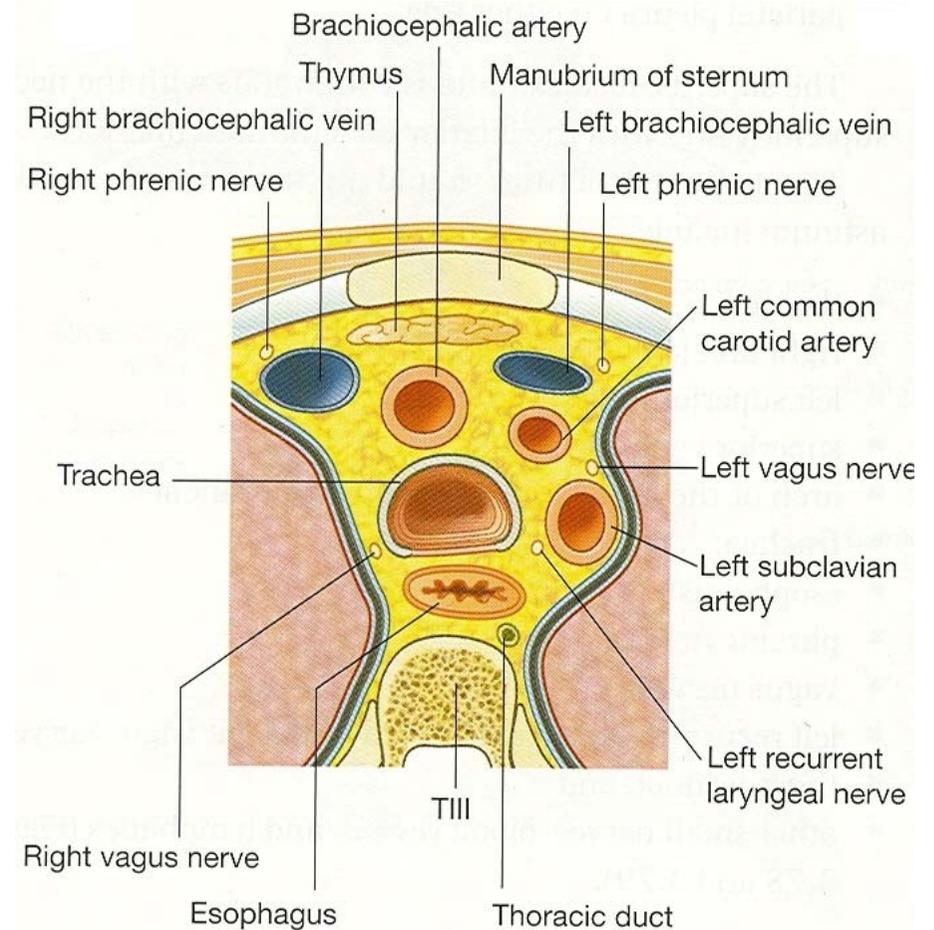
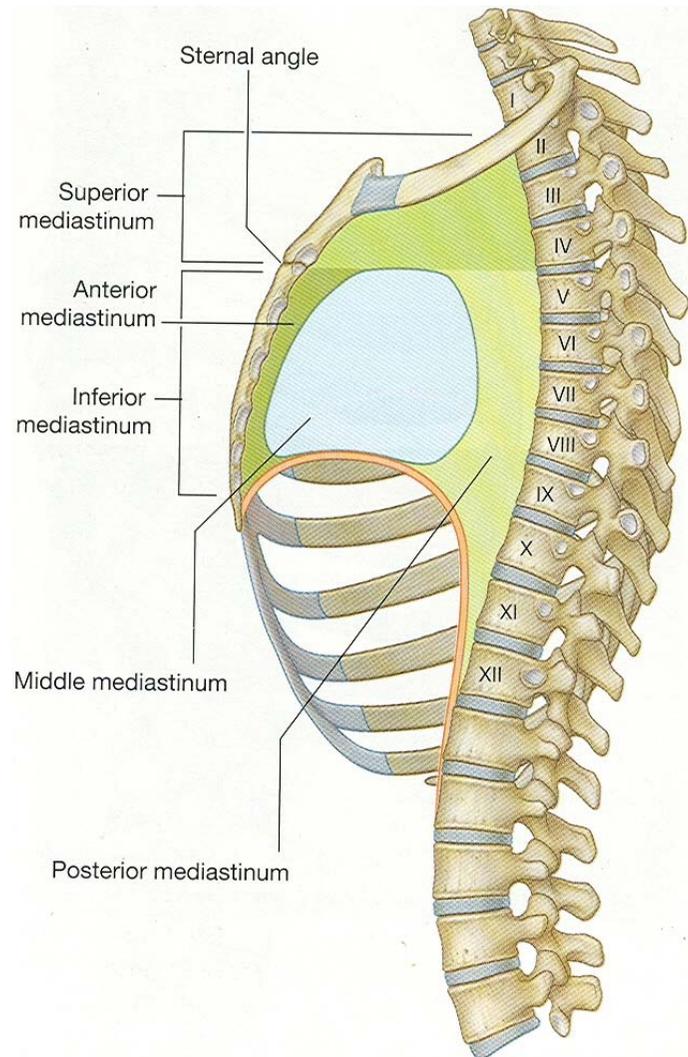
# Divisions of mediastinum

- Divided by an imaginary horizontal plane from the sternal angle to the intervertebral disc between 4<sup>th</sup> & 5<sup>th</sup> vertebra in to
- superior mediastinum
- Inferior mediastinum –
  - Anterior
  - Middle
  - Posterior



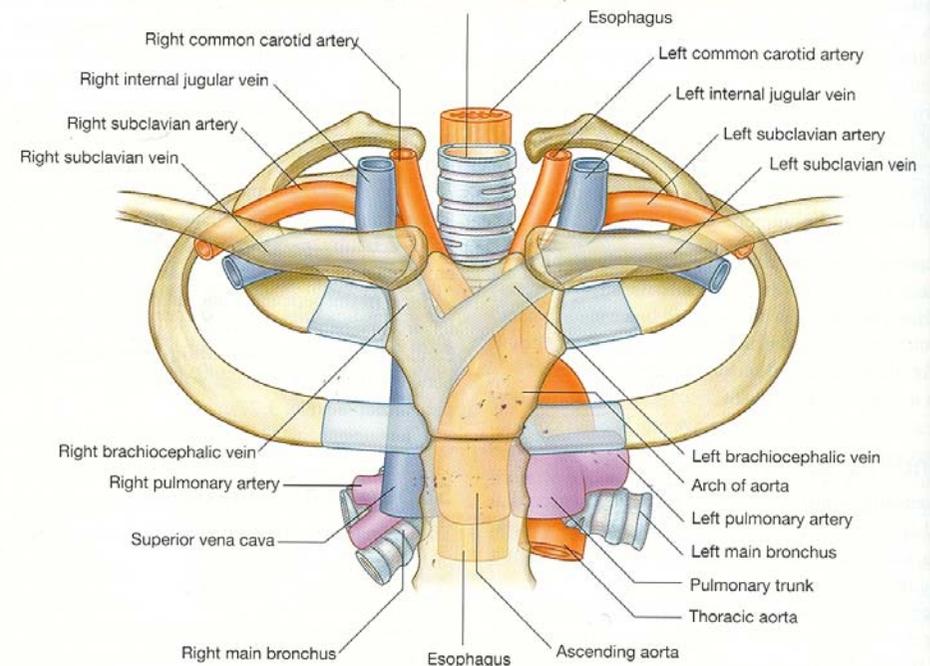
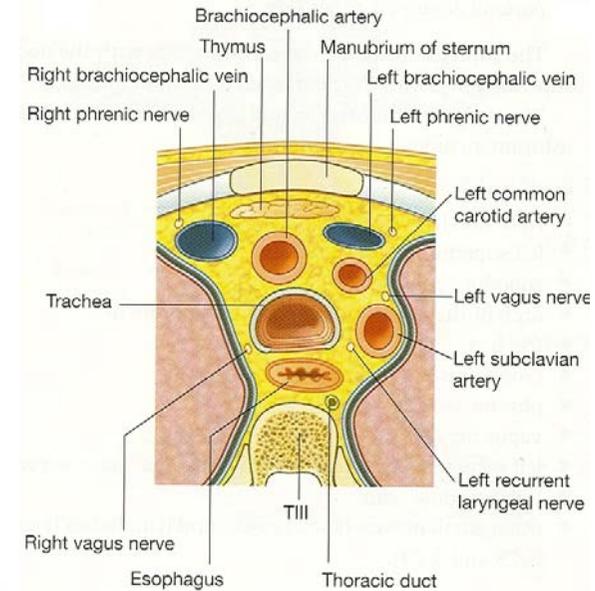
# Superior mediastinum

- Posterior to the sternum & anterior to the bodies of first four thoracic vertebra



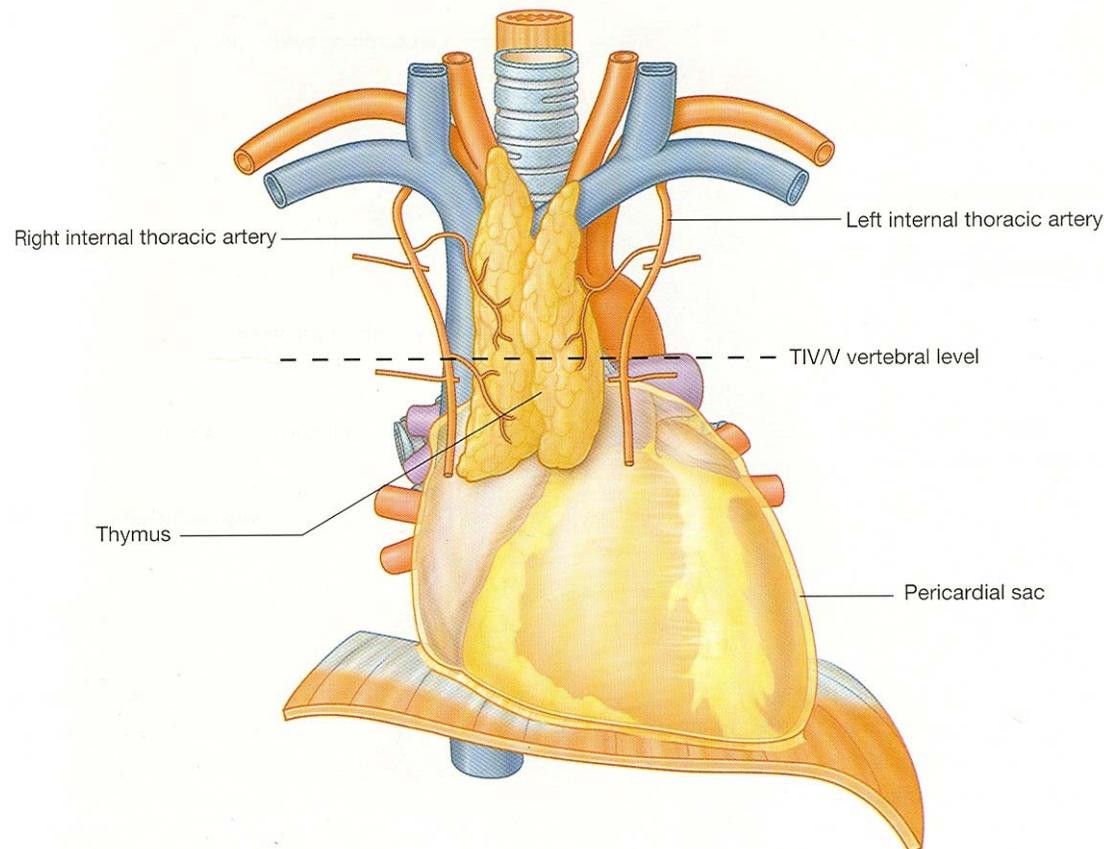
# Contents of superior mediastinum

- Thymus
- Rt & Lt brachiocephalic veins
- Left superior intercostal vein
- Superior vena cava
- Arch of aorta & it's three branches
- Trachea
- Esophagus
- Phrenic nerves
- Vagus nerves
- Lt recurrent laryngeal nerve
- Thoracic duct
- Other small structures



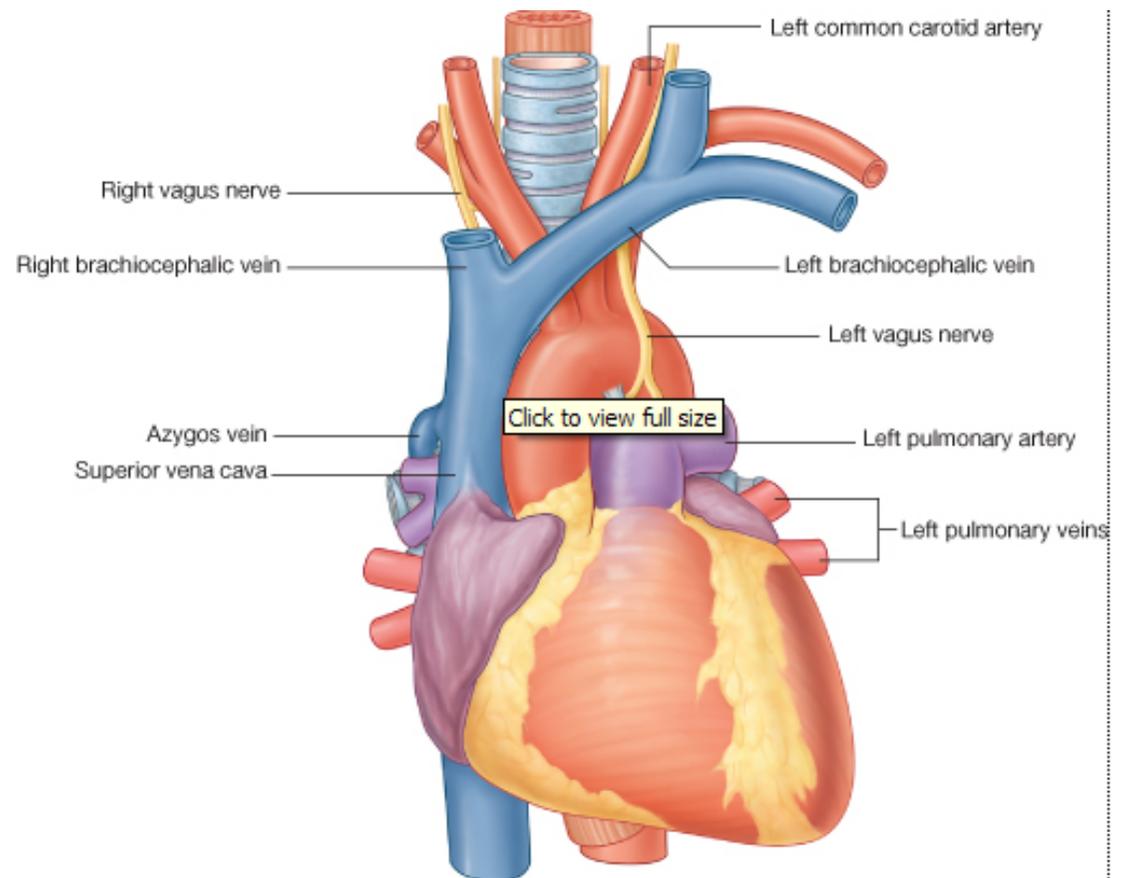
# Thymus

- Asymmetric bilobed gland
- Upper extent may reach as high as thyroid gland
- Involved in early development of immune system
- Large in children
- Atrophies after puberty



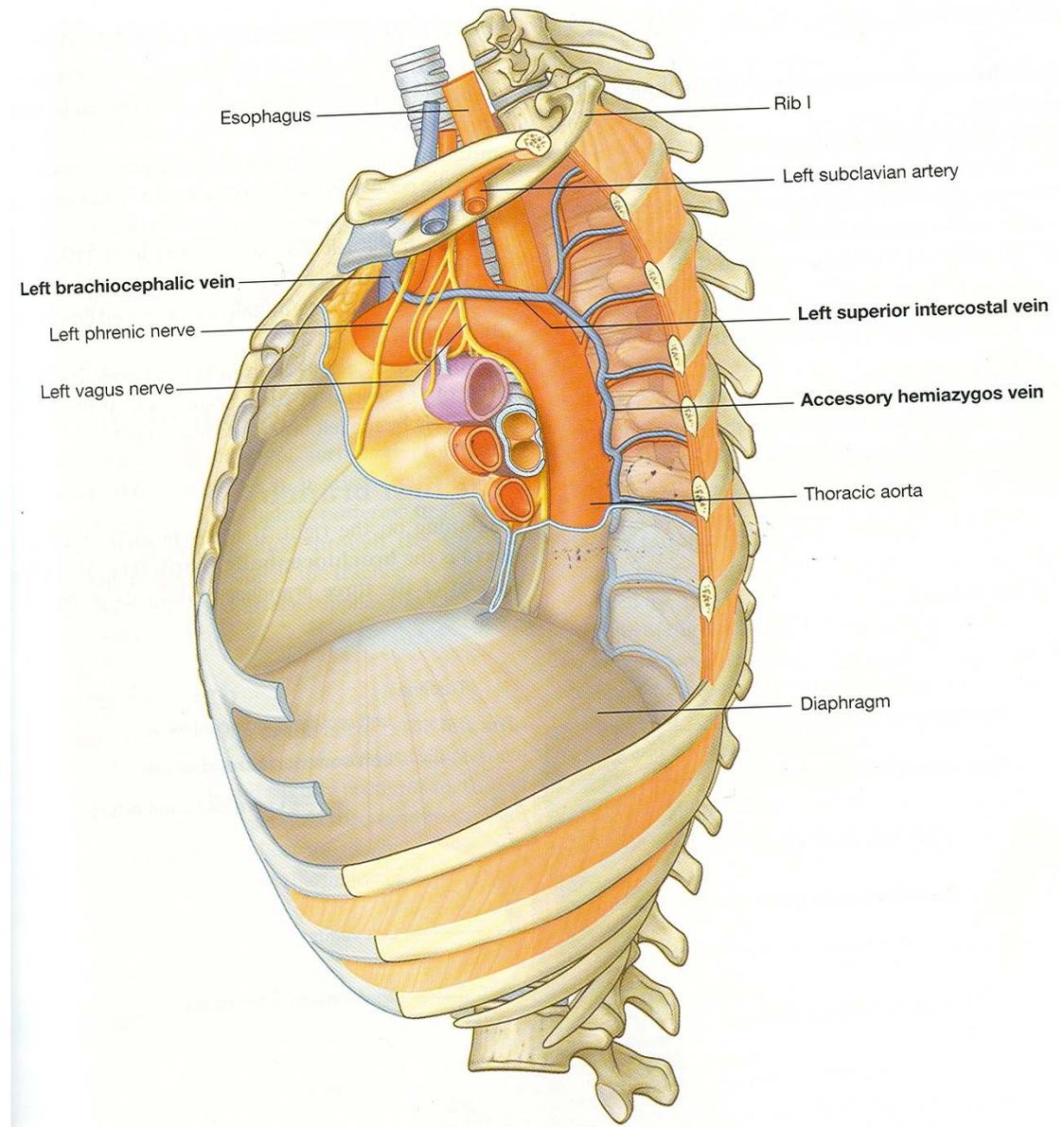
# Brachiocephalic veins

- Located immediately posterior to thymus
- Formed at the jn. of IJ & subclavian veins.
- Begins post to clavicle
- Tributaries: vertebral, first post. Intercostal, int. thoracic, inf. Thyroid, thymic veins



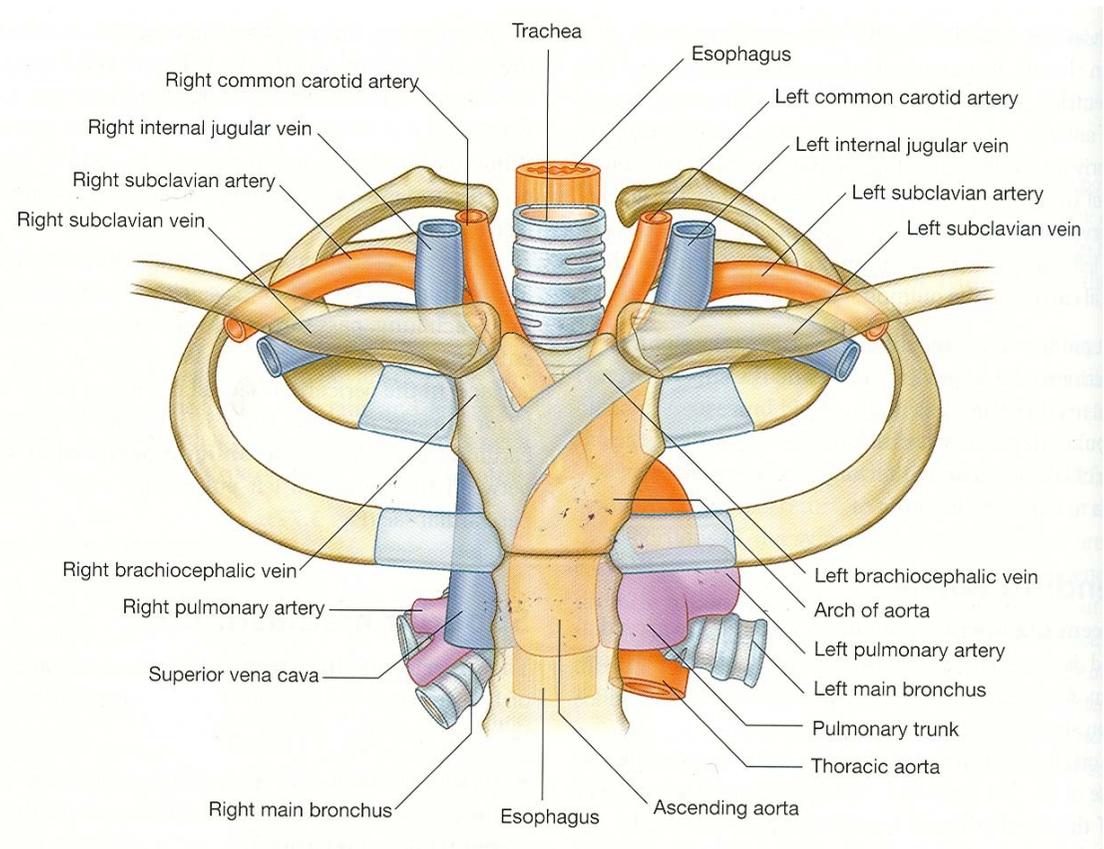
# Left superior intercostal vein

- Drains upper two or three intercostal veins, left bronchial veins & left pericardiophrenic veins
- Drains in to left brachiocephalic veins



# Superior vena cava

- Vertically oriented
- Begins posterior to the lower edge of first costal cartilage
- terminates at the lower border of right third costal cartilage



# Arch of aorta & it's branches

- Begins when ascending aorta emerges from pericardial sac
- Terminates on left side of vertebral level between Th 4<sup>th</sup> - 5<sup>th</sup>

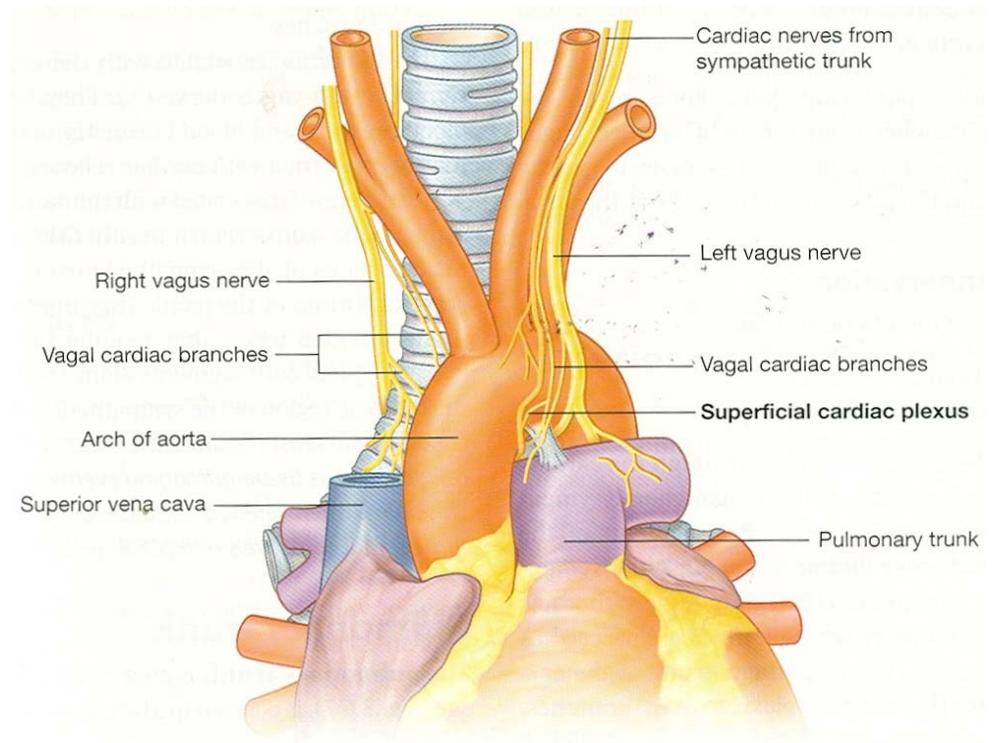
## Branches-

Brachiocephalic trunk

Left CCA

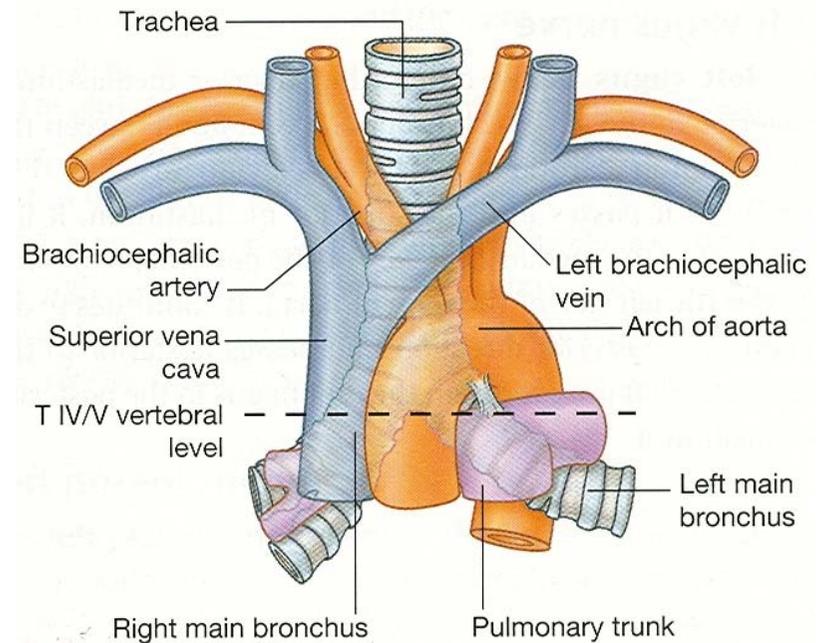
Left subclavian

Thyroid ima



# Trachea

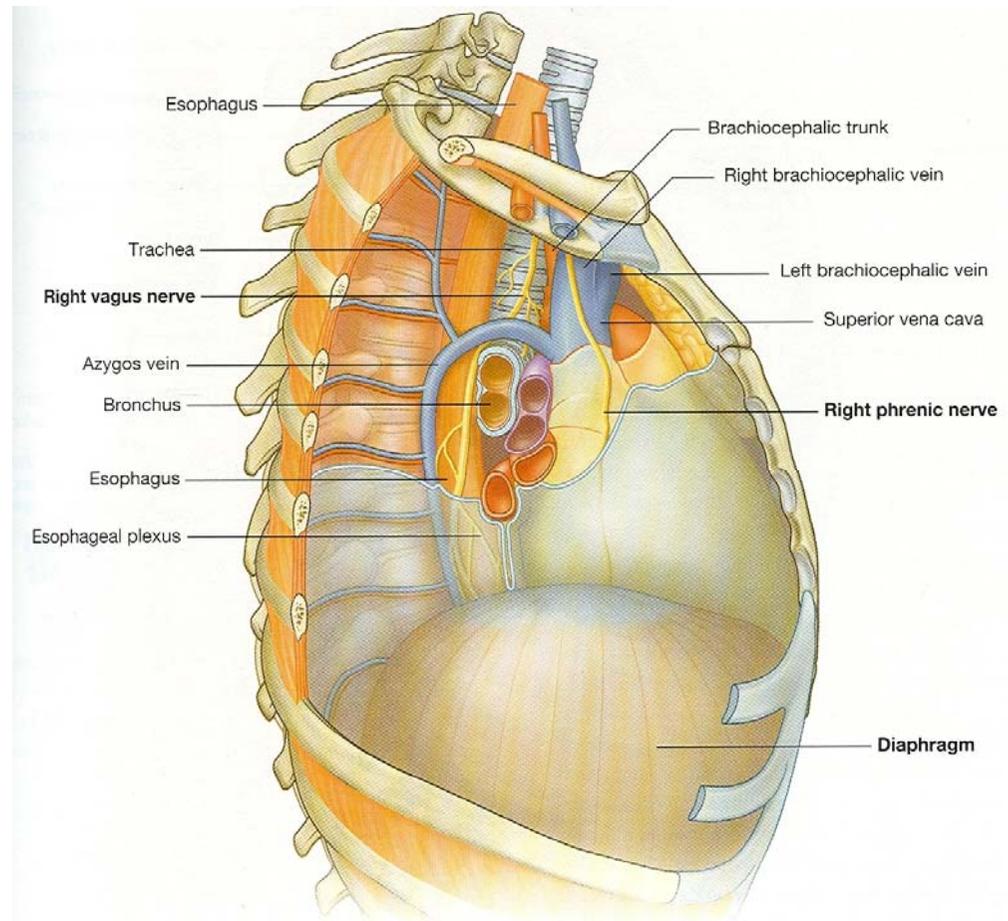
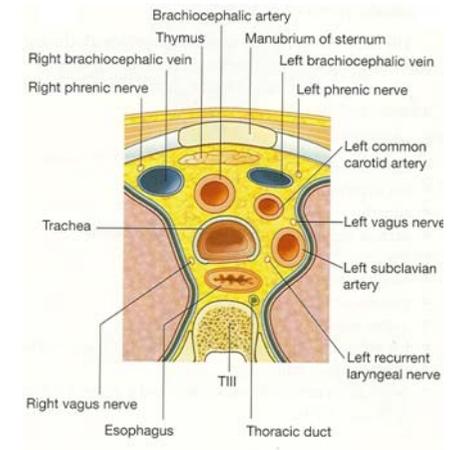
- Midline structure
- Present anterior to esophagus
- Swallowing, breathing, disease & specialized instrumentation causes shift of trachea
- divides just inferior to sternal angle (T3- T4) into Right & Left principal bronchus



# Vagus nerve

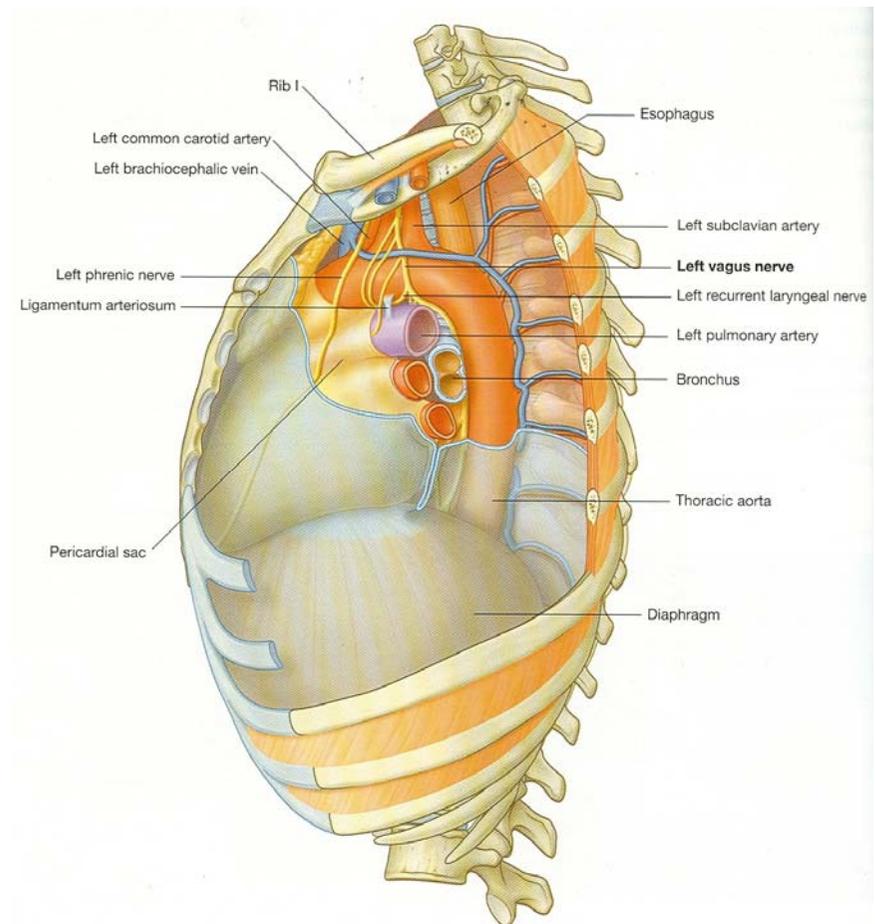
## Right Vagus

- lies between right brachiocephalic vein & trunk
- Descends posteriorly to the root of Right lung to reach esophagus
- Gives branches to esophagus, cardiac plexus & pulmonary plexus



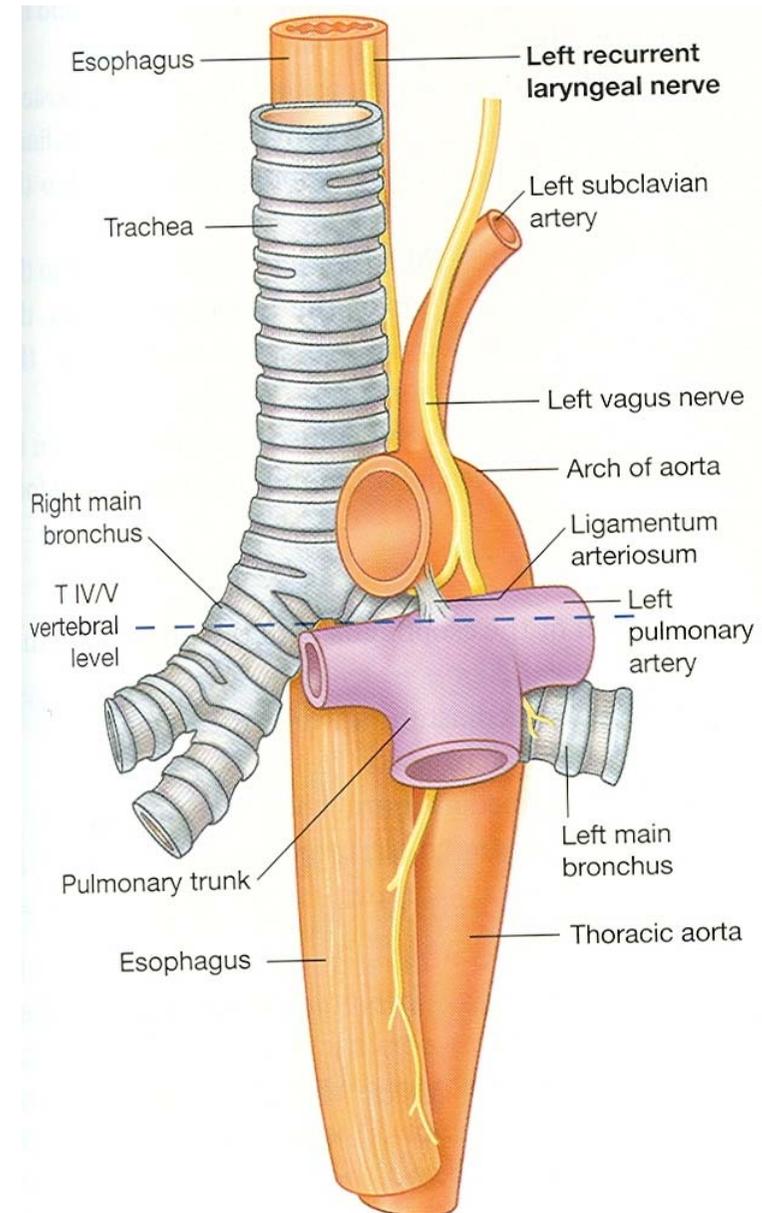
# Left Vagus nerve

- Lies between Lt CCA & Lt subclavian artery
- Pass posterior to the root of lung to reach the esophagus
- Gives branches to esophagus, cardiac & pulmonary plexus
- Also gives Lt recurrent laryngeal nerve- arise at inferior margin of arch of aorta, winds around the aorta & reaches the groove between esophagus & trachea



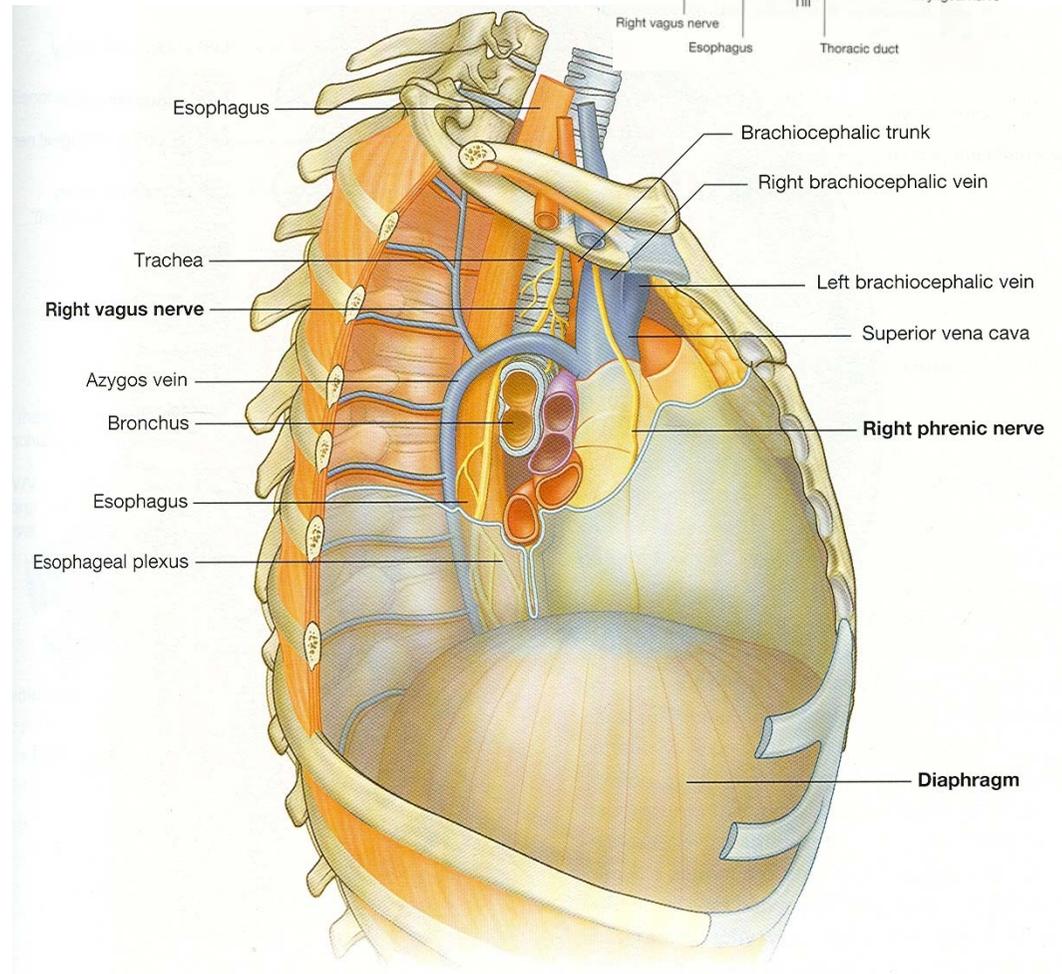
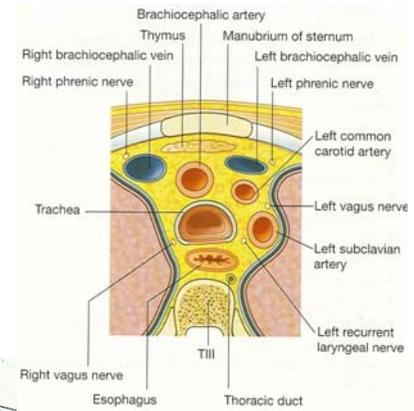
# Left recurrent laryngeal nerve

- arise at inferior margin of arch of aorta, winds around the aorta & reaches the groove between esophagus & trachea



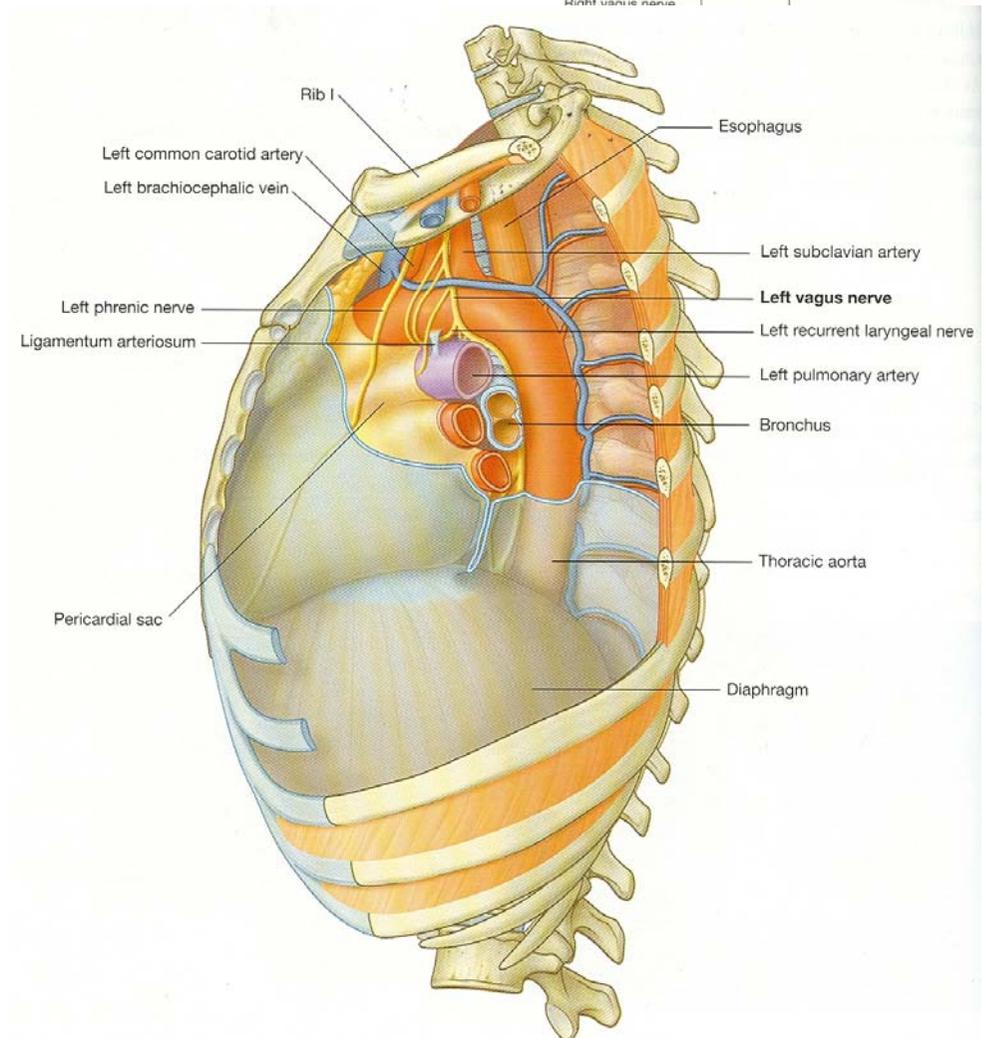
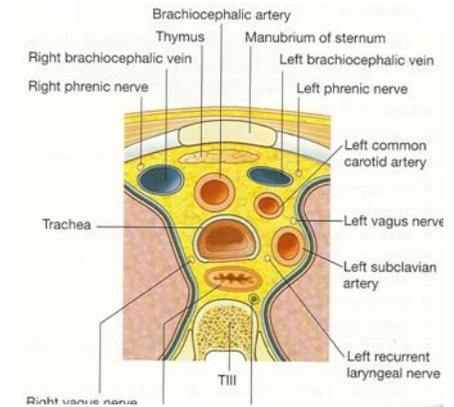
# Phrenic nerve

- Right Phrenic –enters lateral to Right Vagus & beginning of Right brachiocephalic vein
- continues inferiorly on the Right side of sup vena cava, on entering middle mediastinum descends along the Rt side of pericardial sac anterior to the Rt lung root
- leaves the thorax with inferior vena cava



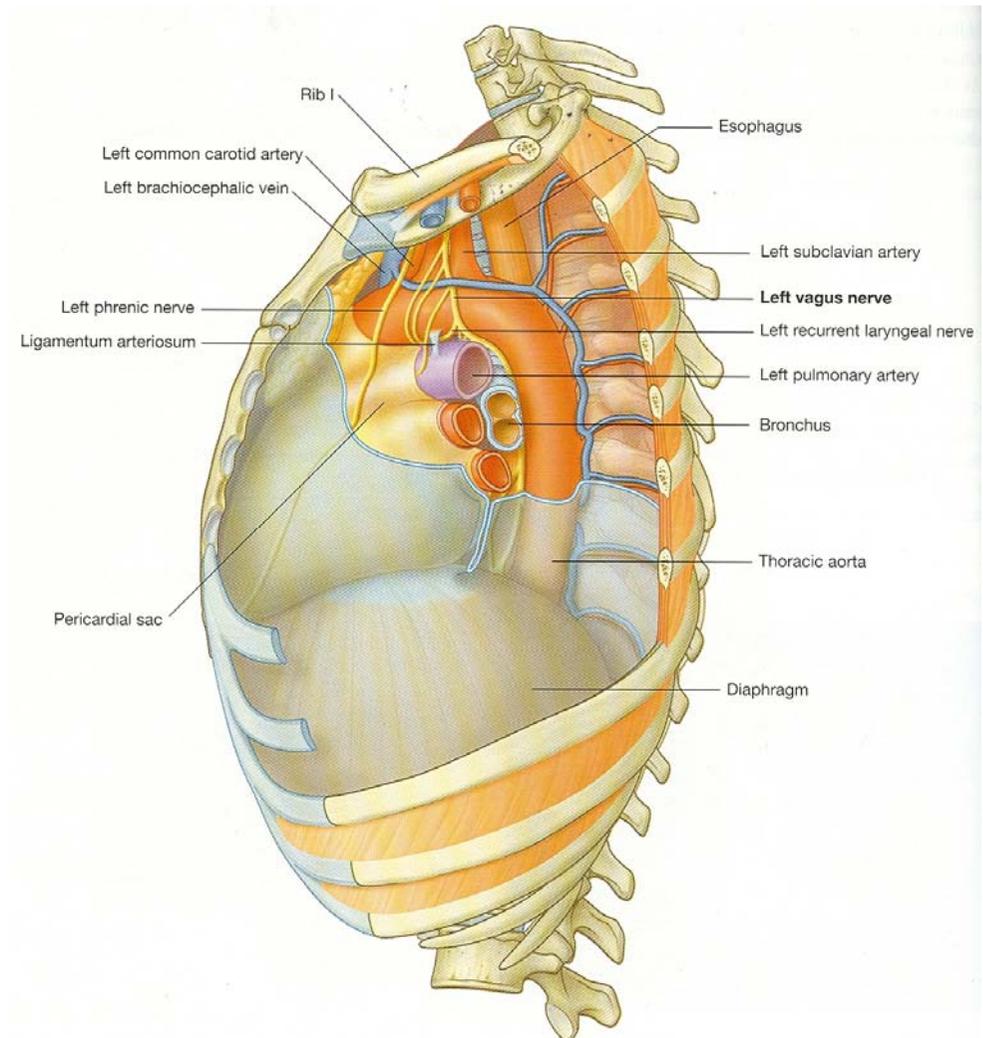
# Left phrenic nerve

- enters similar to Right Phrenic nerve
- Lateral to Vagus & Lt brachiocephalic vein
- Descends on left lateral surface of arch of aorta
- Passes superficial to Lt vagus & superior intercostal vein



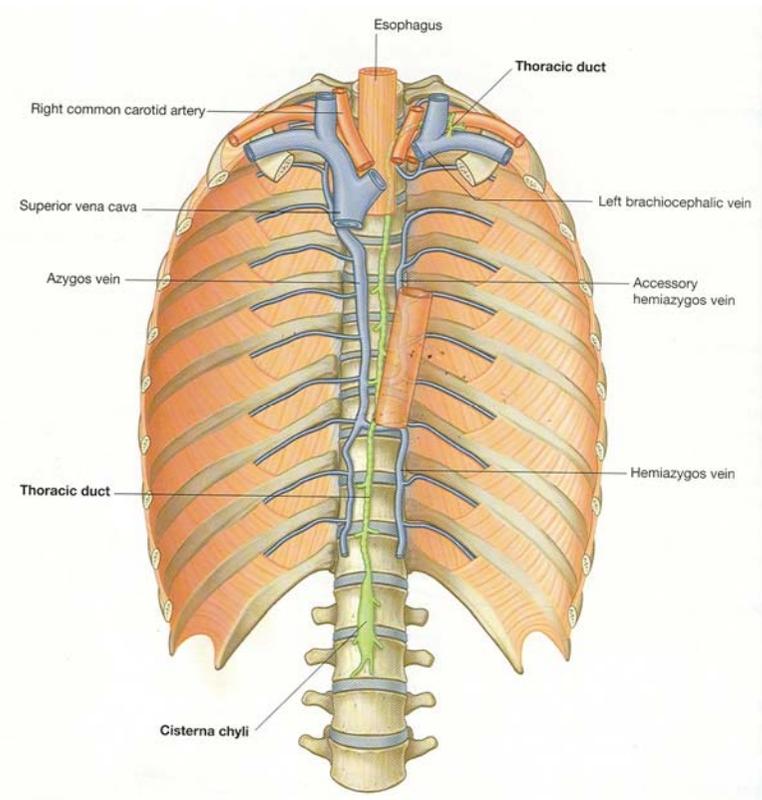
# Left phrenic nerve

- In middle mediastinum lies on the Lt side of pericardial sac anterior to root of Lt lung
- Pierces the diaphragm near the apex of the heart



# Thoracic duct

- Major lymphatic vessel of the body
- Enters sup. mediastinum from below at the level of T4/5
- continues through the superior med. posterior to arch of aorta between the esophagus & Lt pleura



# Esophagus

- Starts at the C<sub>6</sub><sup>th</sup> & terminates at cardiac opening of stomach (T<sub>12</sub>)
- Descends anterior to vertebral bodies in midline
- Crossed laterally by the azygos vein on the right side & arch of aorta on the left side

