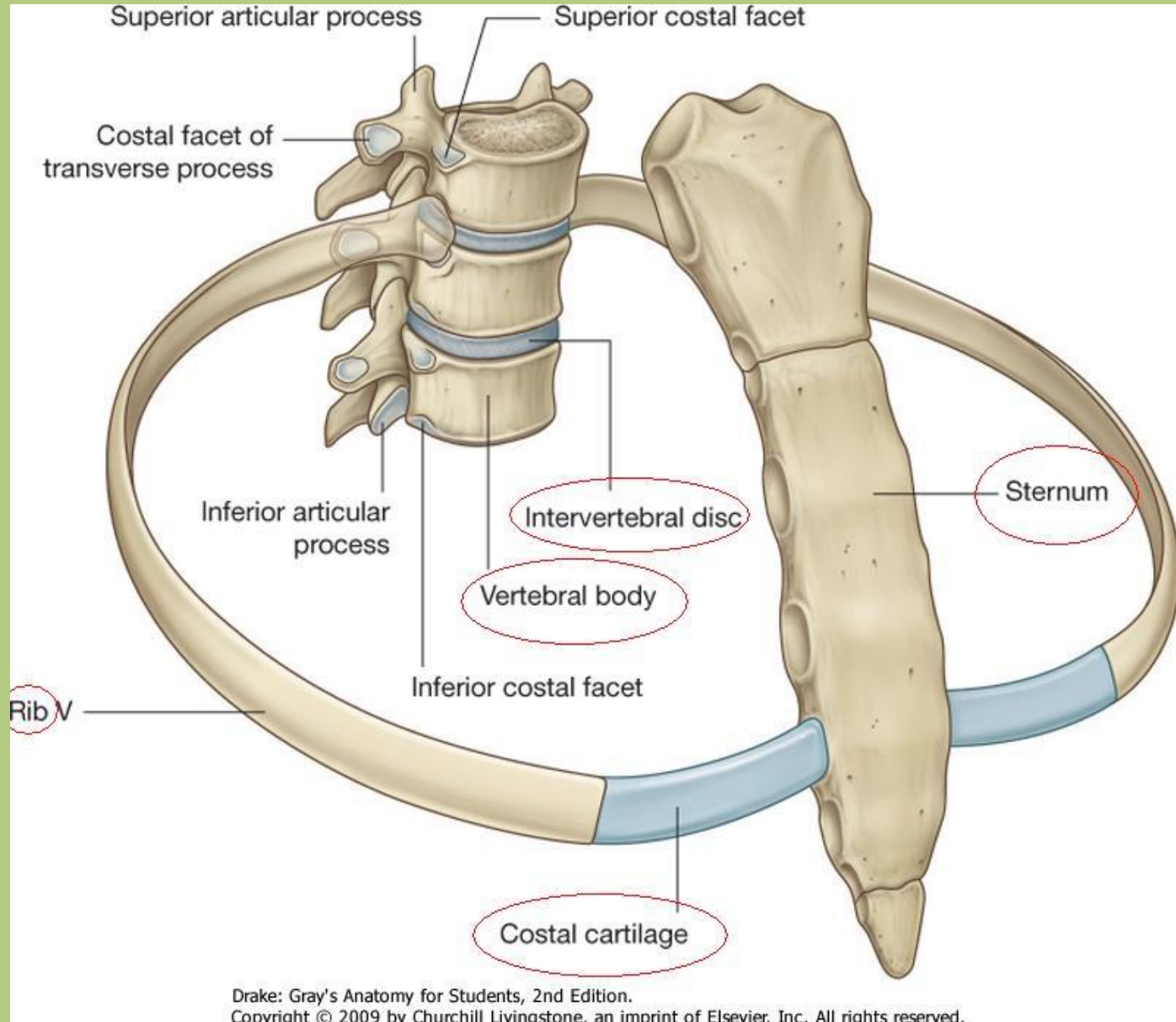




CHEST CAVITY, MEDIASTINUM

Sándor Katz M.D.,Ph.D.

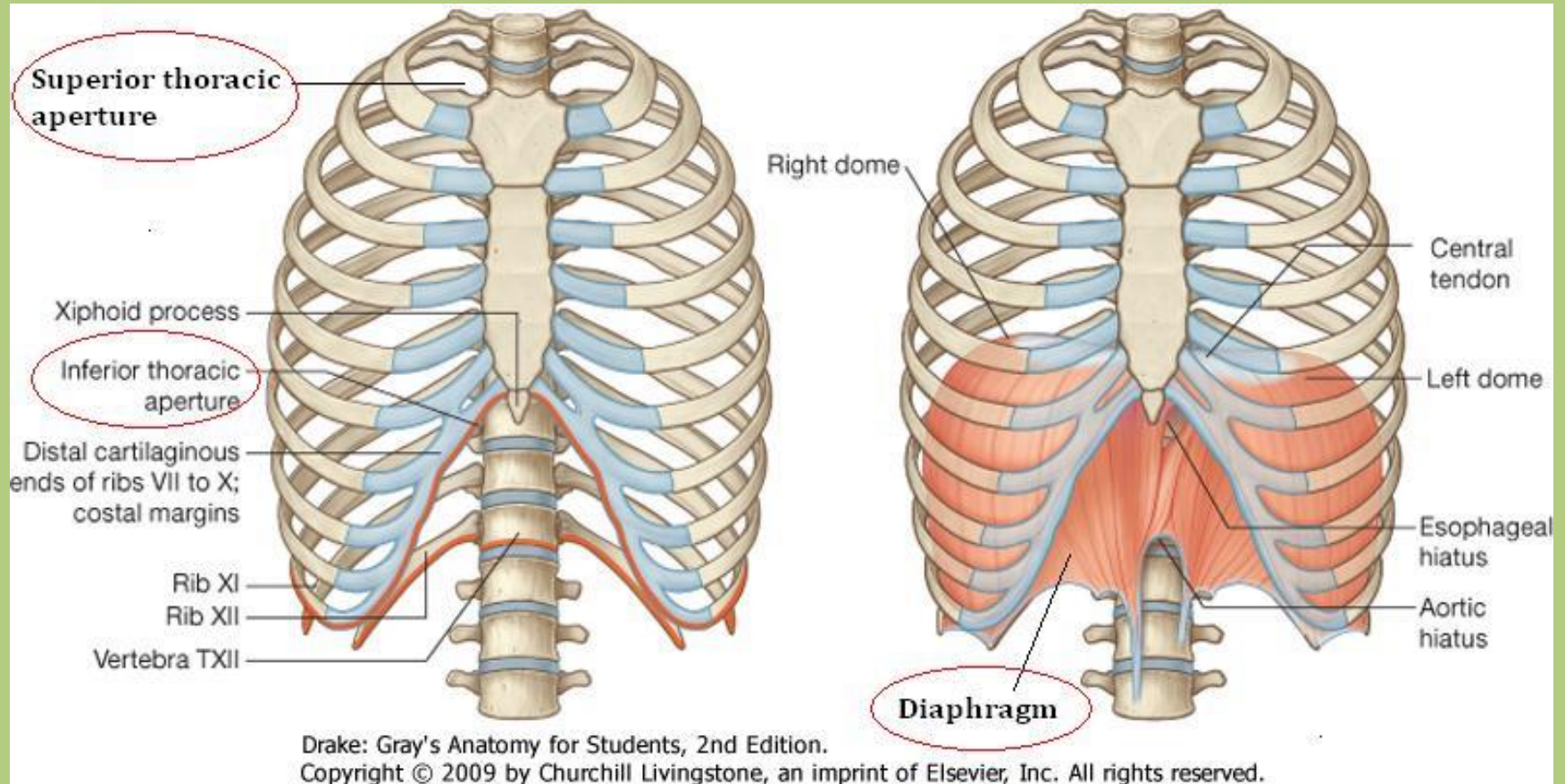
Chest cavity - bony structures



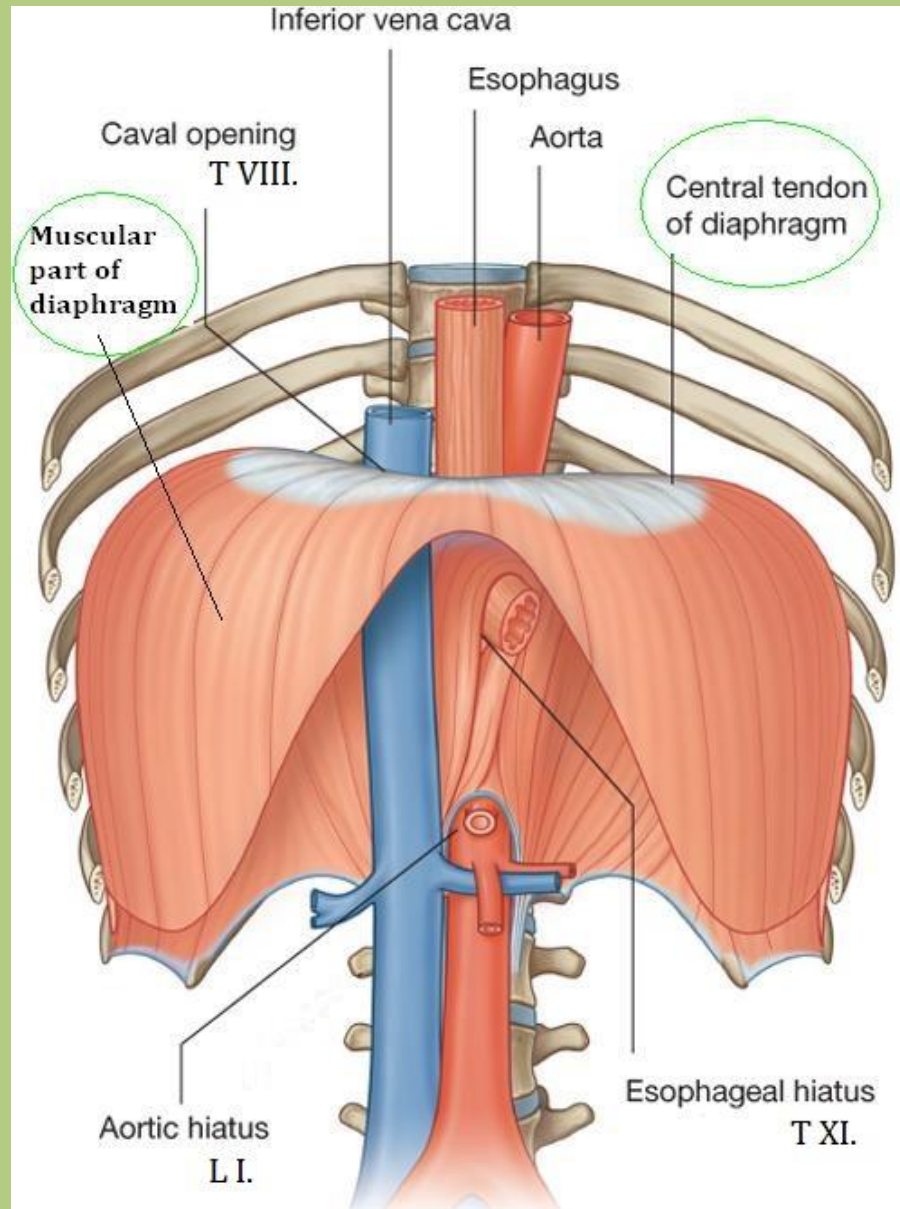
Drake: Gray's Anatomy for Students, 2nd Edition.

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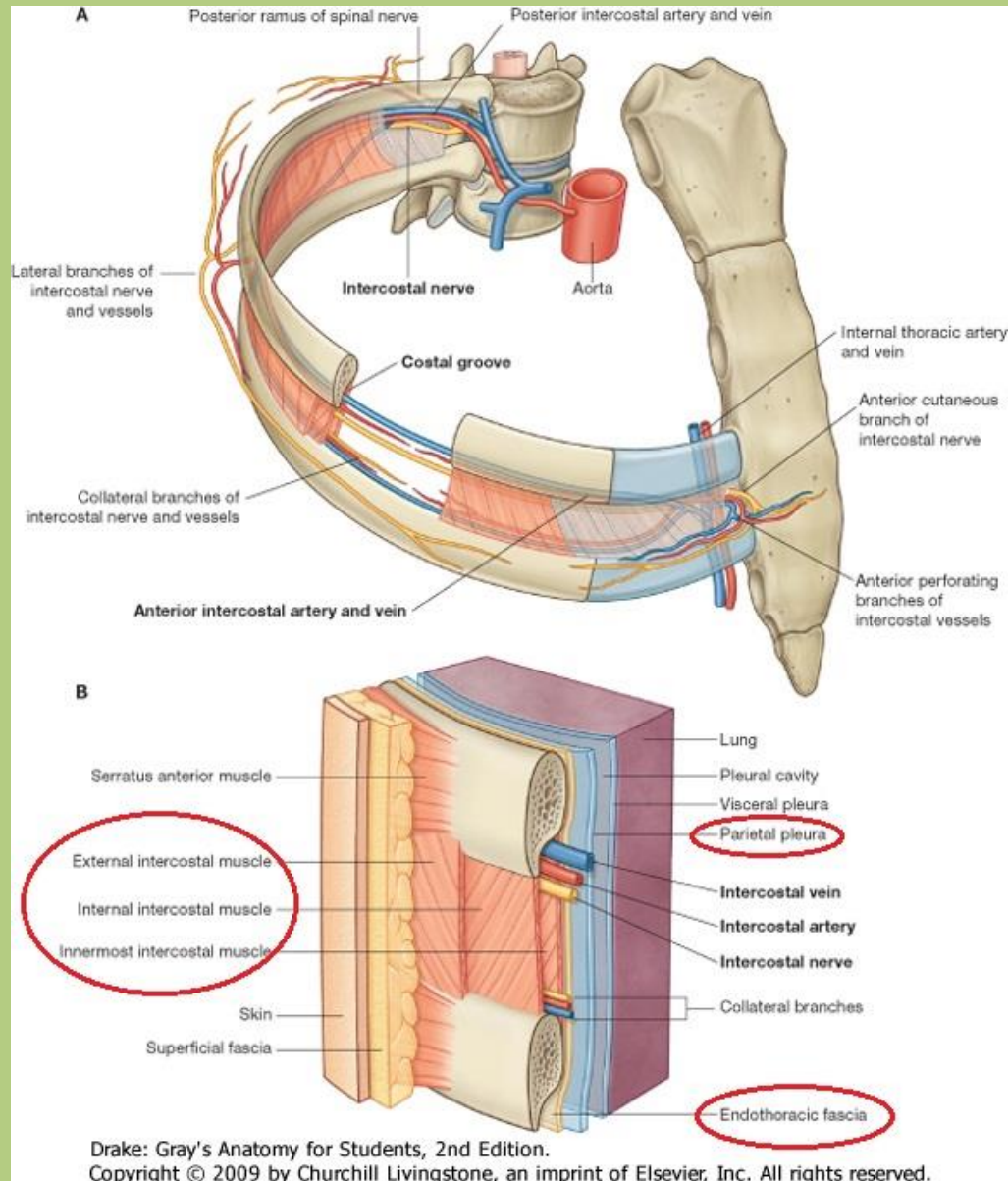
Chest cavity - bony structures



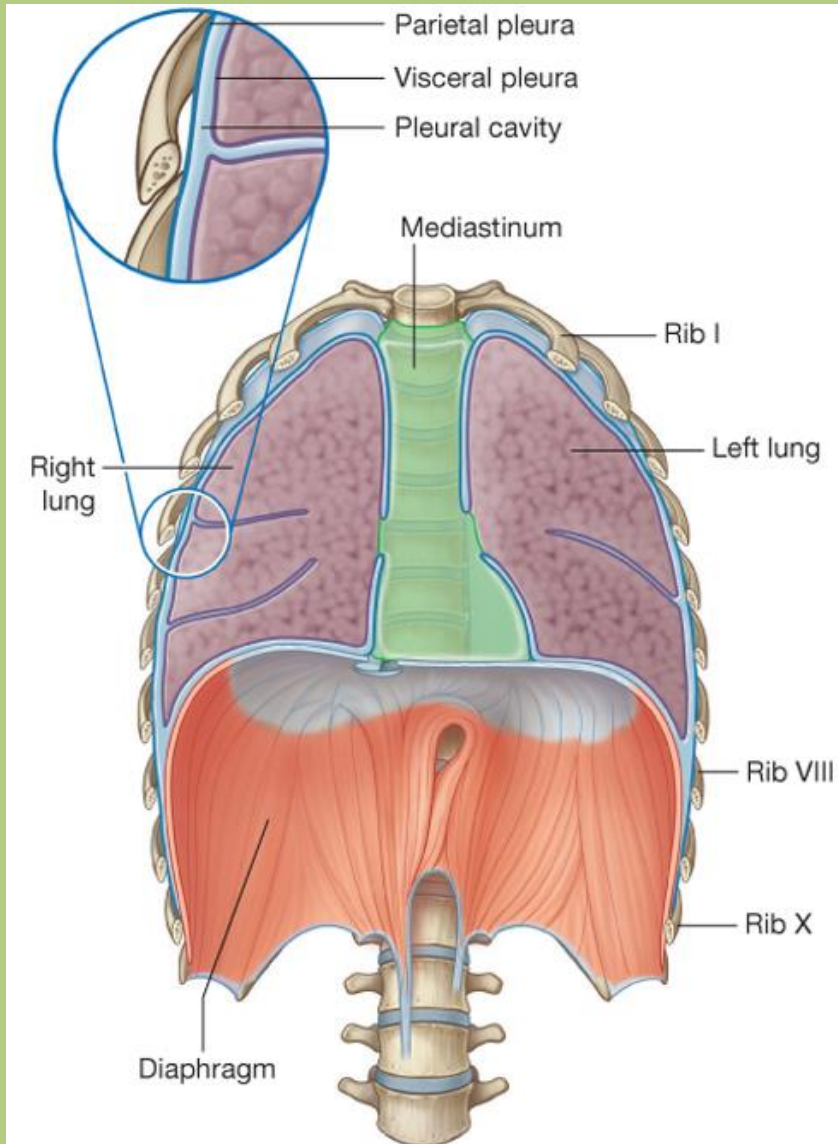
Diaphragm



Thoracic wall – soft structures

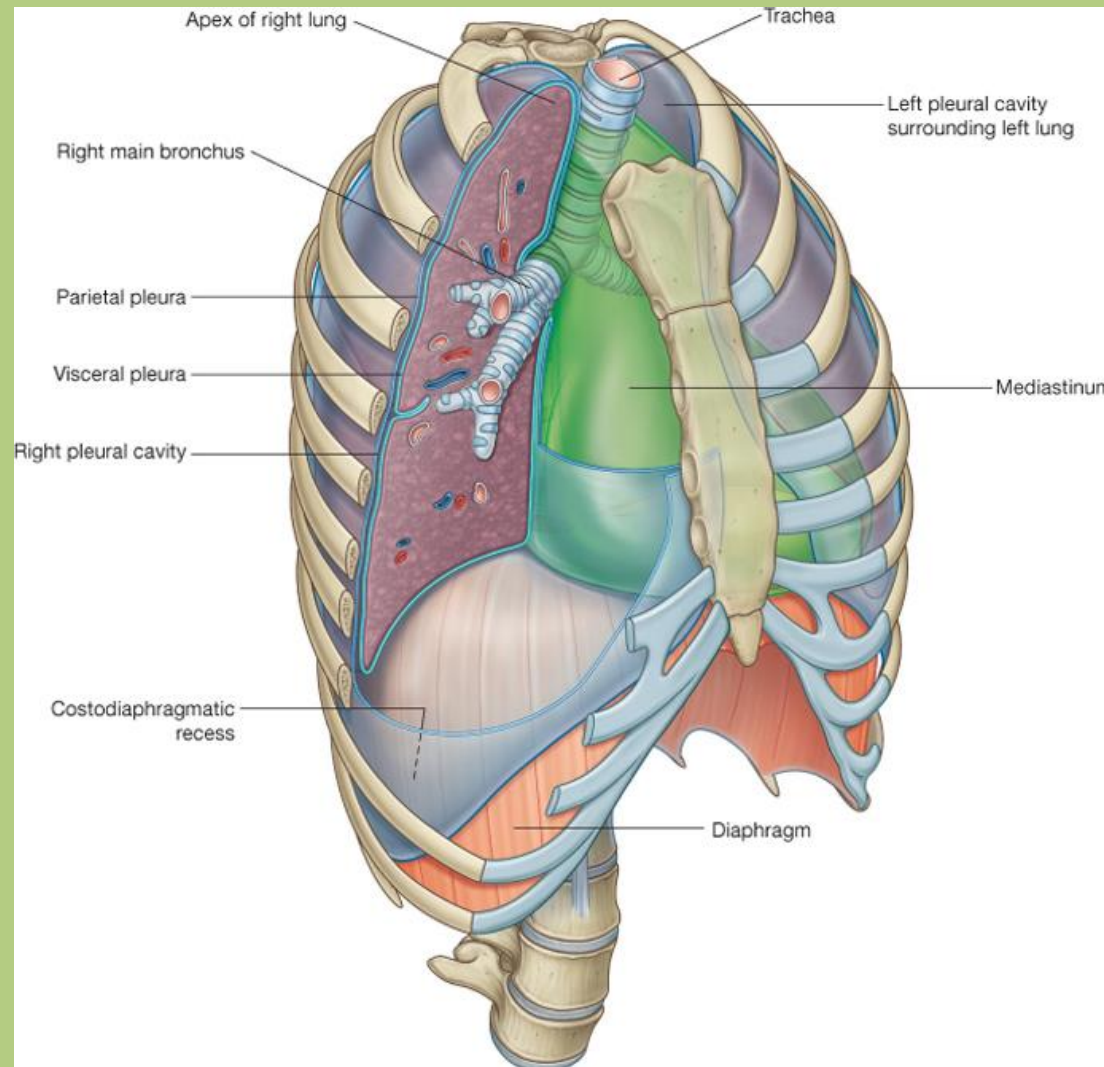


Mediastinum



Space between two mediastinal pleura.

Mediastinum - boundaries



Anterior: sternum,
costal cartilages

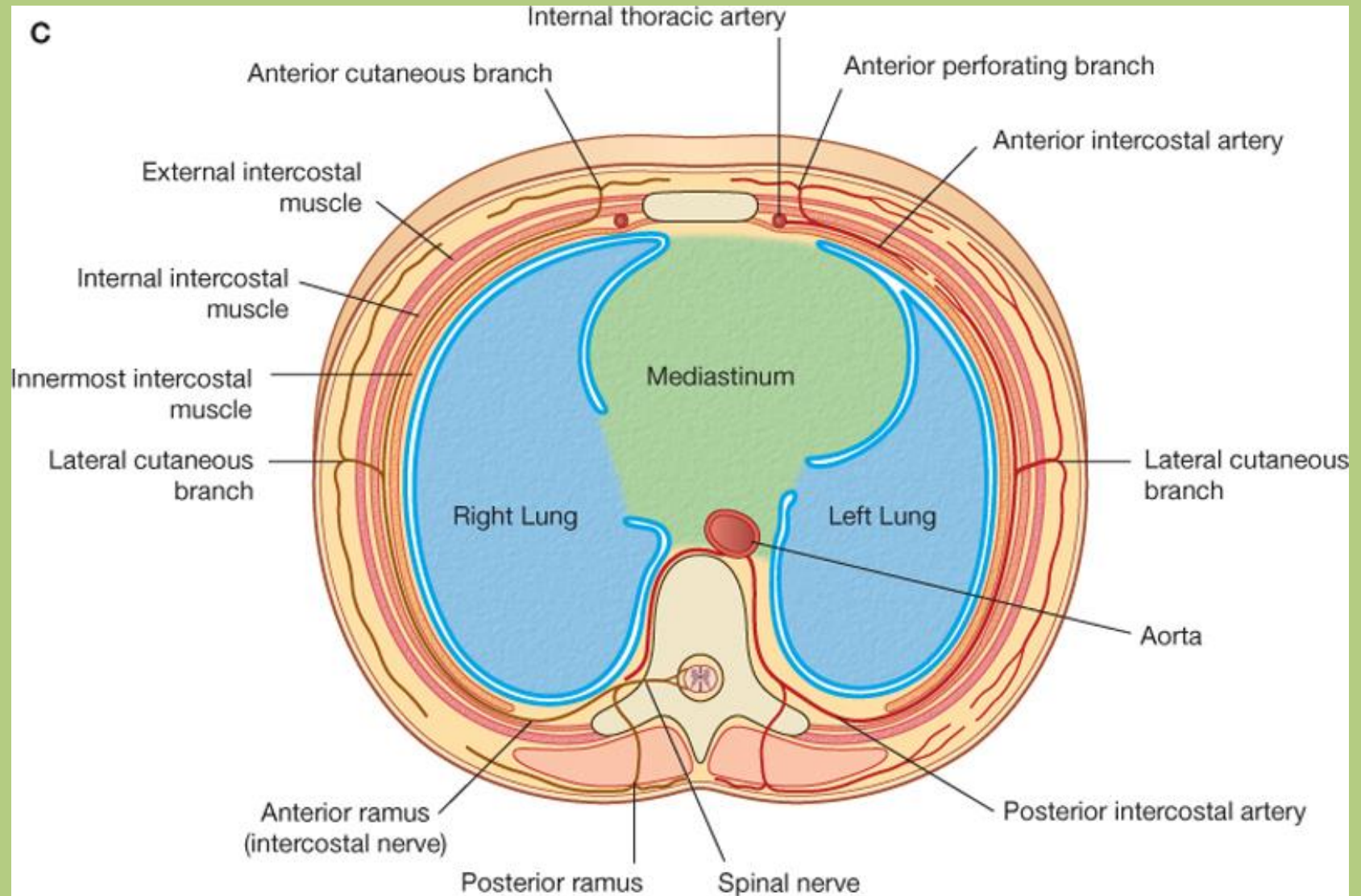
Posterior: vertebral
column

Superior: manubrium of
sternum,
I. rib,
T I. vertebra

Inferior: diaphragm

Lateral: mediastinal
pleural

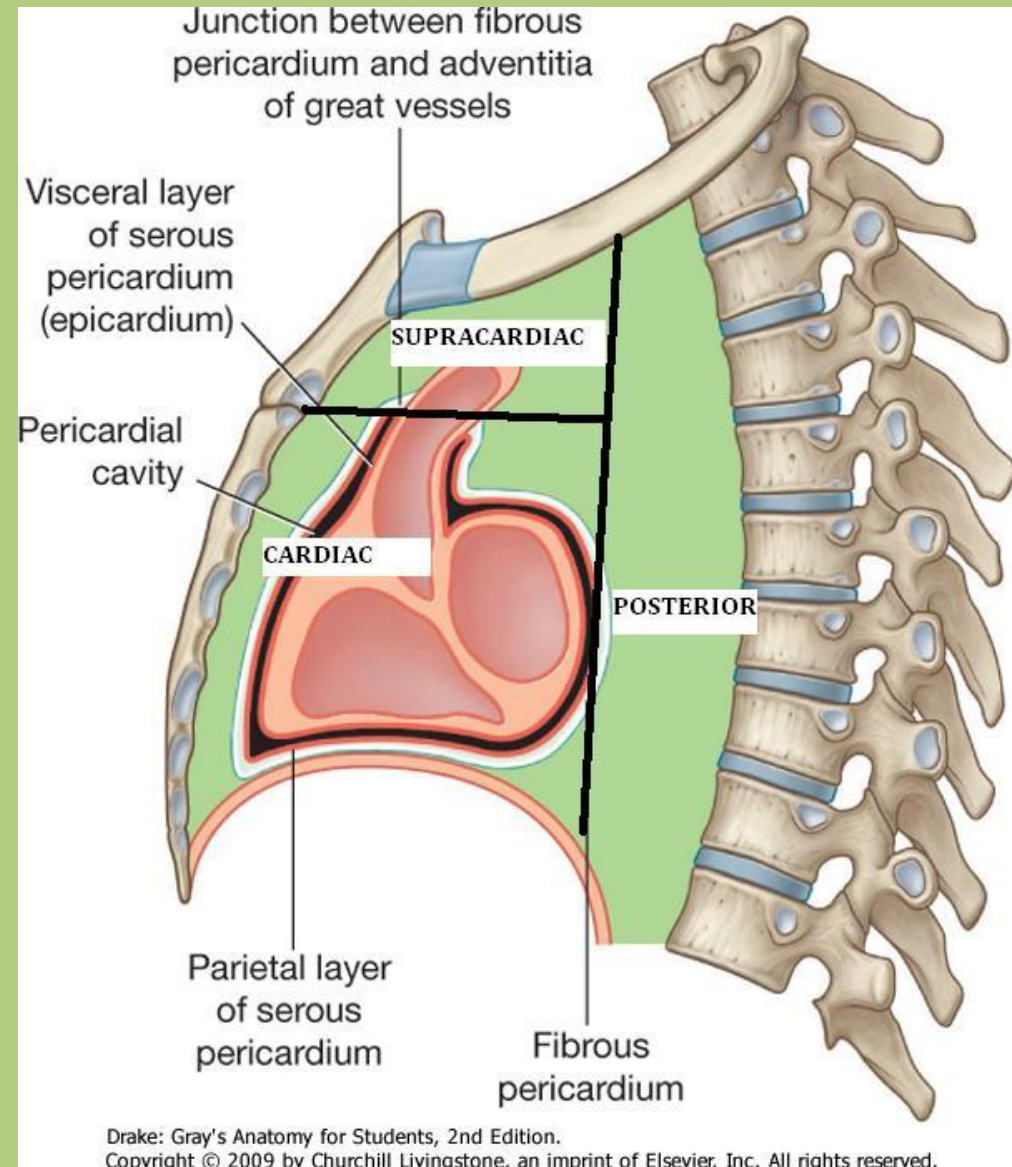
Mediastinum - boundaries



Drake: Gray's Anatomy for Students, 2nd Edition.

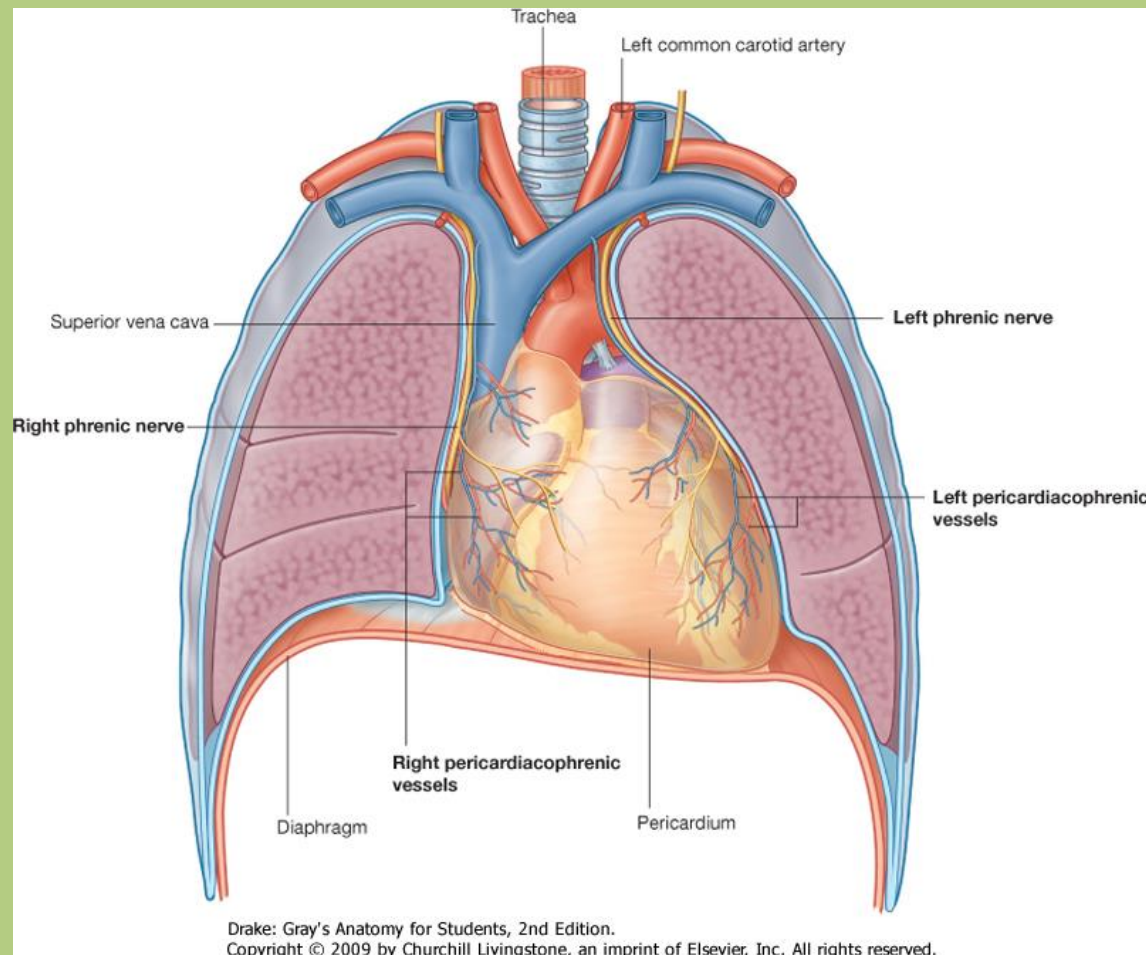
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Mediastinum - divisions



- **Anterior mediastinum**
 - cardiac
 - supracardiac
- **Posterior mediastinum**

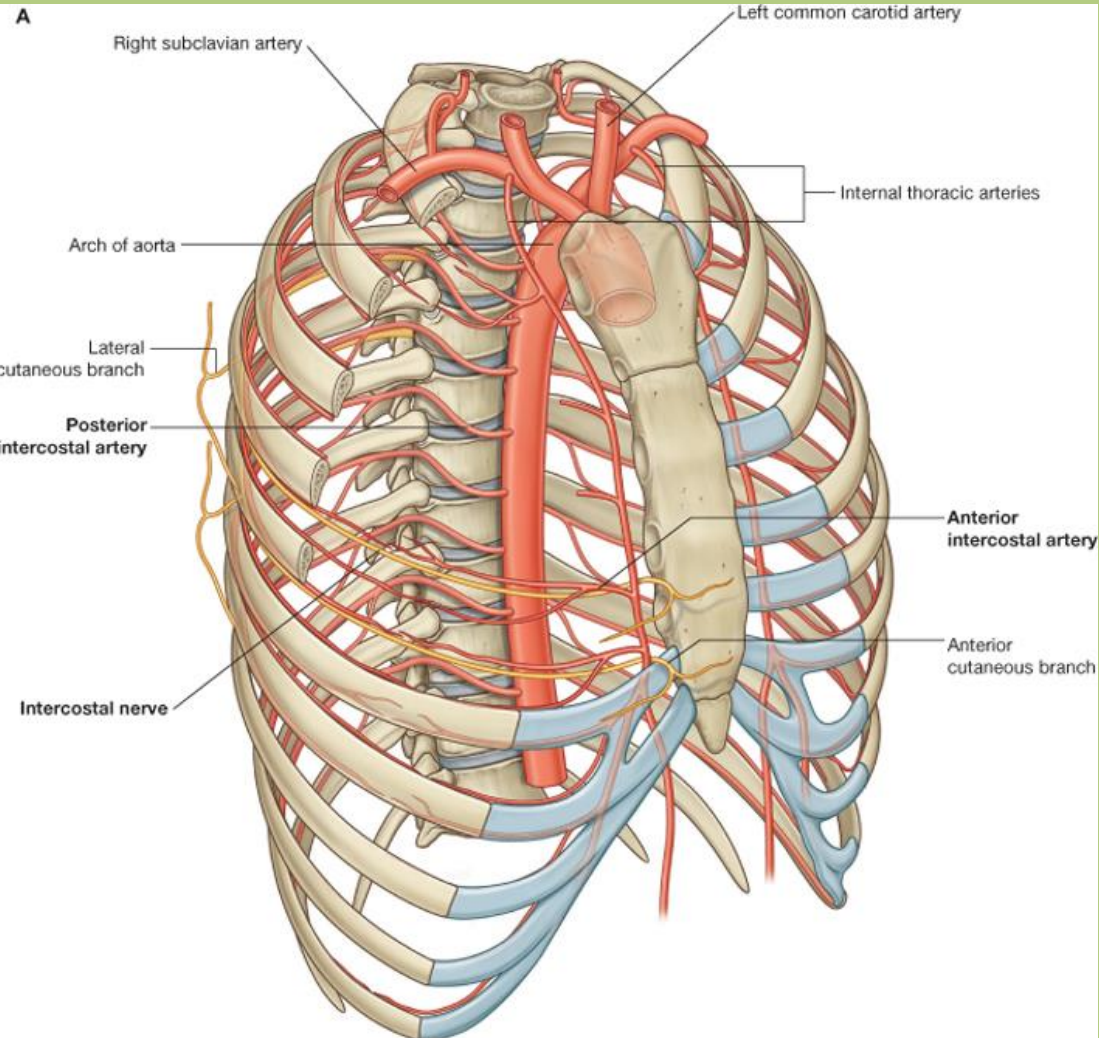
Cardiac mediastinum



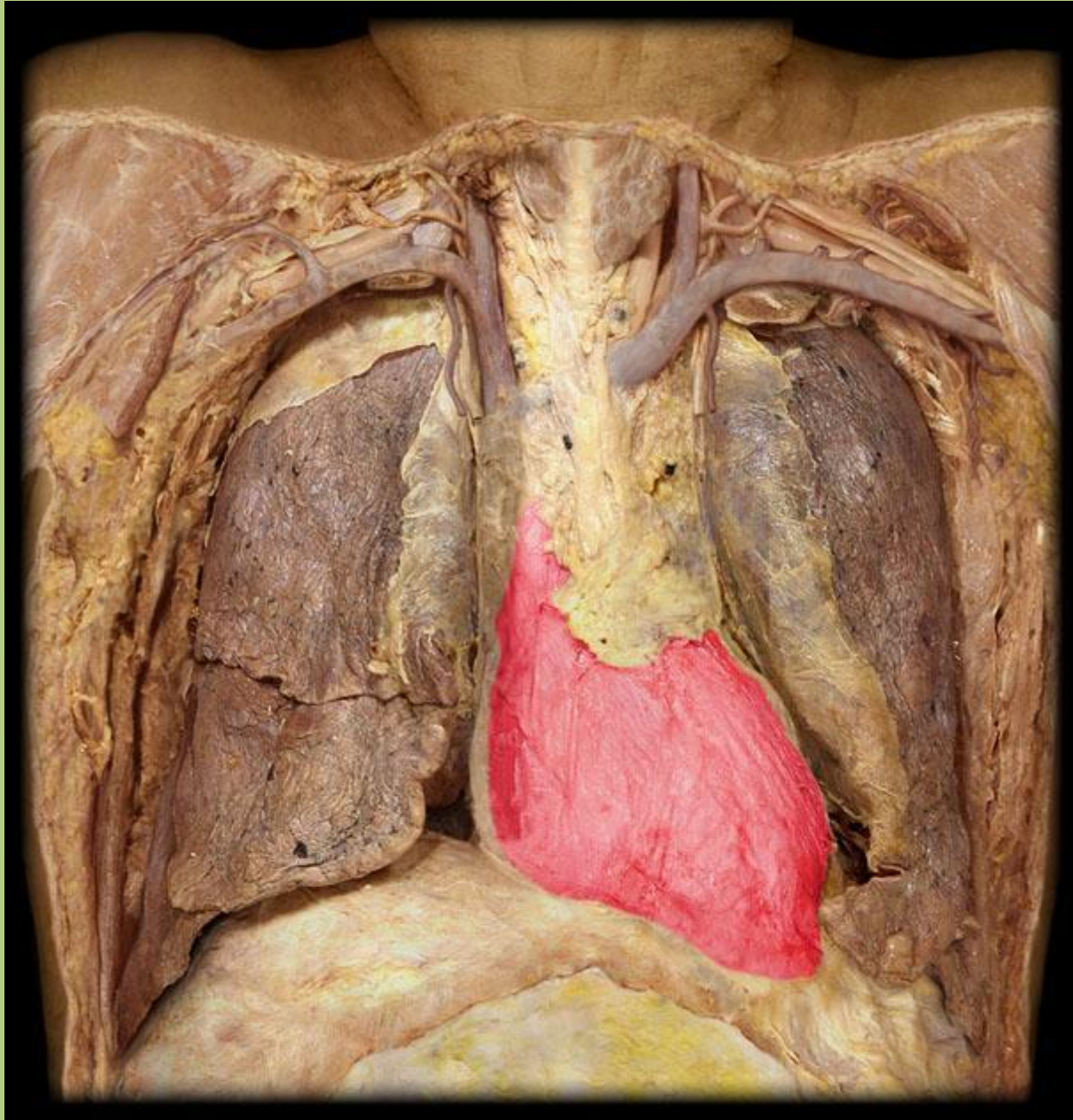
Pericardium and its content.

1. Fibrous pericardium
2. Serous pericardium (parietal and visceral laminae)
3. Phrenic nerves
4. Ascending aorta
5. Pulmonary trunk
6. Superior vena cava

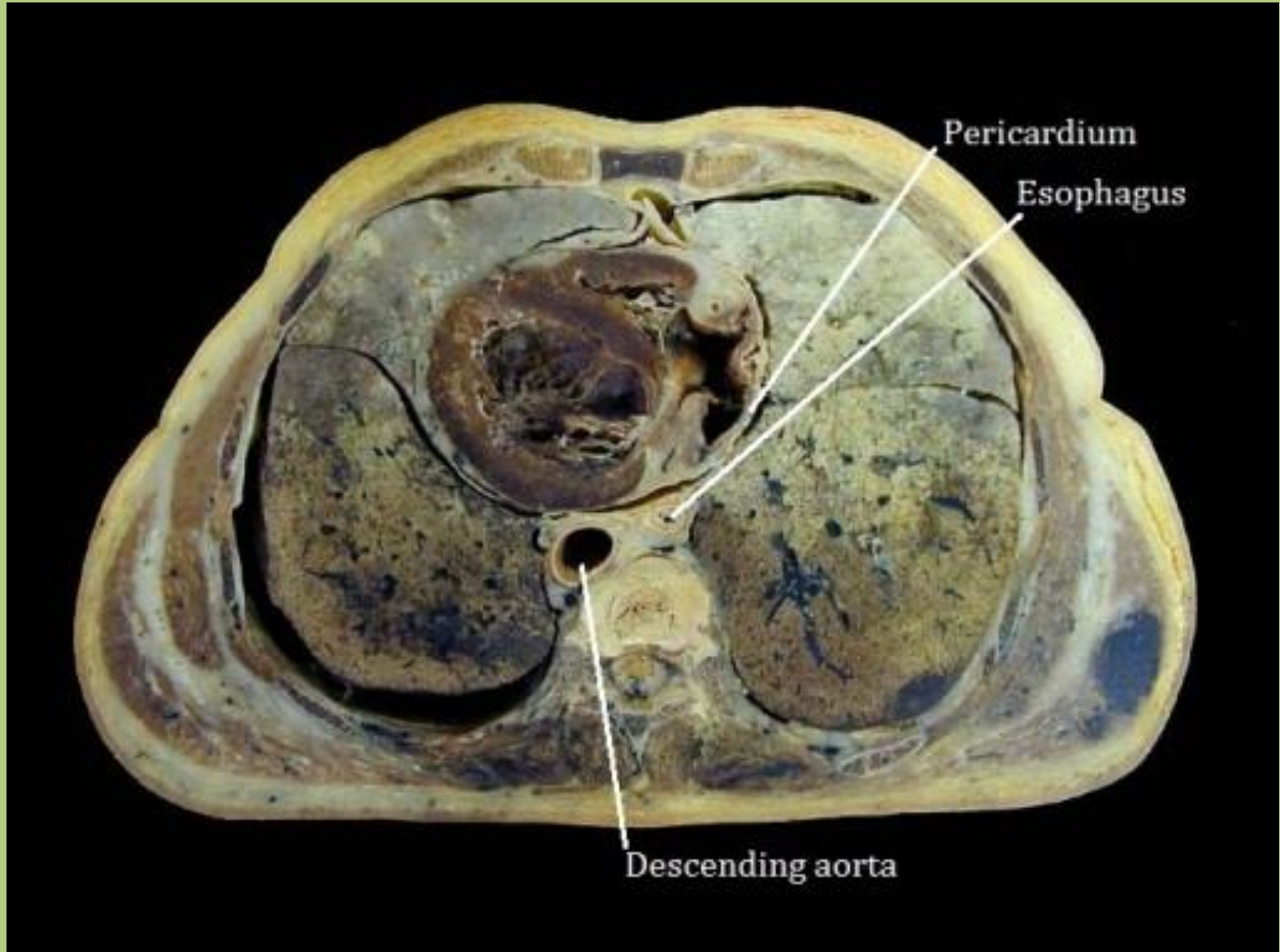
Cardiac mediastinum



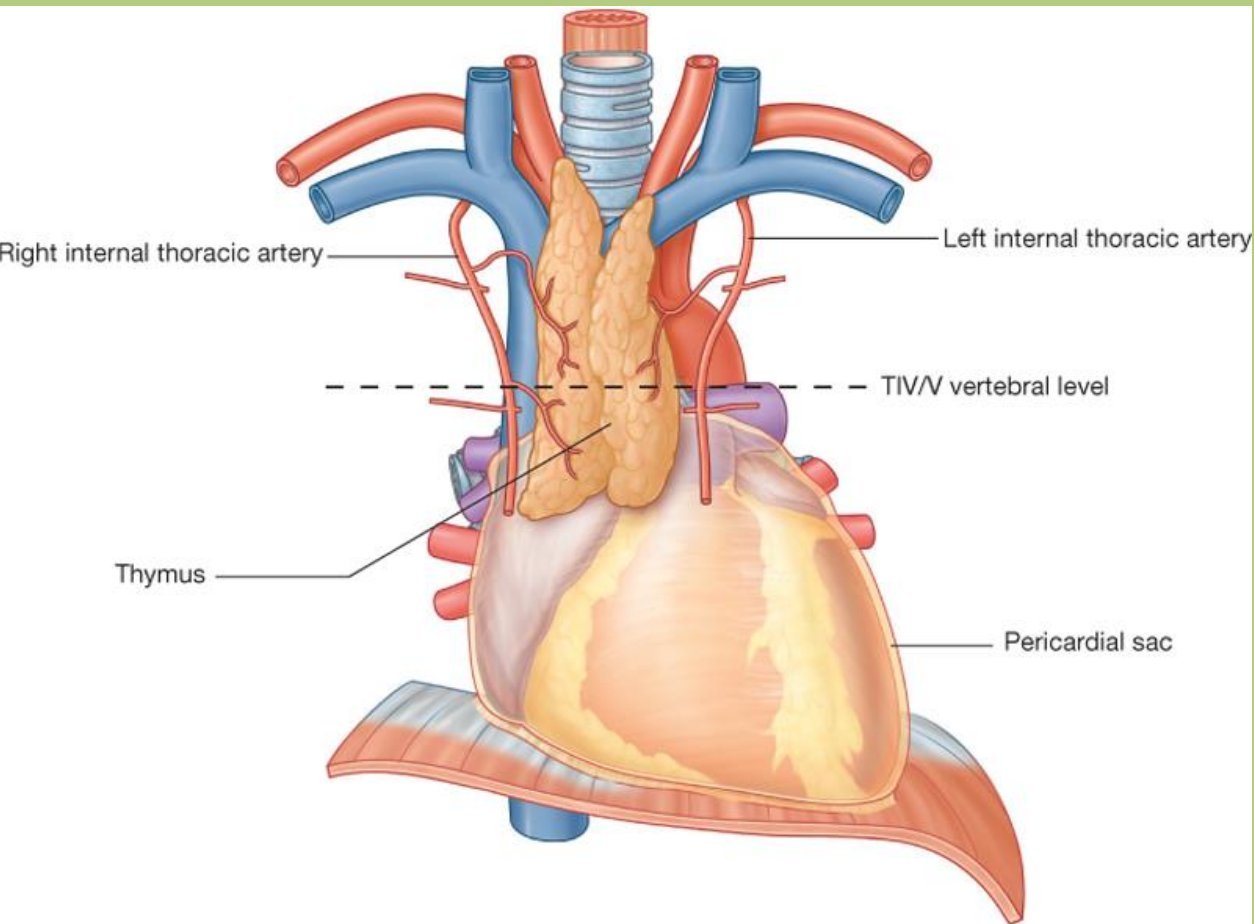
7. Pericardiacophrenic vessels



Cardiac mediastinum



Supracardiac mediastinum



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Layers:

Thymus

Veins:

Superior vena cava,
Brachiocephalic veins,
Azygos vein

Aortic arch and its
branches

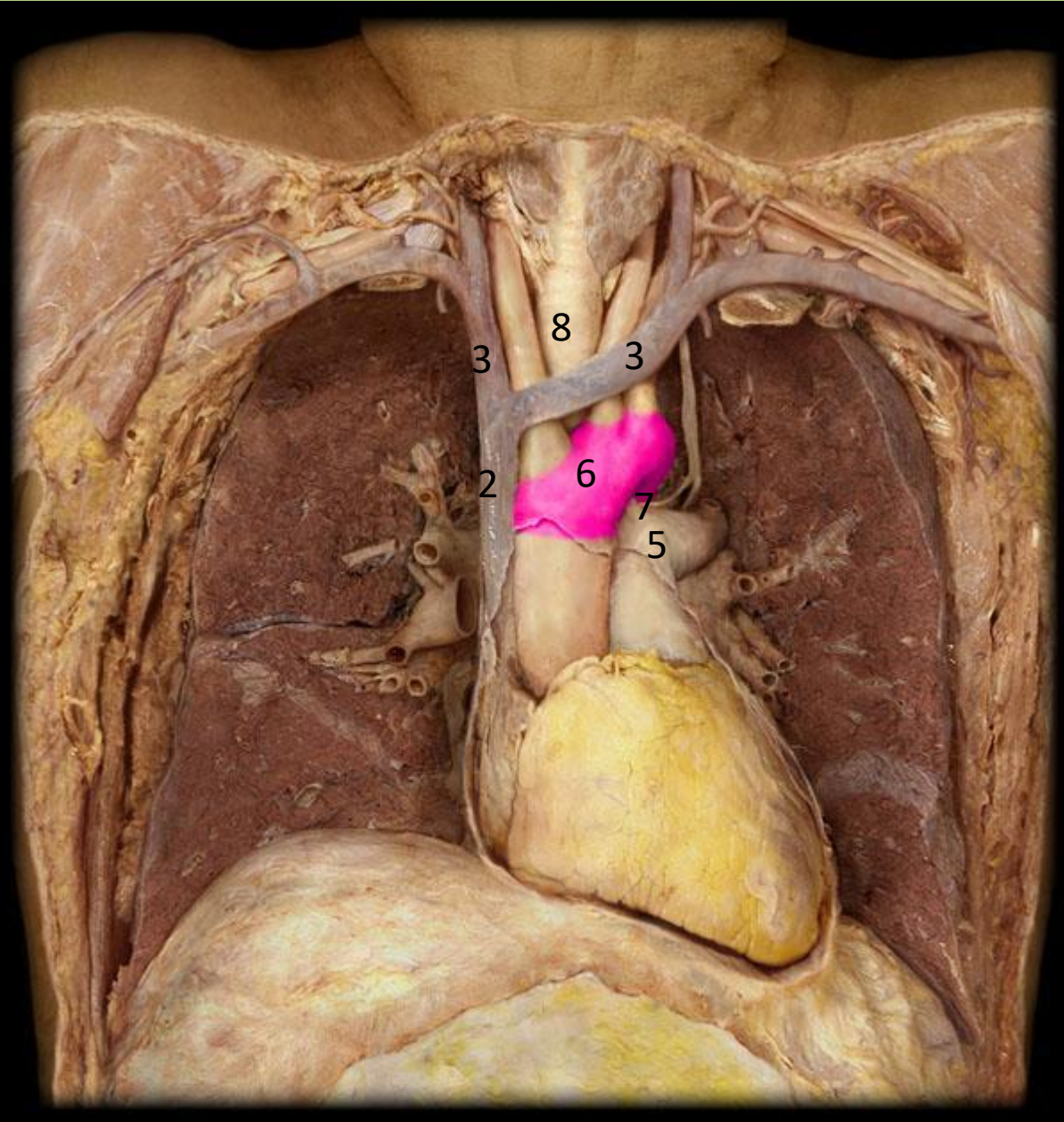
Recurrent laryngeal
nerves (thoracic branch
of the vagus nerve) and
phrenic nerves,

Pericardiophrenic
vessels

Pulmonary trunk and its
branches, pulmonary veins

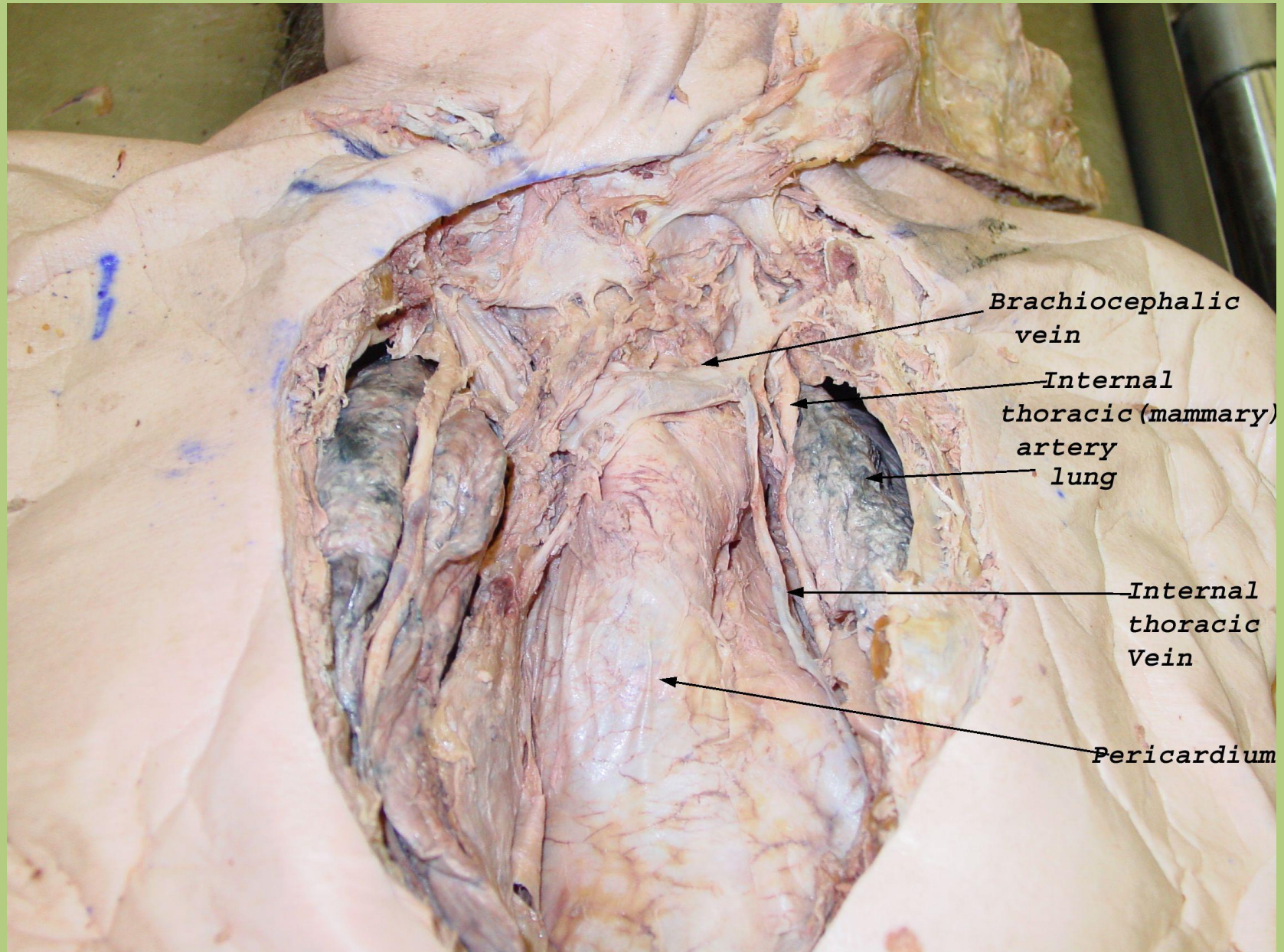
Trachea and main bronchi

Supracardiac mediastinum

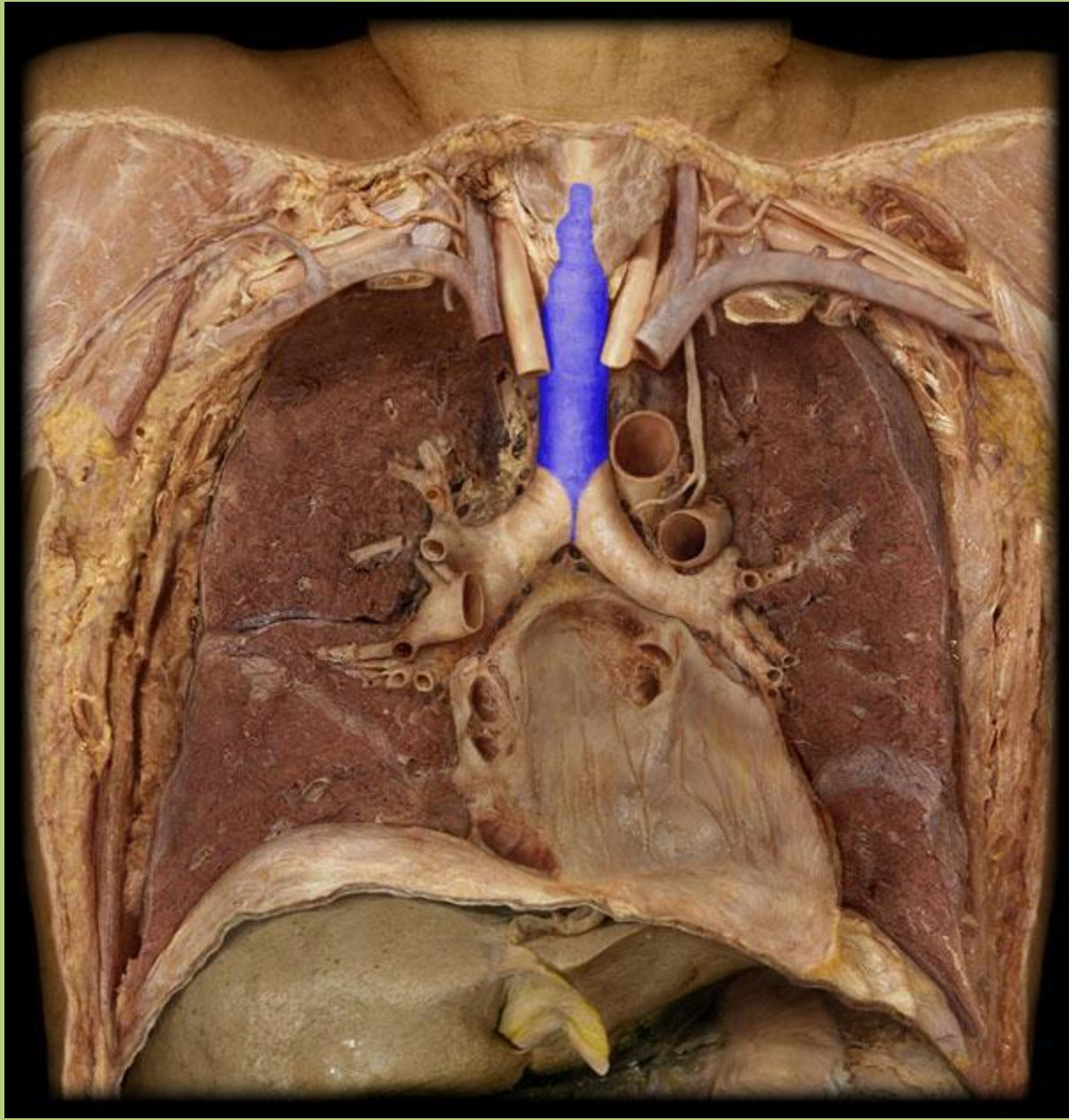


- superior vena cava - 2
- brachiocephalic veins - 3
- pulmonary trunk - 5
- aortic arch - 6
- recurrent laryngeal nerve - 7
- trachea - 8

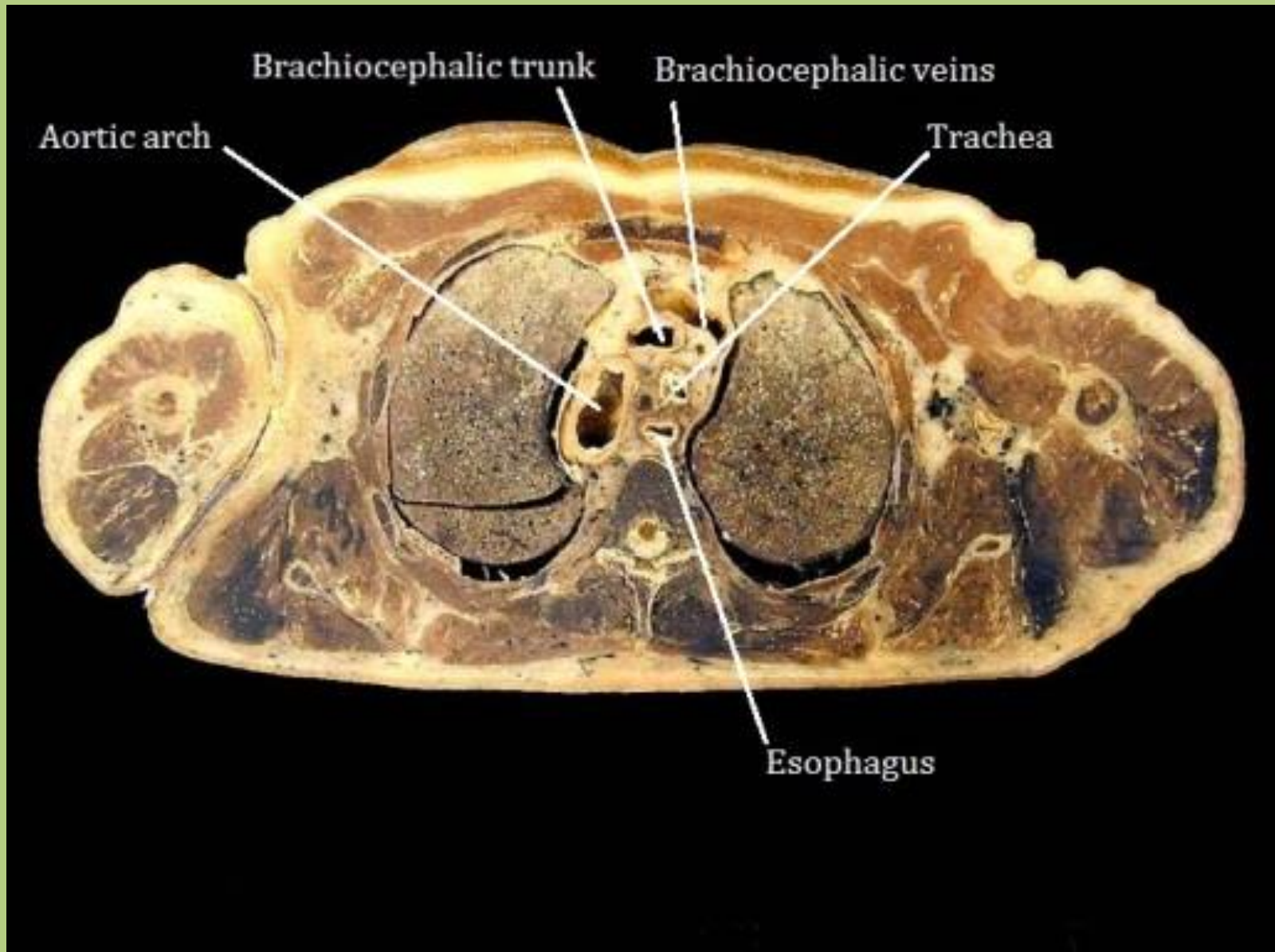
Supracardiac mediastinum



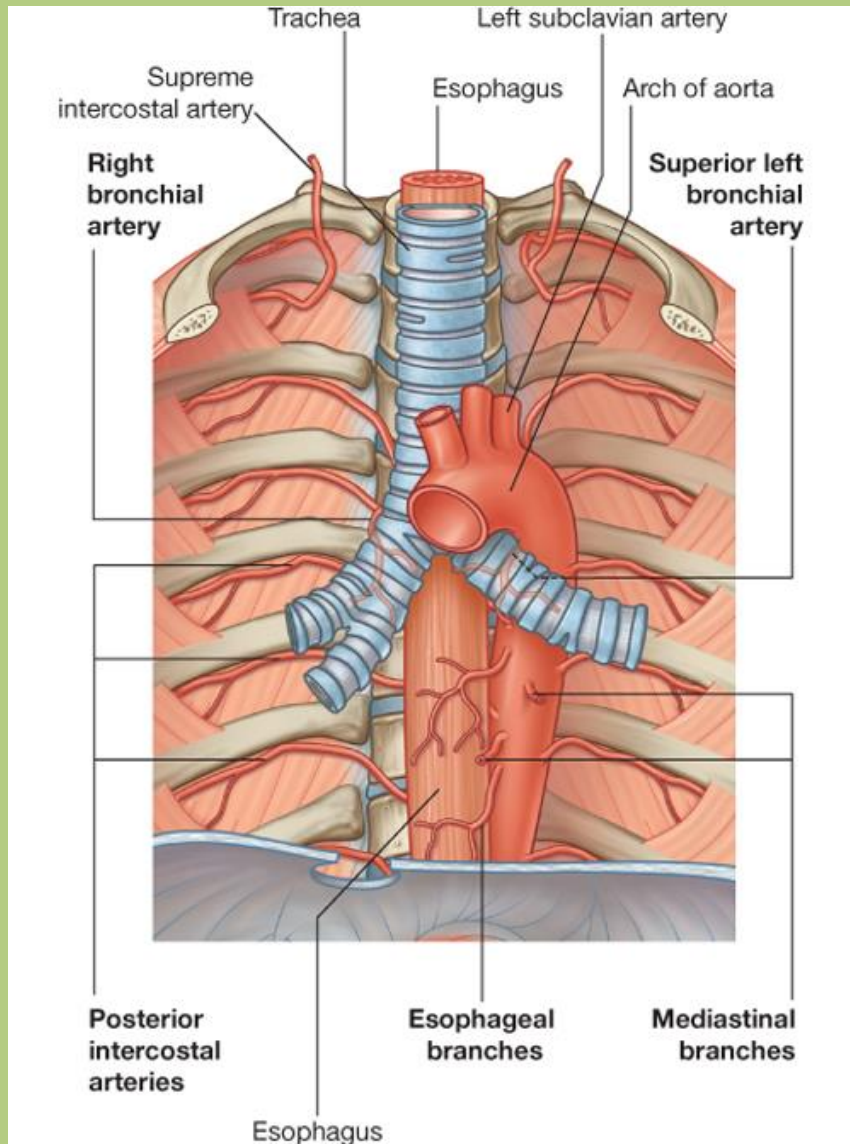
Supracardiac mediastinum



Supracardiac mediastinum



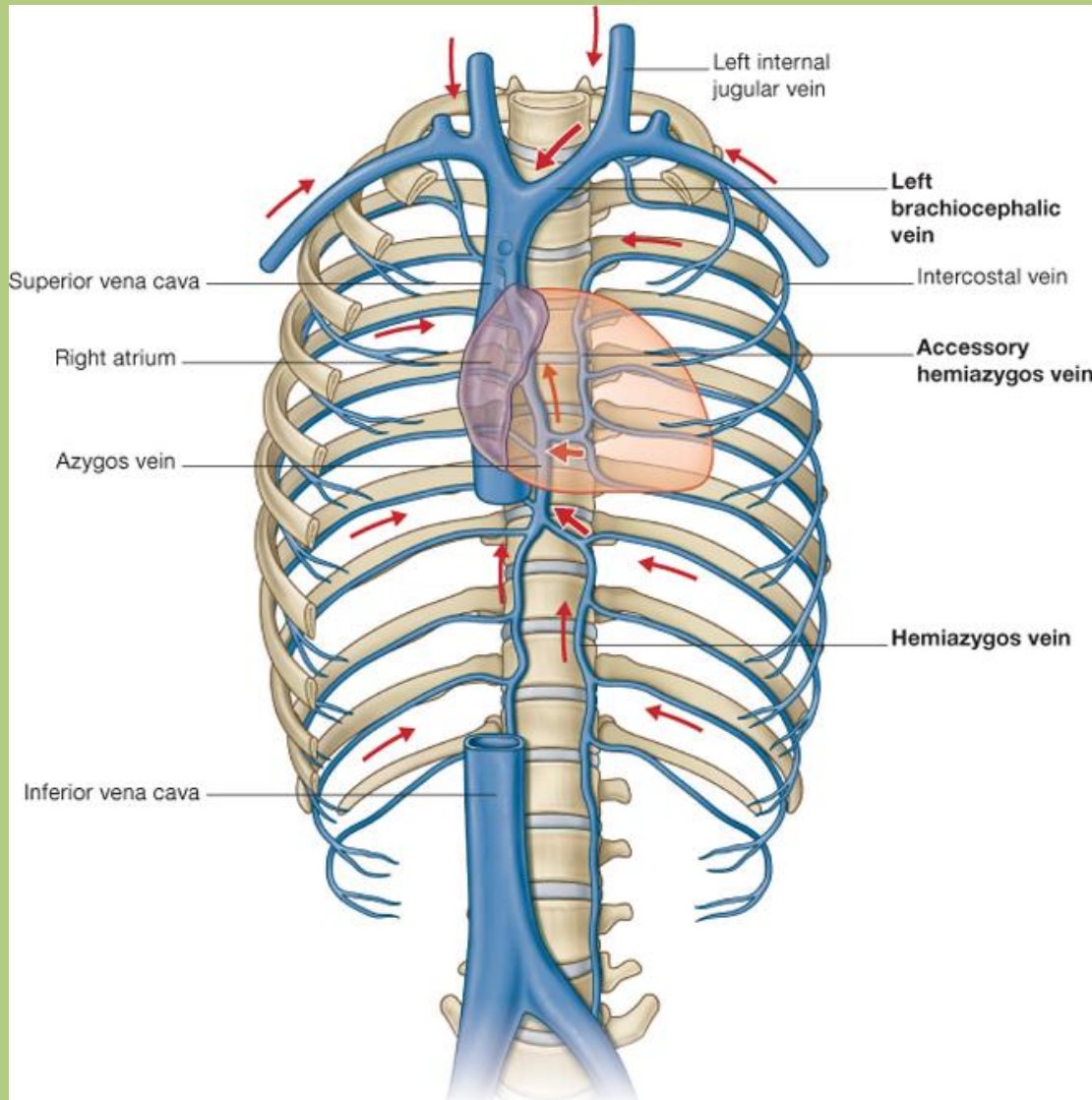
Posterior mediastinum



Behind the esophagus.
No layers.

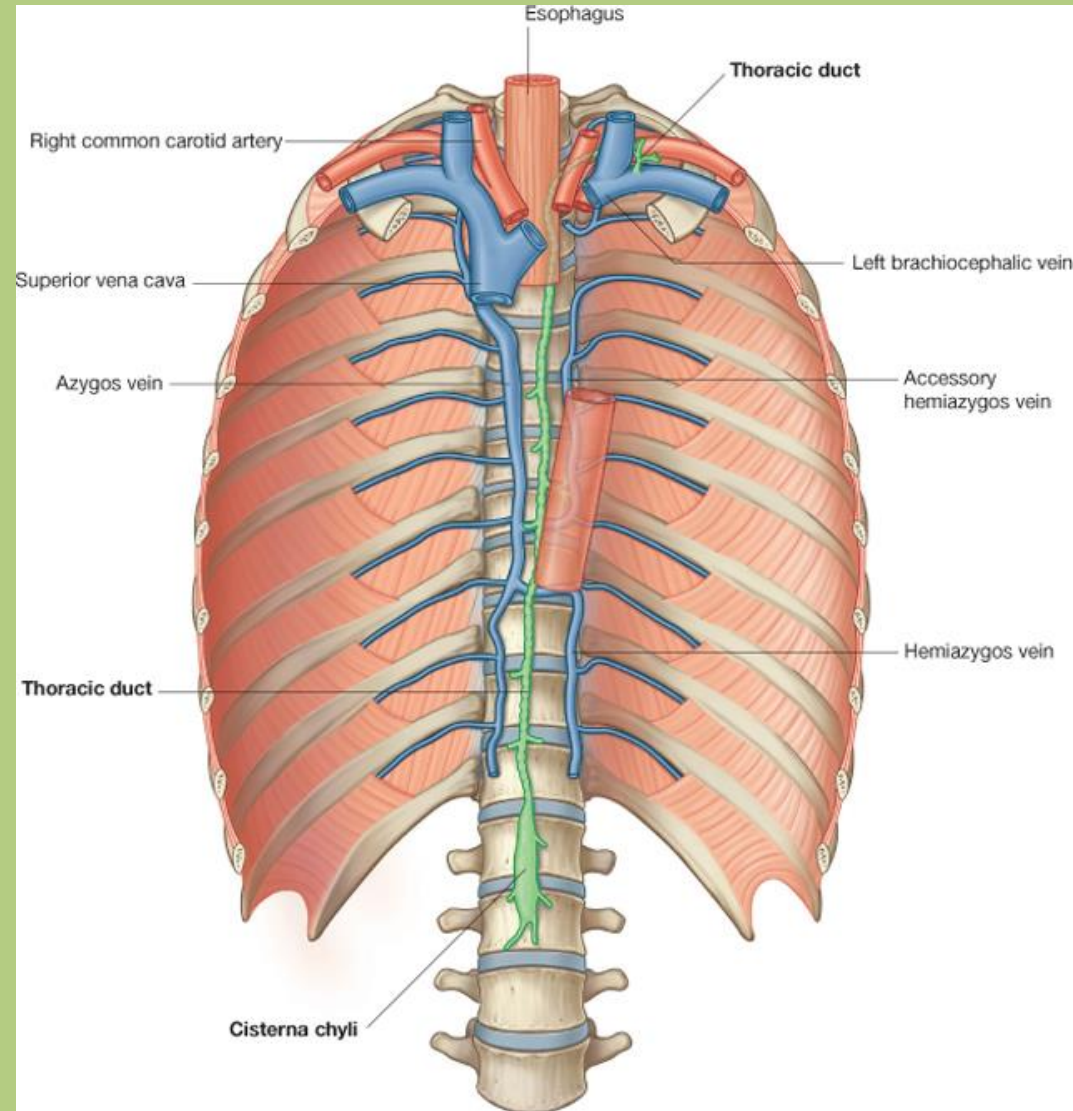
1. Esophagus
2. Vagi nerves
3. Thoracic aorta and its branches:
 - esophageal branches
 - tracheal branch
 - bronchial branches
 - pericardial branches
 - superior phrenic arteries
 - posterior intercostal arteries

Posterior mediastinum



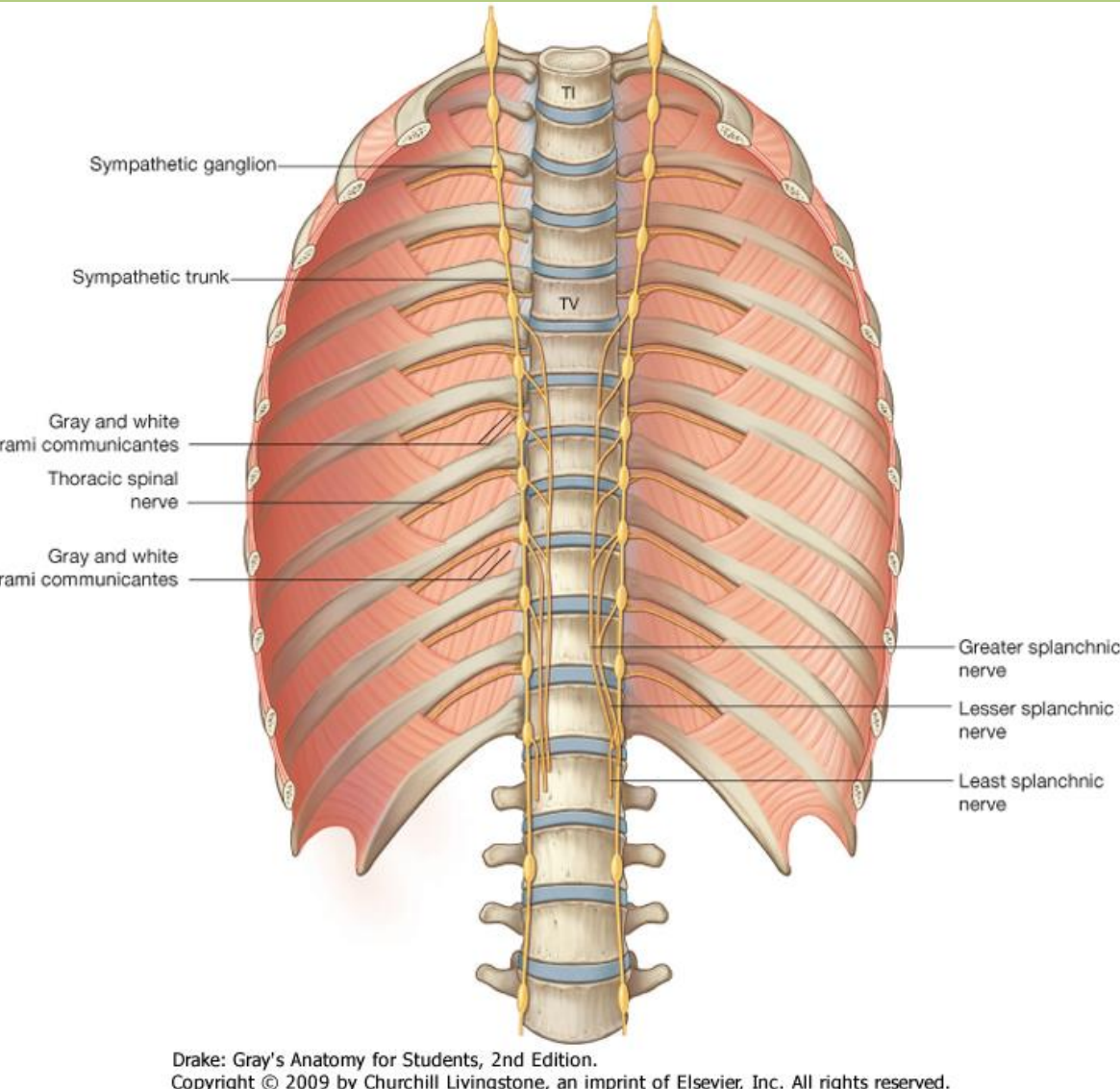
4. Azygos vein
5. Hemiazygos vein
6. Accessory hemiazygos vein

Posterior mediastinum



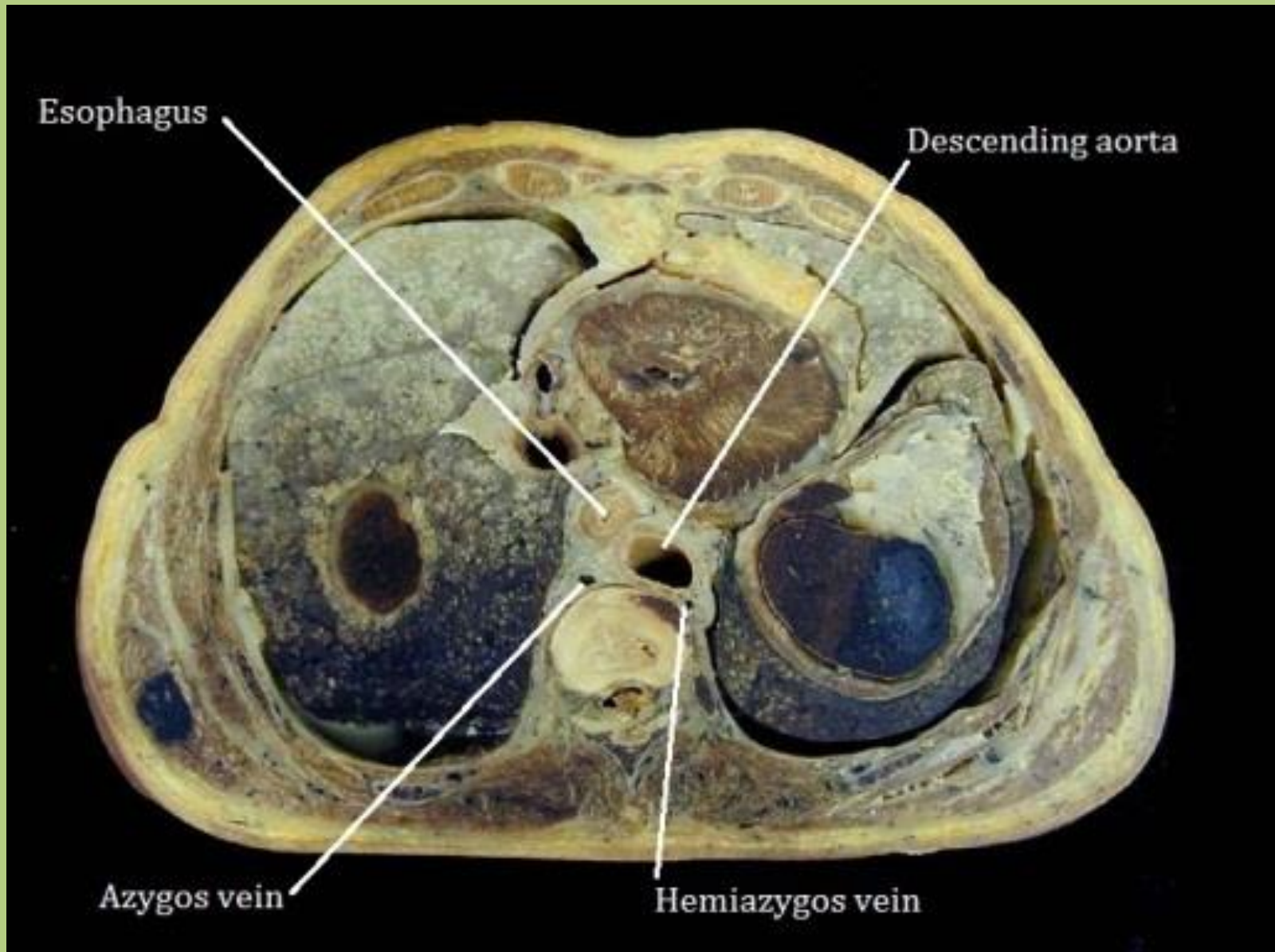
7. Thoracic duct

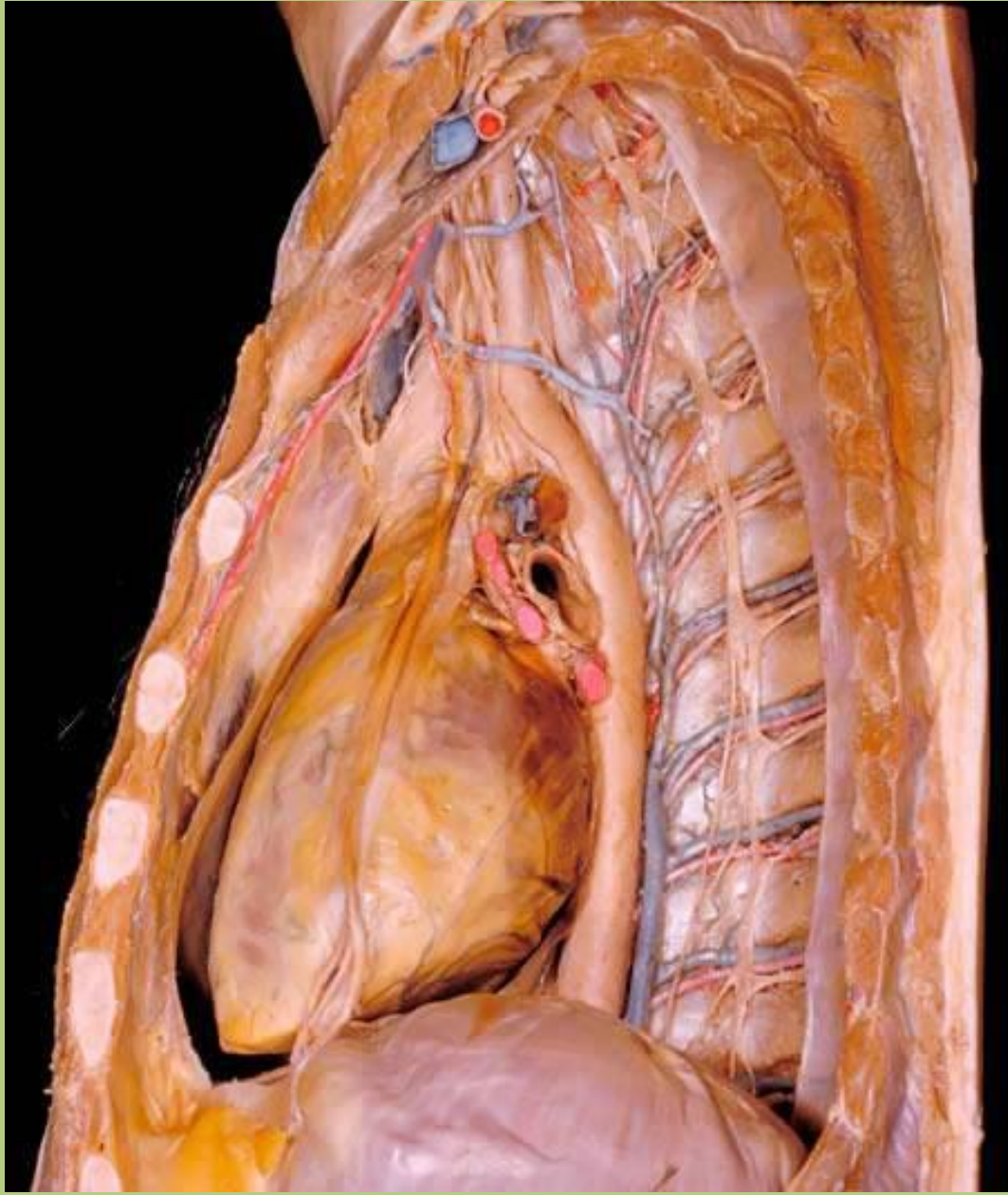
Posterior mediastinum



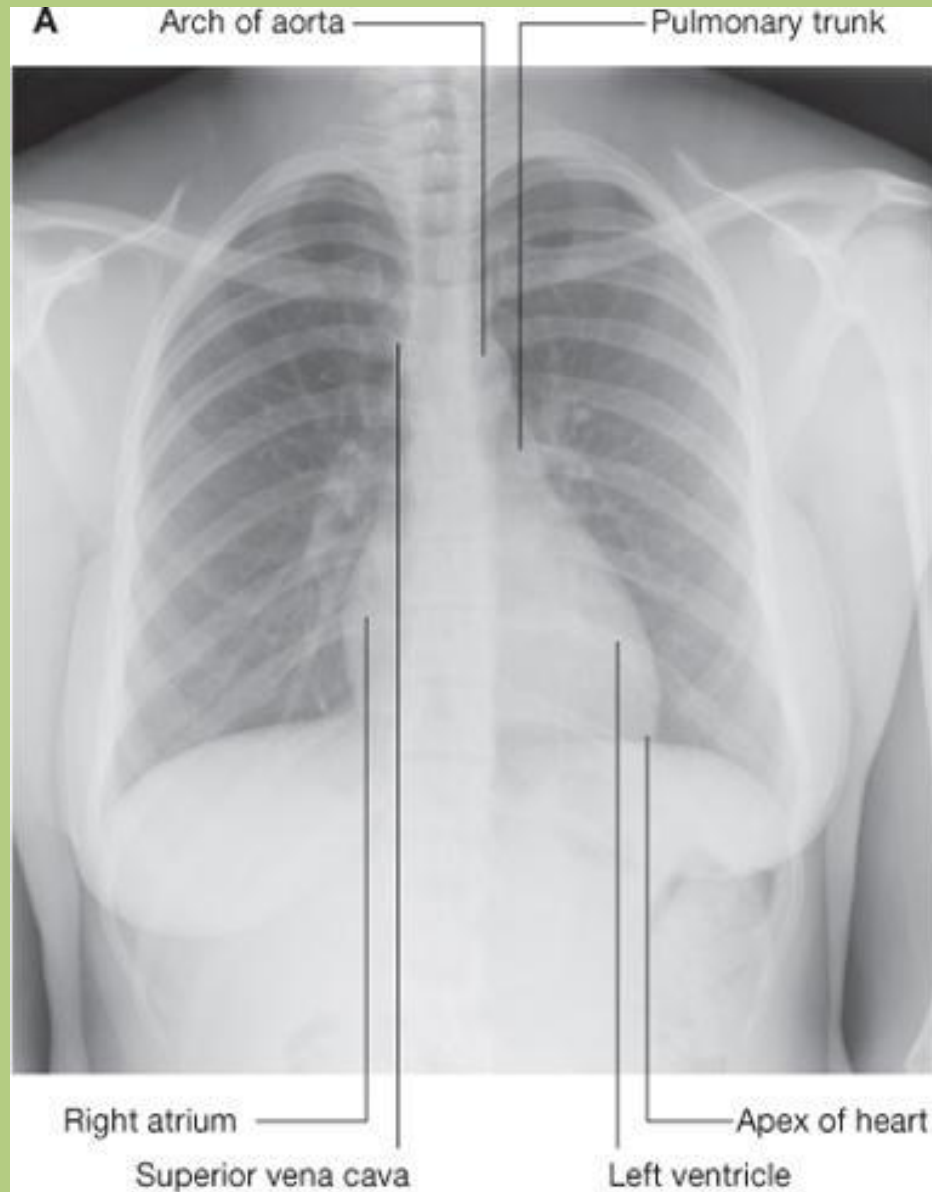
8. Sympathetic trunk
9. Greater splanchnic nerve
10. Lesser splanchnic nerve

Posterior mediastinum





X-ray picture of the chest cavity



Thank you for your attention.

References: Gray's Anatomy for Students

<http://www.meduniwien.ac.at/sysanat/plastination.html>

studyblue.com