

MEDIASTINUM

Subdivisions and contents

❖ Mediastinum is a **central partition** between the 2 pleural sacs limited on either sides by the mediastinal pleura

❖ **Extent**

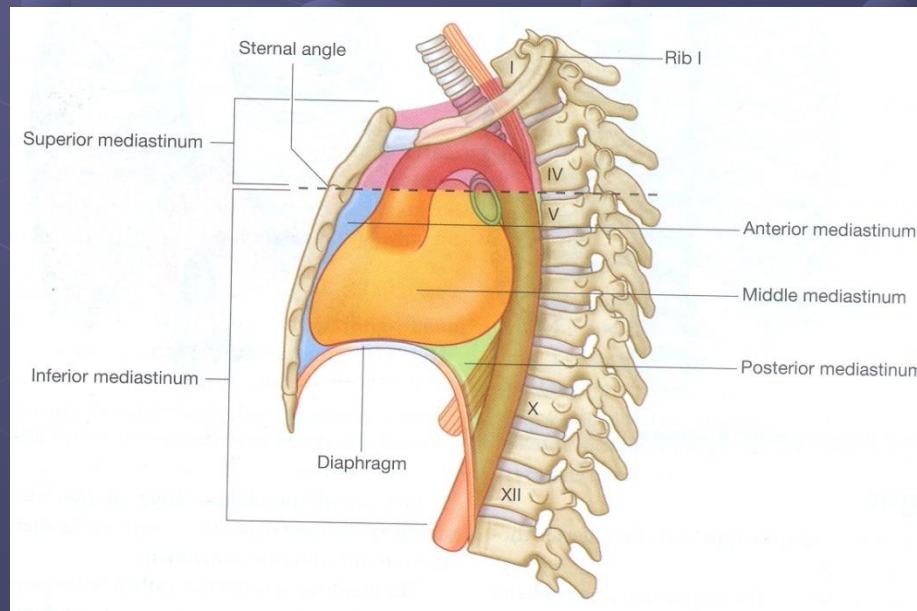
In front – Sternum

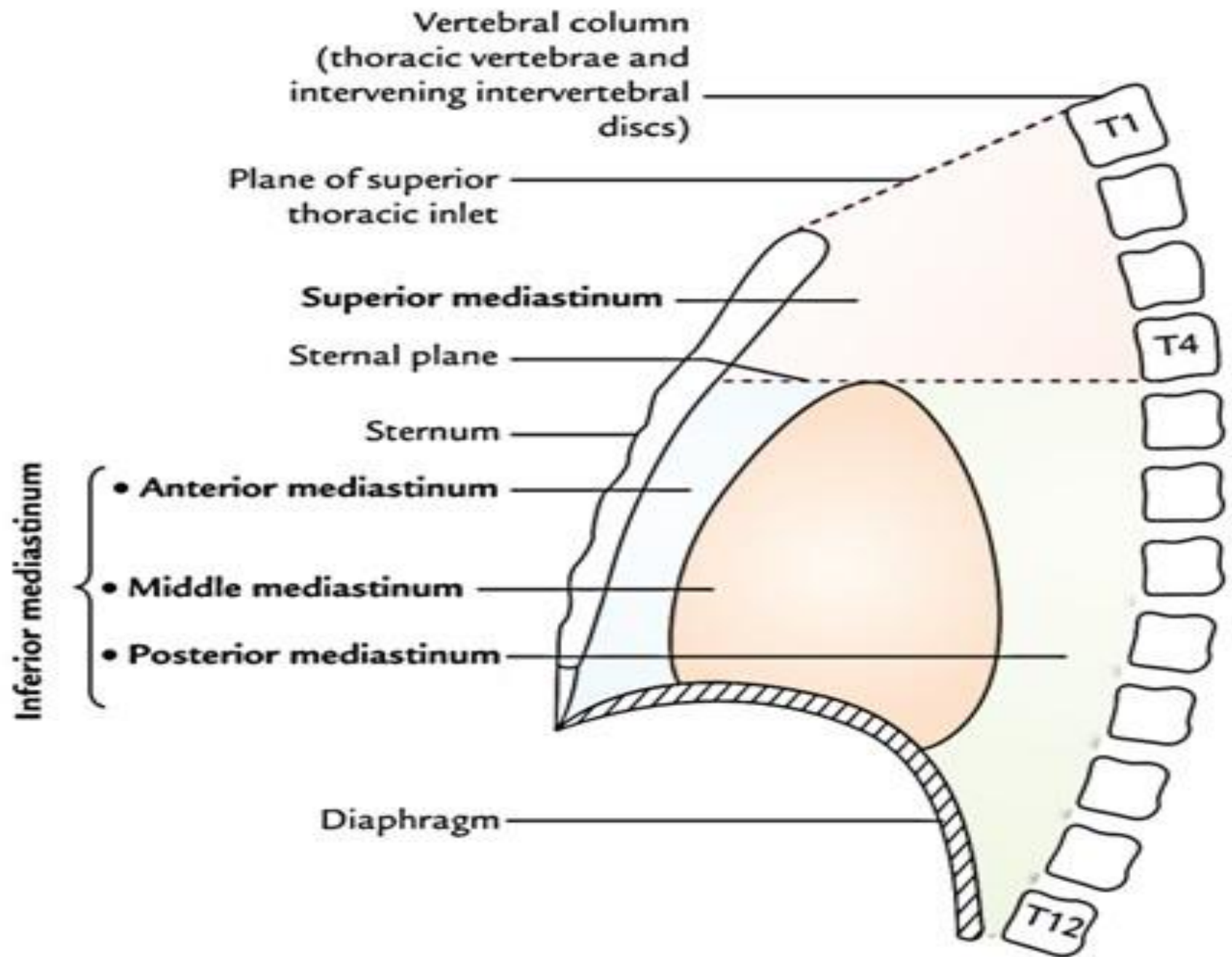
Behind – Bodies of 12 thoracic vertebrae

Above – Thoracic inlet

Below – The diaphragm

On each side – Mediastinal pleura





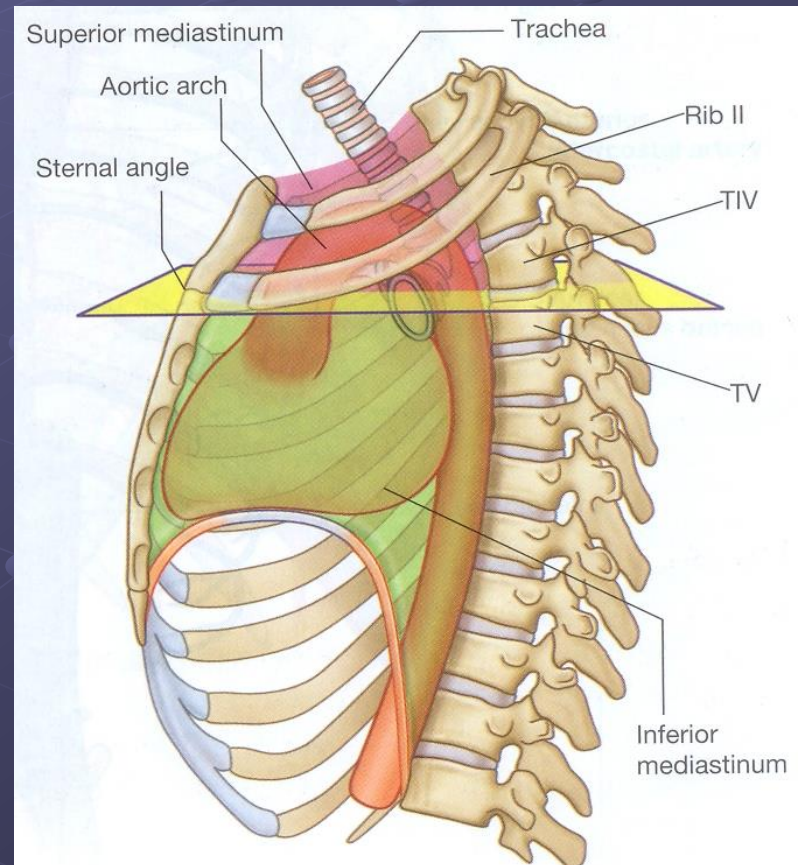
❖ Subdivisions

An imaginary horizontal plane extending from the sternal angle to the lower border of T4 into superior and inferior

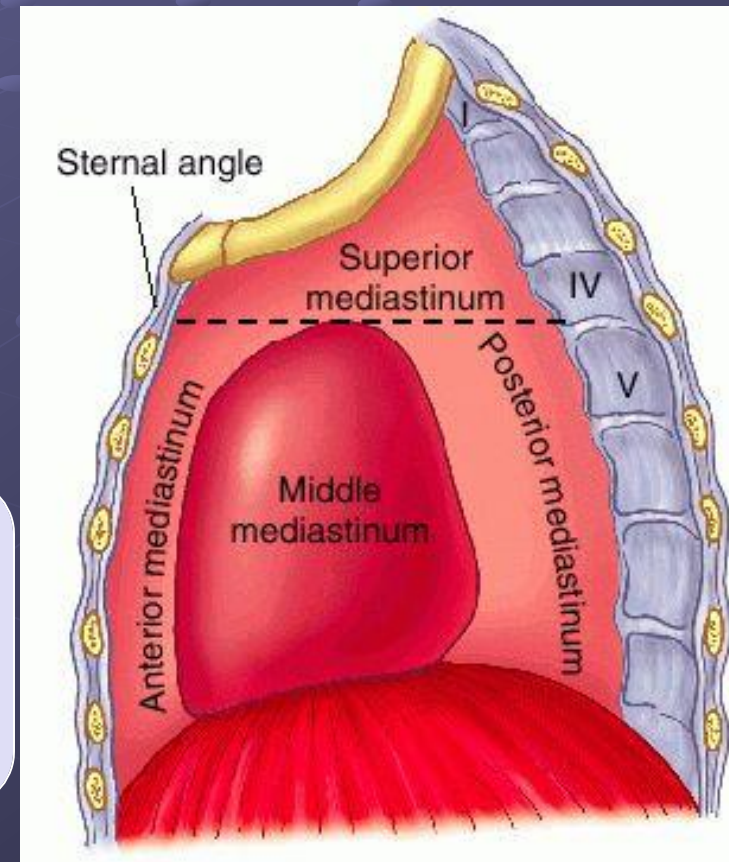
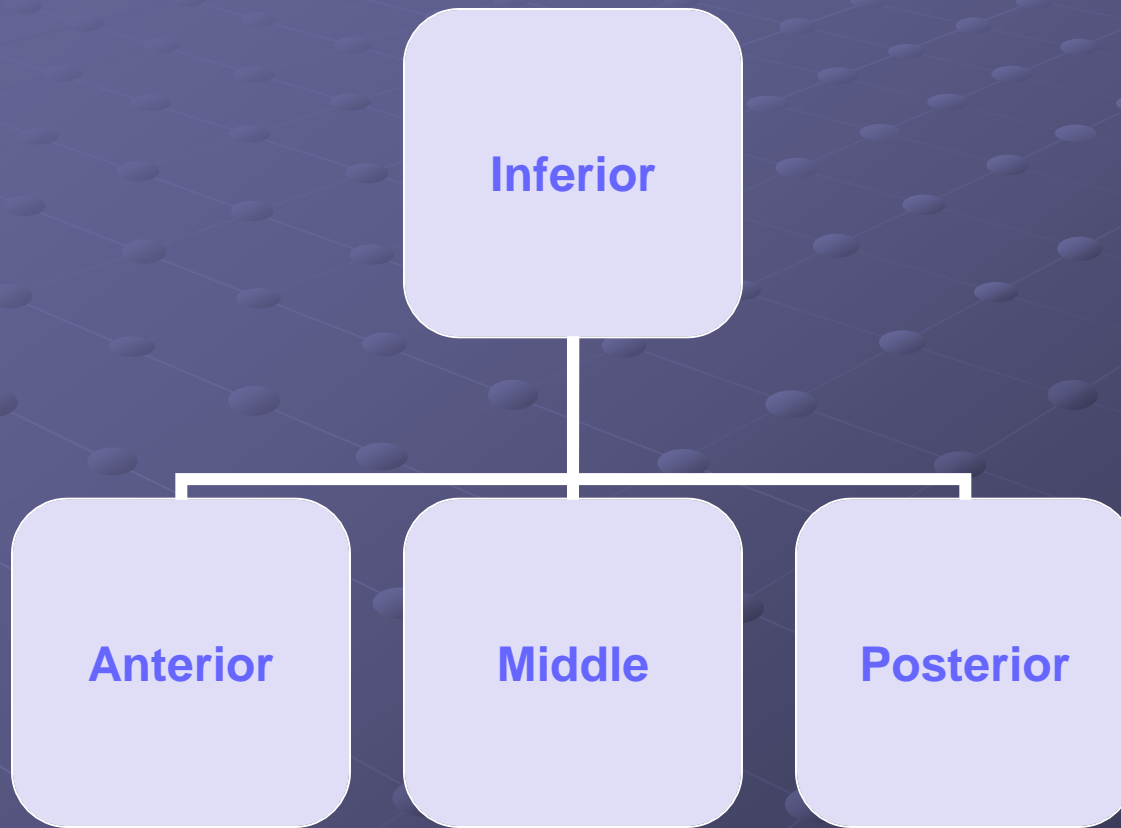
Mediastinum

Superior

Inferior



- ❖ Inferior mediastinum is further divided by the **pericardial sac** into **anterior**, **middle** and **posterior**



❖ *Superior mediastinum*

• **Boundaries**

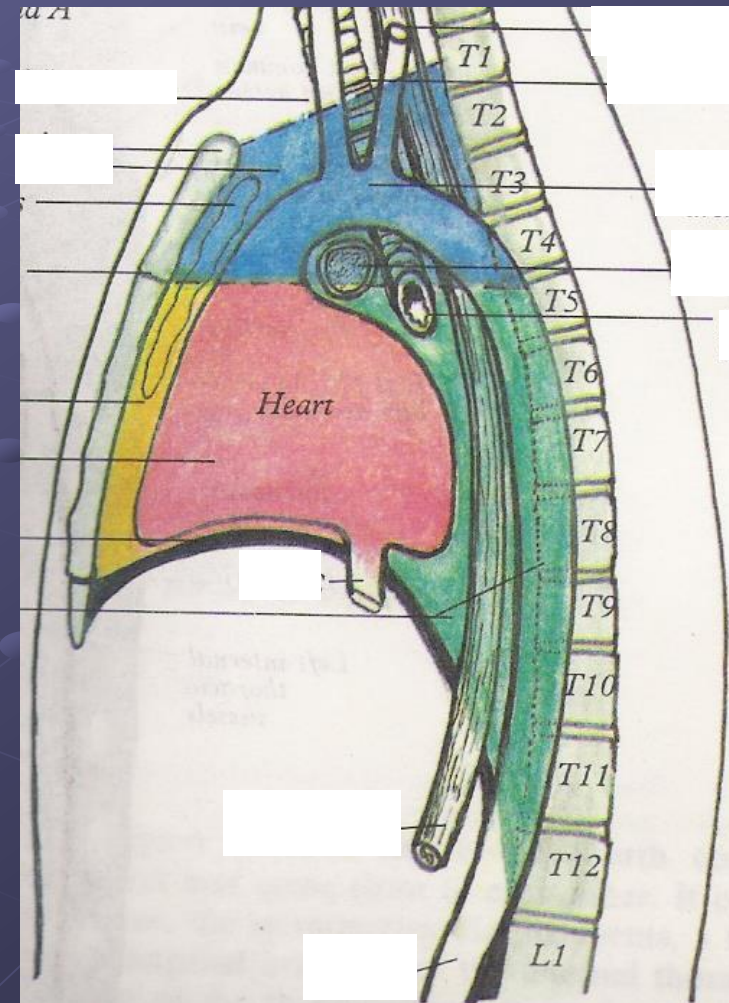
In front – Manubrium sterni

Behind – Bodies of upper 4 thoracic vertebrae, intervertebral discs

Above – Thoracic inlet

Below – imaginary plane passing through the sternal angle and T4

On each side – Mediastinal pleura

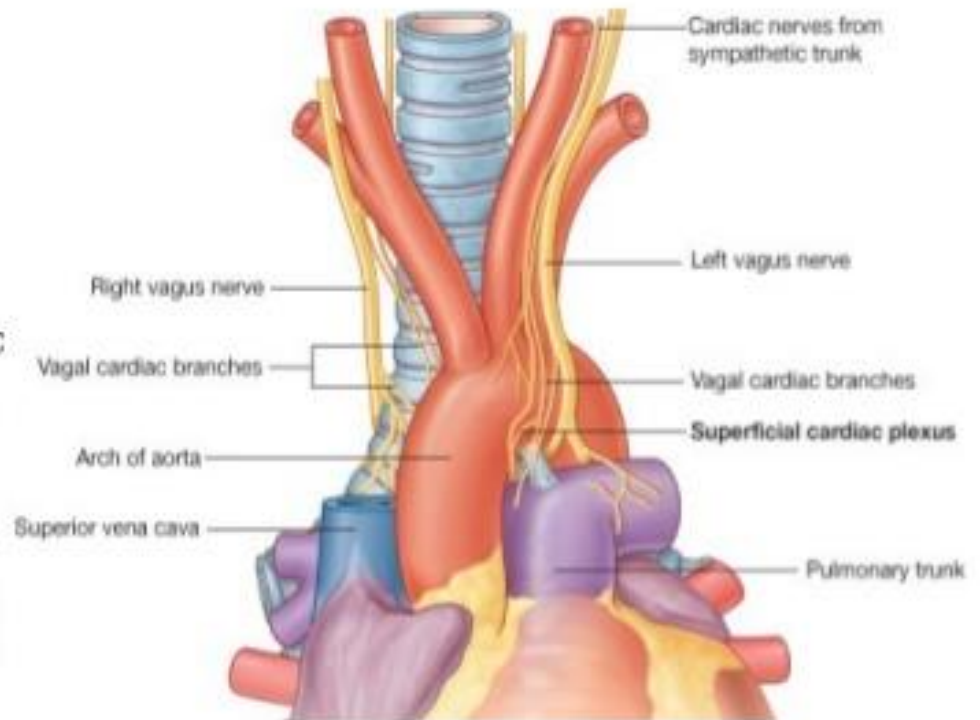
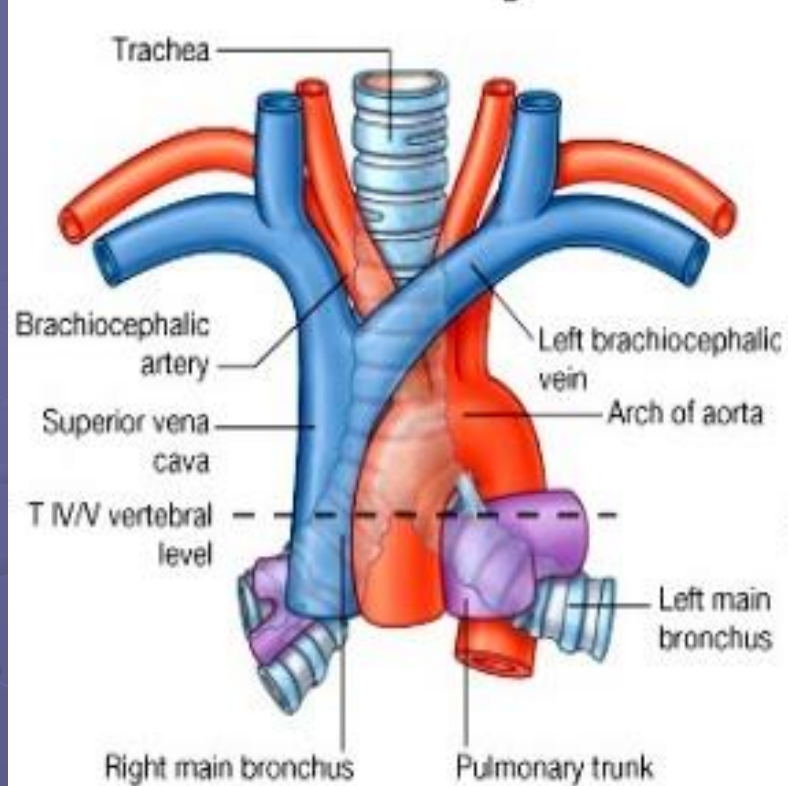


Contents of superior mediastinum

- Internal thoracic vessels
- Arch of aorta and its branches
- Rt and Lt vagal nerve
- Phrenic nerve, superior part of cardiac plexus
- Trachea, oesophagus, thoracic duct
- Thymus

- Brachiocephalic vein and the upper half of SVC
- Lt recurrent laryngeal nerve
- Paratracheal, brachiocephalic and tracheobronchial lymph nodes

Superior Mediastinum



❖ Anterior mediastinum

• Boundaries

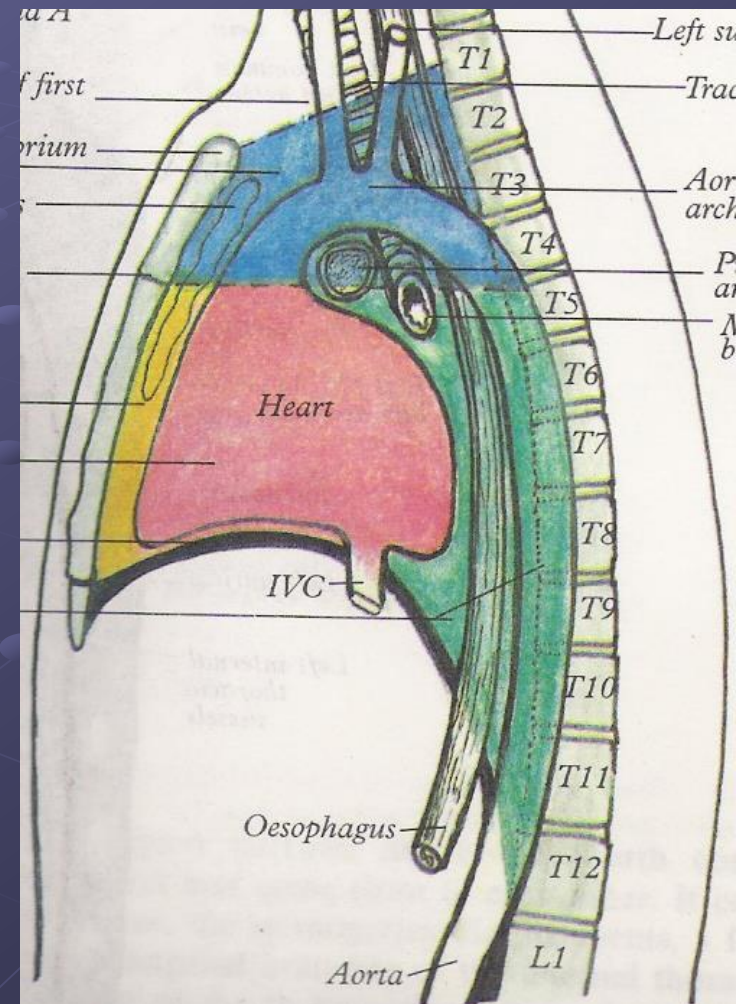
In front – Body of the sternum

Behind – Pericardium

Above – Imaginary horizontal plane extending from sternal angle to the lower border of T4

Below – The diaphragm

On each side – Mediastinal pleura

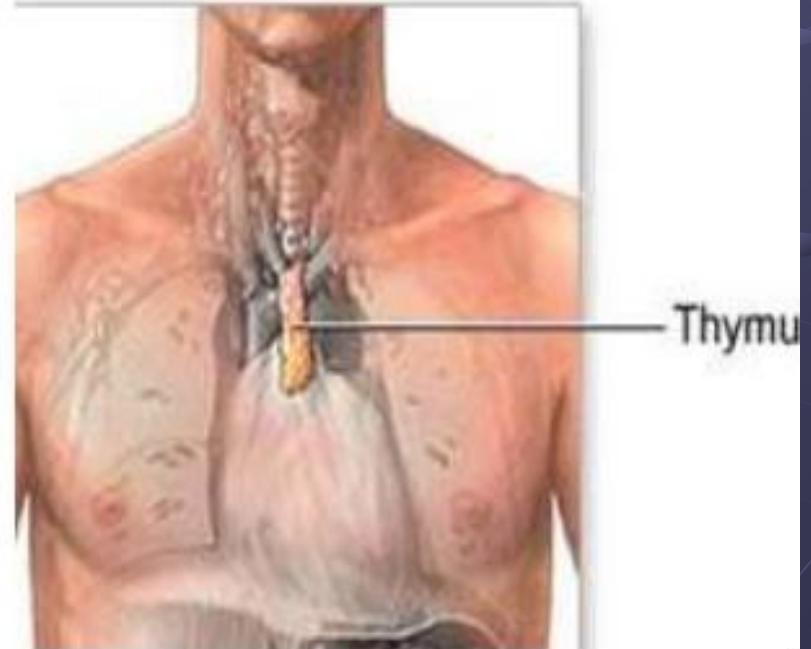
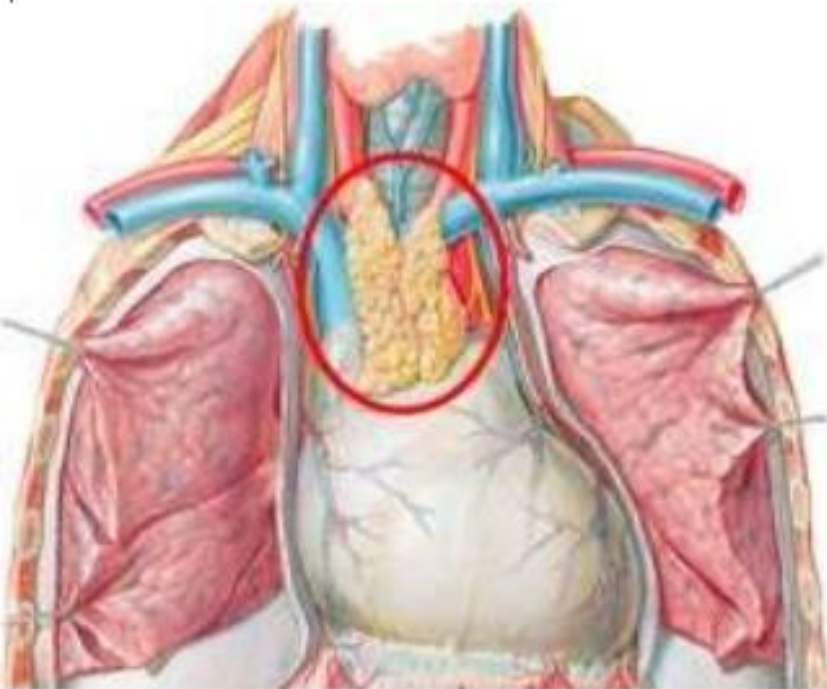


❖ Contents

- Superior and inferior sternopericardial ligaments
- Loose areolar tissue
- Retrosternal lymph nodes
- Mediastinal branches of internal thoracic artery
- In infants and young children, anterior mediastinum contains the thymus.

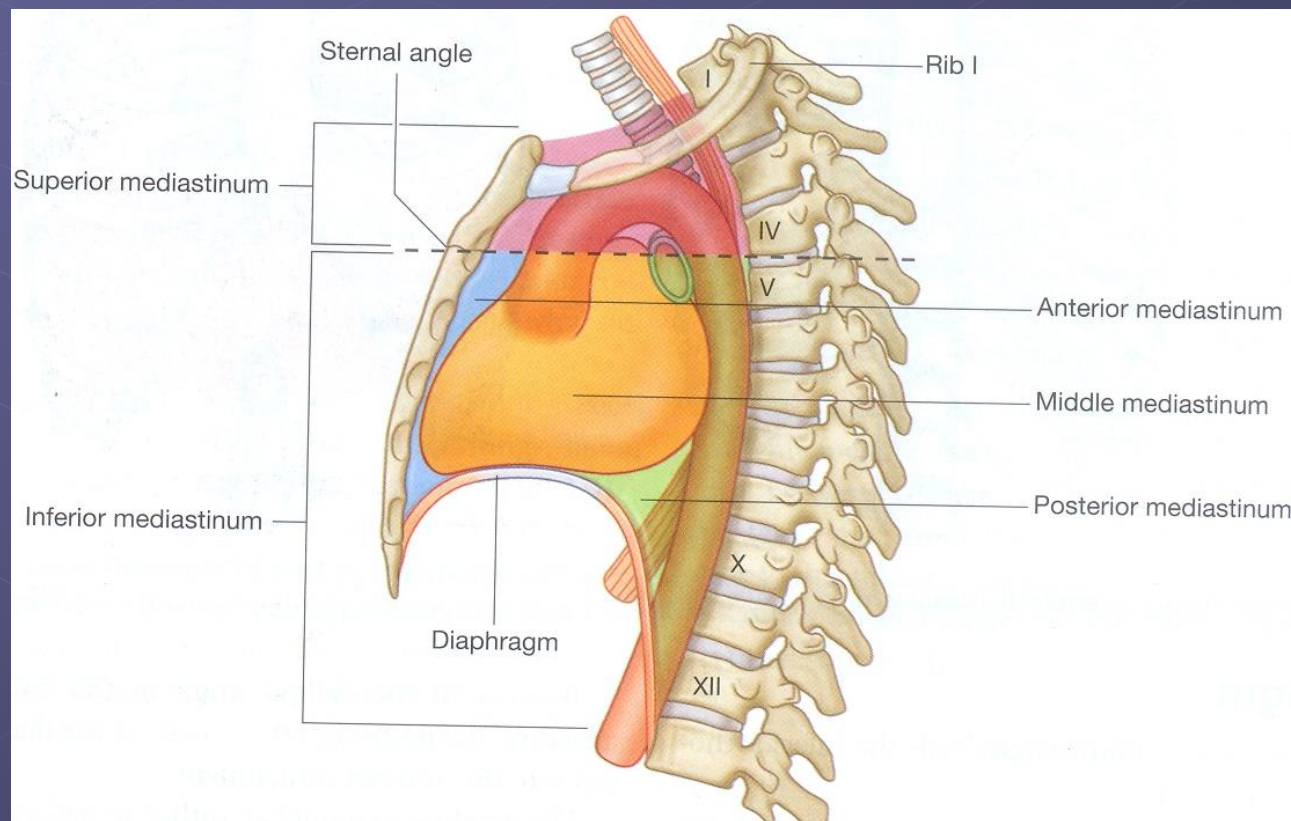
Anterior mediastinum contains:

Thymus
Lymph nodes
fat



❖ **Middle mediastinum**

- Widest subdivision
- Occupied mainly by the heart and pericardium
- Limited on each side by mediastinal pleura



❖ Contents

- Heart enclosed in the pericardium
- Arteries – Ascending aorta and pulmonary trunk dividing into right and left pulmonary arteries
- Veins – Lower part of superior venacava, arch of azygos vein and 4 pulmonary veins
- Nerves – phrenic, deep cardiac plexus
- Lymph nodes – inferior tracheobronchial nodes
- Tubes – bifurcation of trachea, right and left bronchi

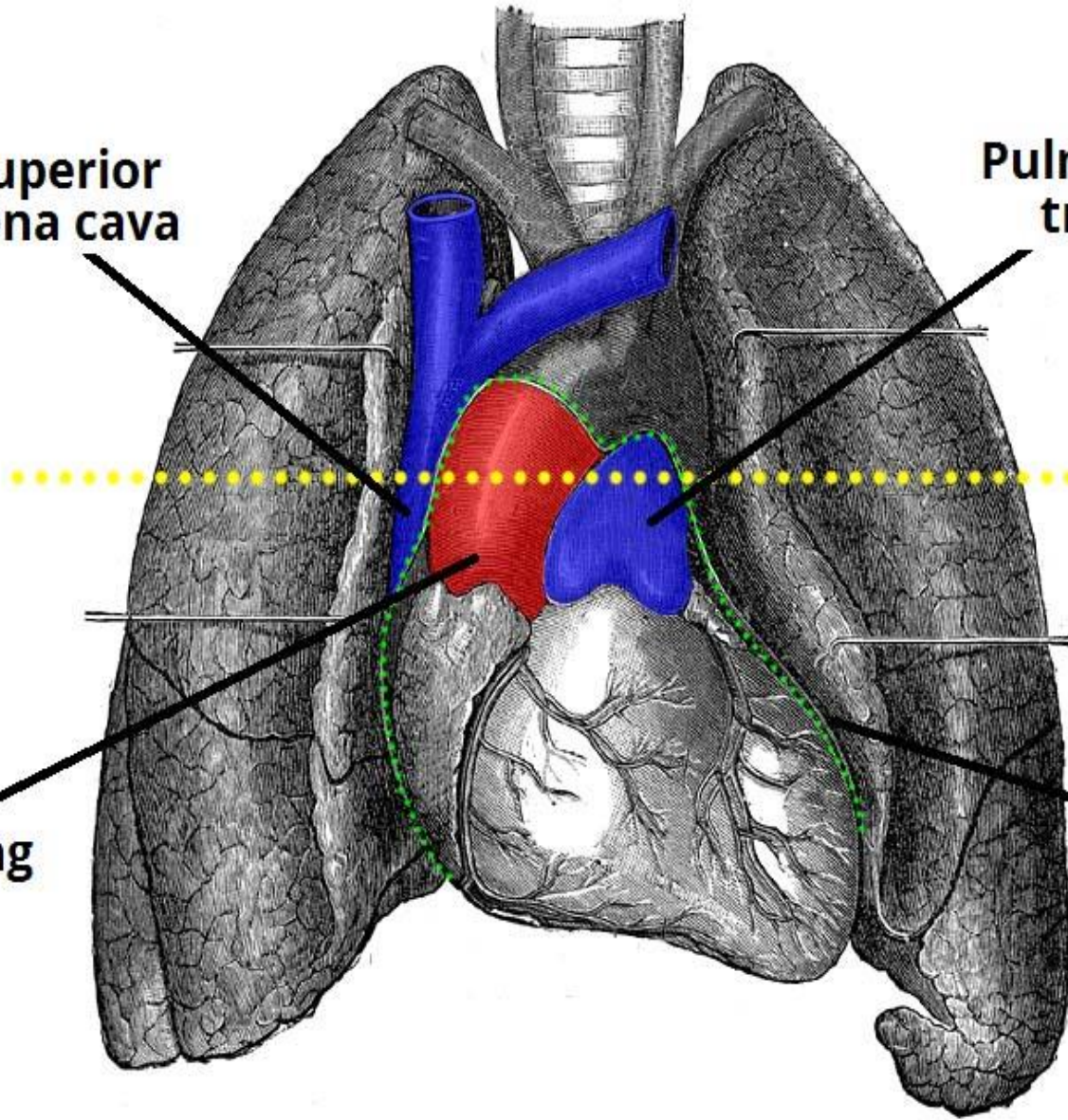
**Superior
vena cava**

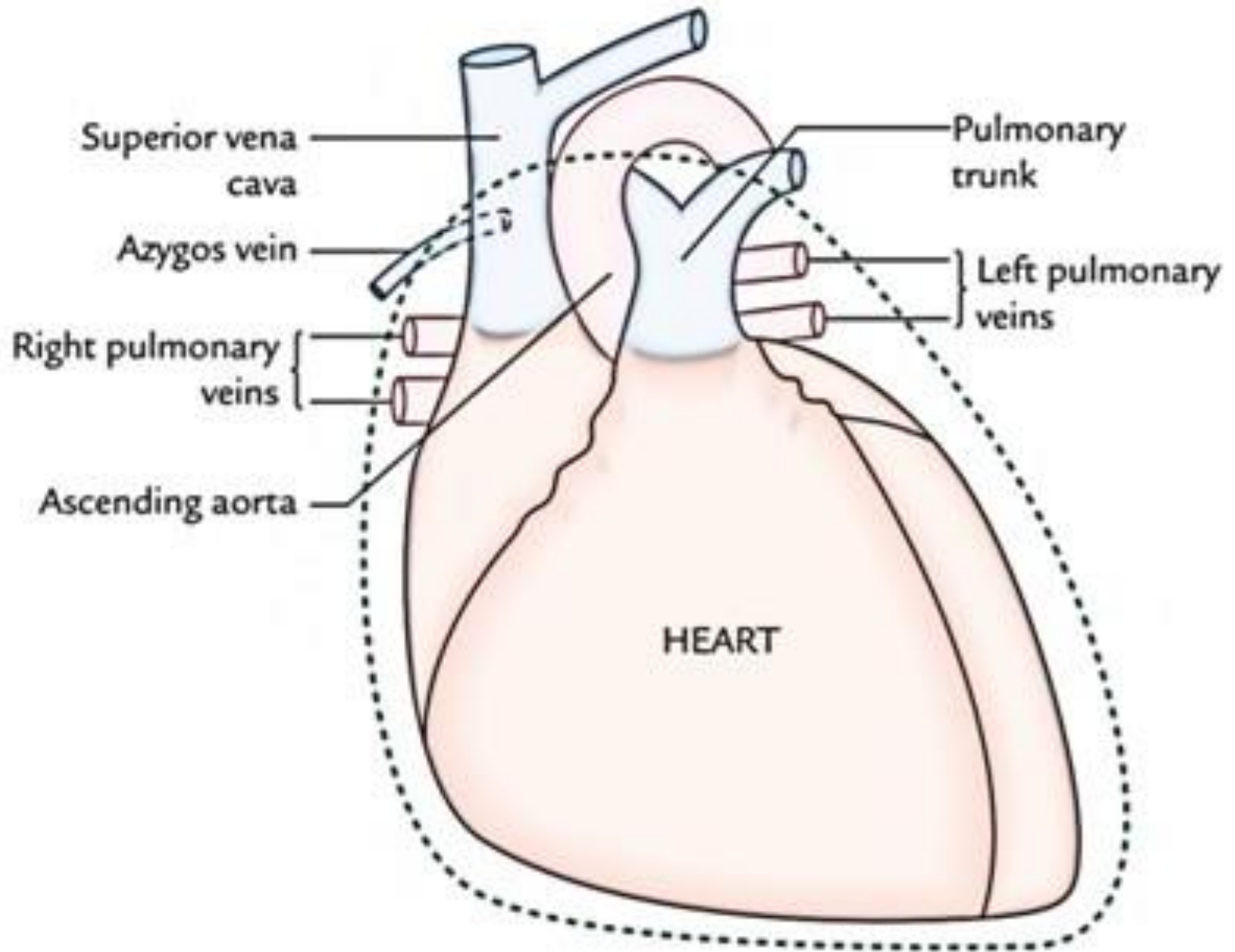
**Pulmonary
trunk**

**Level of sternal
angle**

**Ascending
aorta**

**Border of
pericardium**





❖ **Posterior mediastinum**

• **Boundaries**

In front (from above downwards) –
Bifurcation of trachea, pulmonary vessels,
fibrous pericardium

Behind – Bodies of lower 8 thoracic
vertebrae, intervertebral discs

Above – Imaginary horizontal plane

Below – The diaphragm

On each side – Mediastinal pleura

● Contents

Thoracic duct

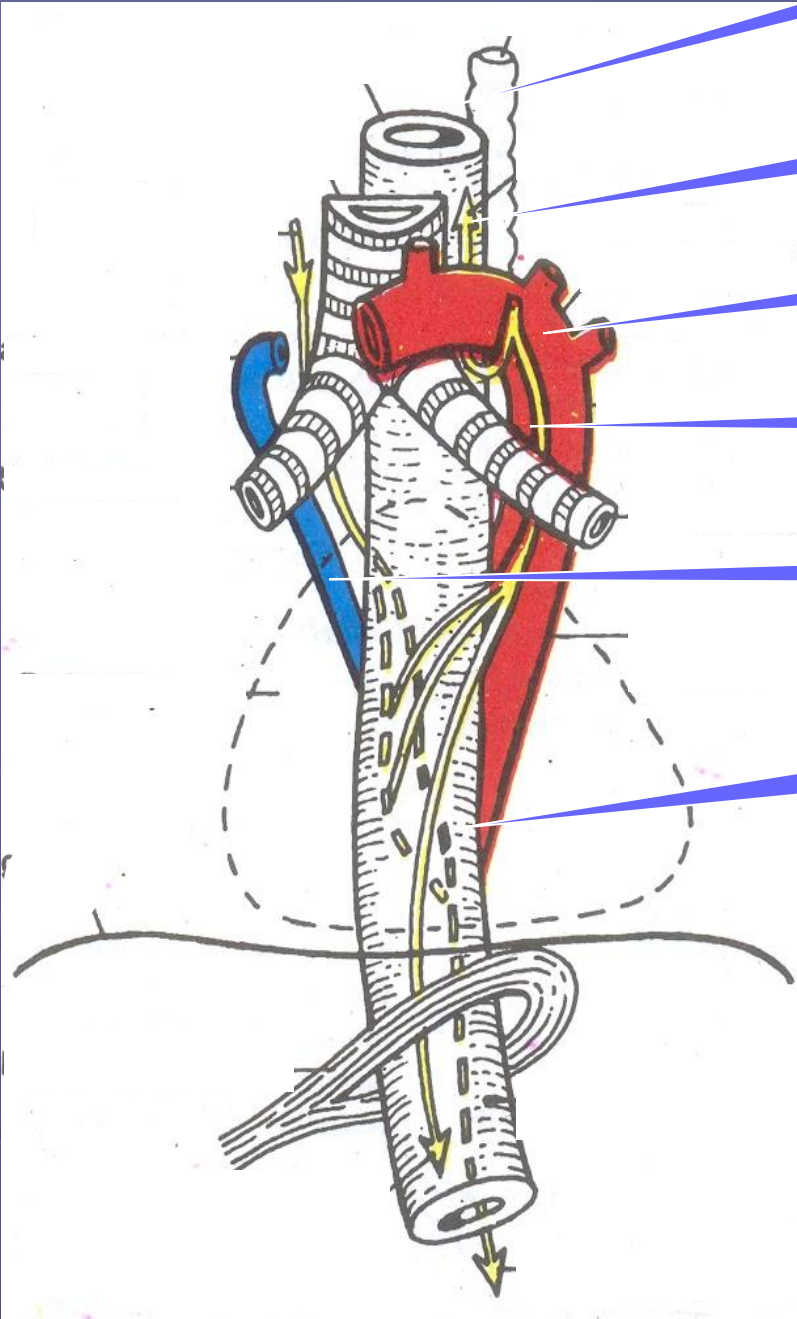
Left recurrent laryngeal nerve

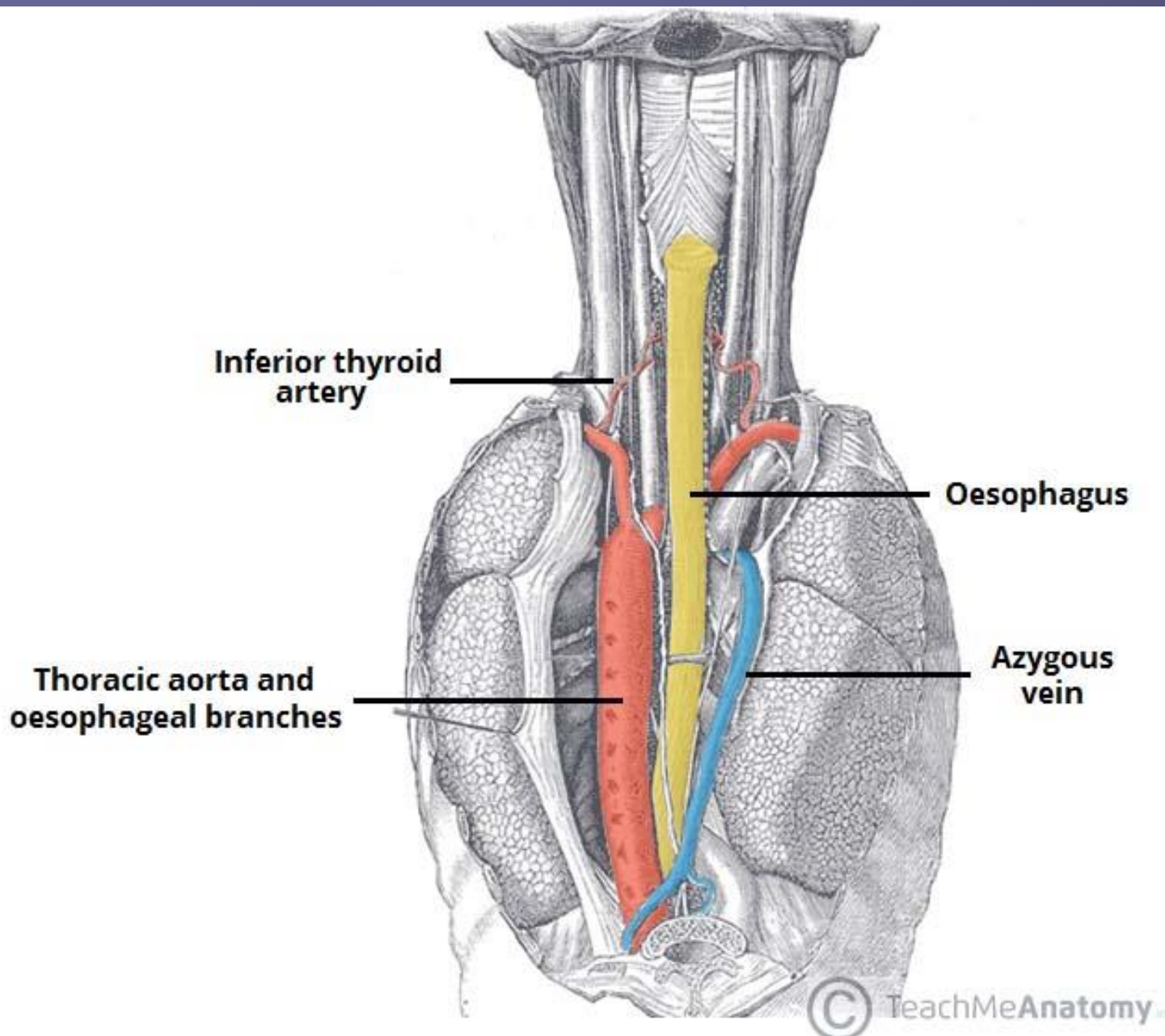
Aorta and its branches

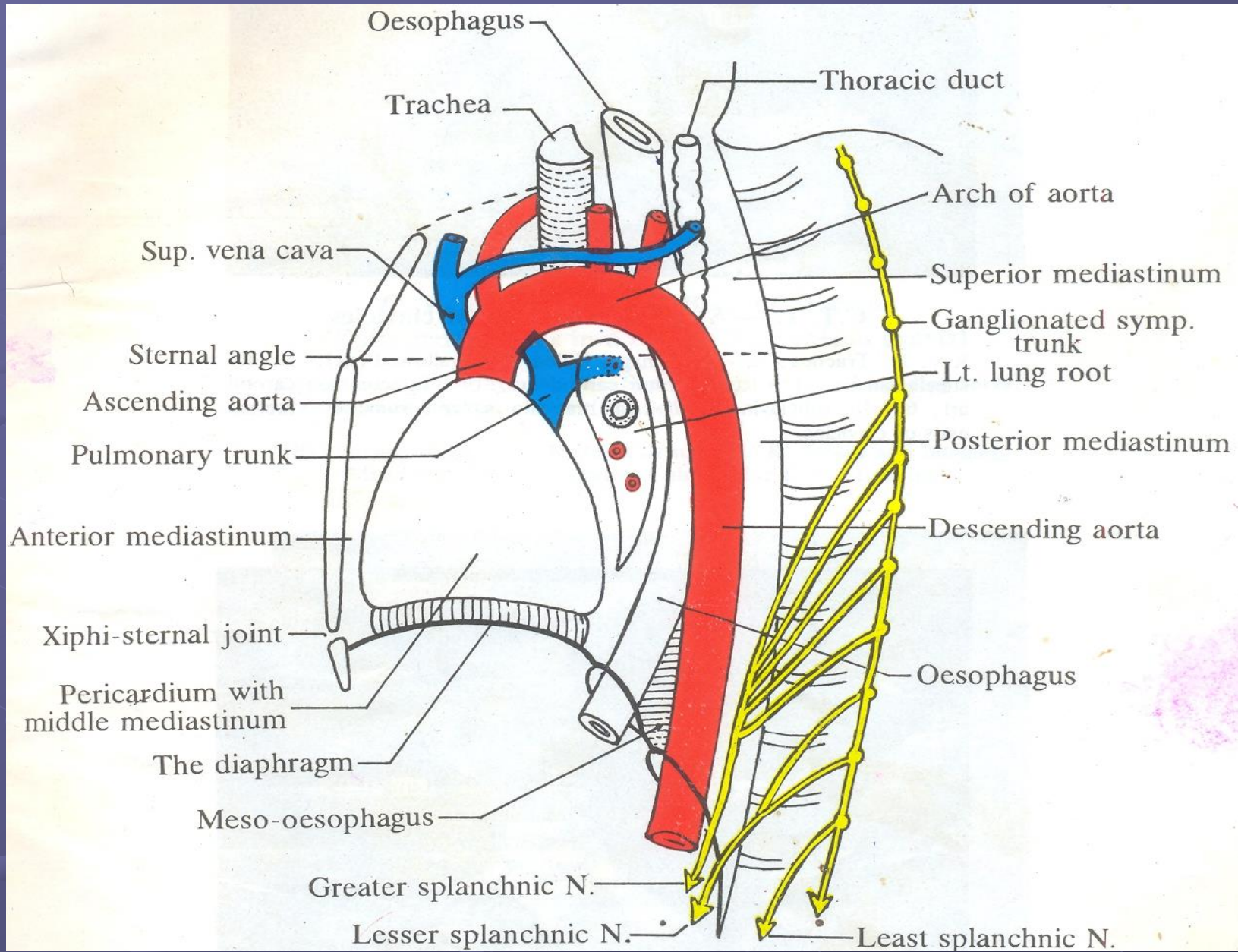
Left vagus

Azygos vein

oesophagus







Oesophagus

Arteries – Descending thoracic aorta
and its branches

Veins – Azygos, Hemiazygos

Nerves – Vagus, splanchnic nerves

Lymph nodes – posterior mediastinal
nodes

Thoracic duct

Have a nice day

