

October 7, 2026 - Dr. Doroudi (majid.doroudi@ubc.ca)

Dissector

Objectives:

- Describe the divisions of the mediastinum and their contents
- Discuss the clinical importance of the portocaval anastomosis found in the lower part of the esophagus
- Describe the course of the thoracic duct
- Describe the course and anatomical relationships of the esophagus
- Describe the clinical importance of the diameter and orientation of the trachea and the main bronchi
- Identify the big vessels in the superior mediastinum
- Describe the relationship of the great vessels entering and leaving the heart
- Describe the origin, course and function of the phrenic nerves
- Describe the origin, course and function of the vagus nerves and identify the right and left recurrent laryngeal nerves

Superior/Posterior Mediastinum
PreLab Talk (Video)

Superior/Posterior Mediastinum
Dissection Process (Video)

Posterior Wall (Atlas)

Posterior Thoracic Wall (3D)

Mediastinum (Radiology)

Superior Mediastinum

Identify and examine:

- ☐ Tracheal bifurcation into left and right primary (main) bronchi

Be able to describe the clinical importance of the different sizes and courses of the left and right primary bronchi.

Bronchi (Atlas)

Arteries:

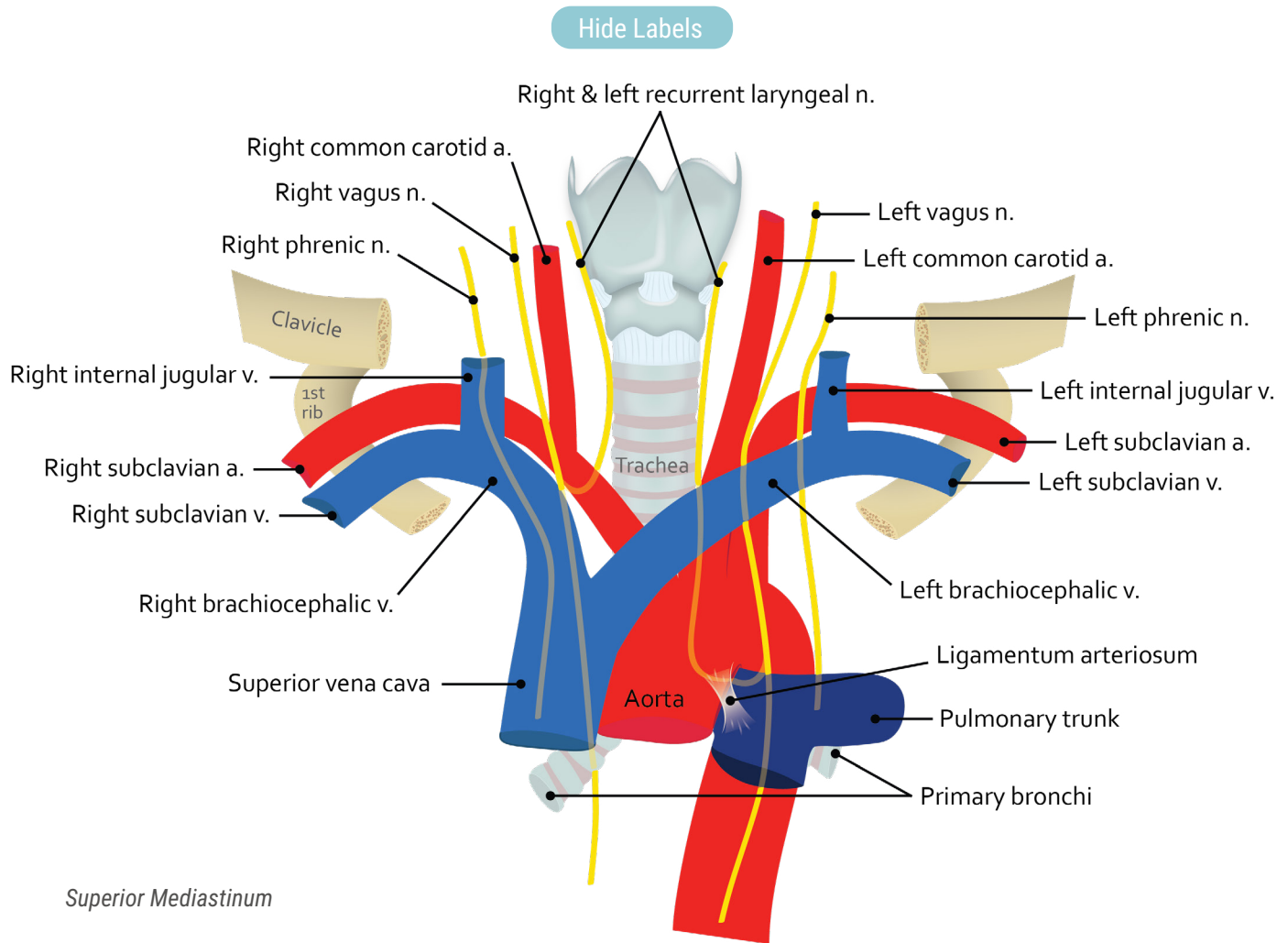
- ☐ Arch of aorta
- ☐ Brachiocephalic trunk (artery)
- ☐ Common carotid artery (L & R)
- ☐ Subclavian artery (L & R)
- ☐ Pulmonary trunk
- ☐ Pulmonary artery (L & R)

Veins:

- ☐ Superior vena cava
- ☐ Arch of azygos vein
- ☐ Brachiocephalic vein (L & R)
- ☐ Internal jugular vein (L & R)
- ☐ Subclavian vein (L & R)

- ☐ **Ligamentum Arteriosum**
(remnant of the Ductus Arteriosus)

October 7, 2026 - Dr. Doroudi (majid.doroudi@ubc.ca)

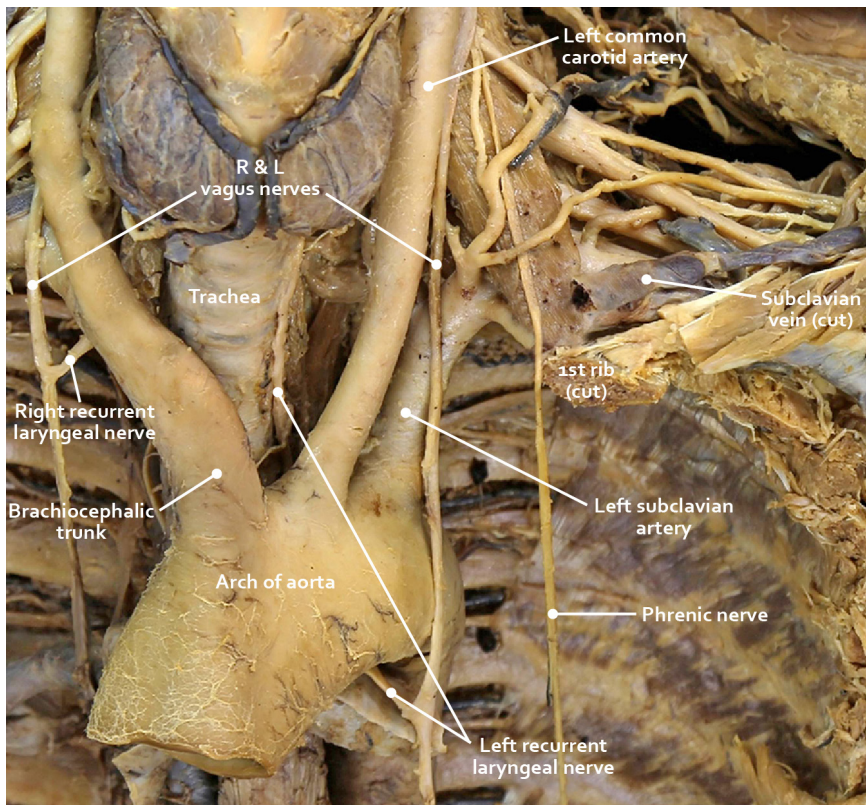


Nerves:

- ☐ Left & right vagus nerves (and their course)
- ☐ Left & right phrenic nerves (origin, course and function)
 - be aware of the clinical importance of the cervical origin of the phrenic nerves
- ☐ Left & right recurrent laryngeal nerves
 - be aware of the importance of the intrathoracic course of the left recurrent laryngeal nerve

Why can pathology in the thorax present as a change in voice?

October 7, 2026 - Dr. Doroudi (majid.doroudi@ubc.ca)

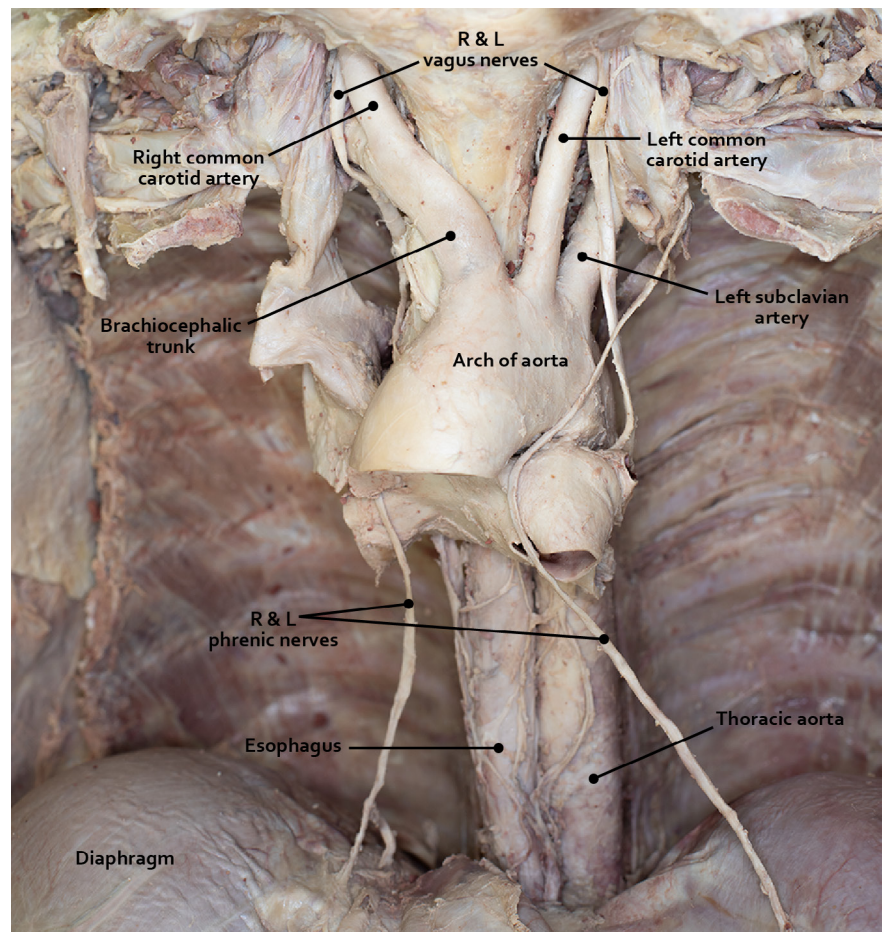


Hide Labels

Superior Mediastinum:

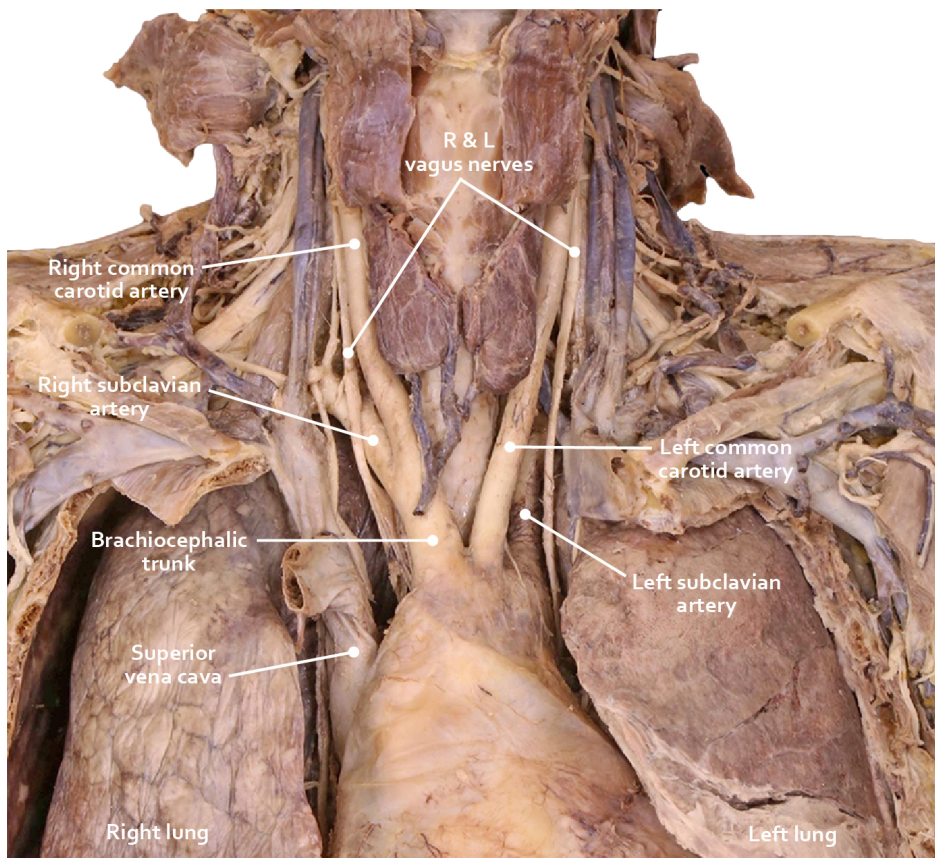
B. Kathleen Alsup & Glenn M. Fox, University of Michigan Medical School, [BlueLink](#)

Hide Labels



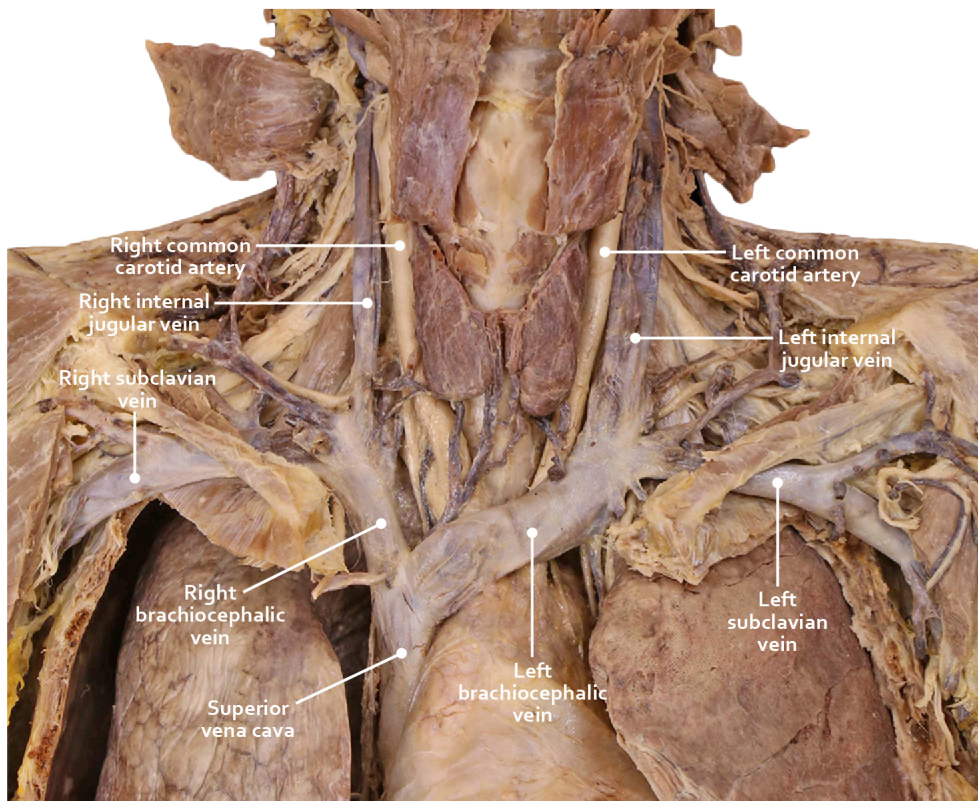
Superior Mediastinum

October 7, 2026 - Dr. Doroudi (majid.doroudi@ubc.ca)



Hide Labels

Superior Mediastinum



Hide Labels

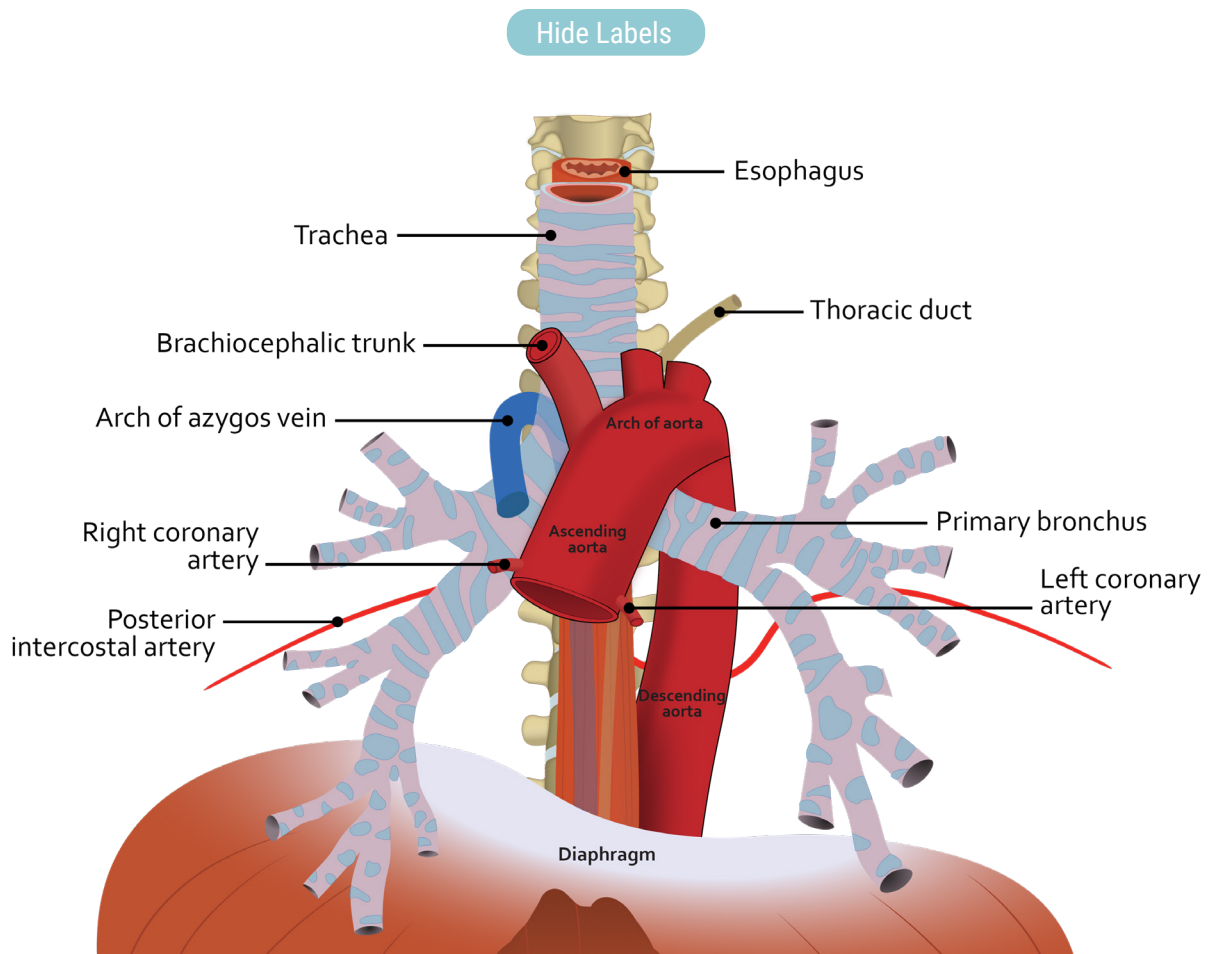
Images: B. Kathleen Alsup & Glenn M. Fox, University of Michigan Medical School, [BlueLink](#)

October 7, 2026 - Dr. Doroudi (majid.doroudi@ubc.ca)

Posterior Mediastinum

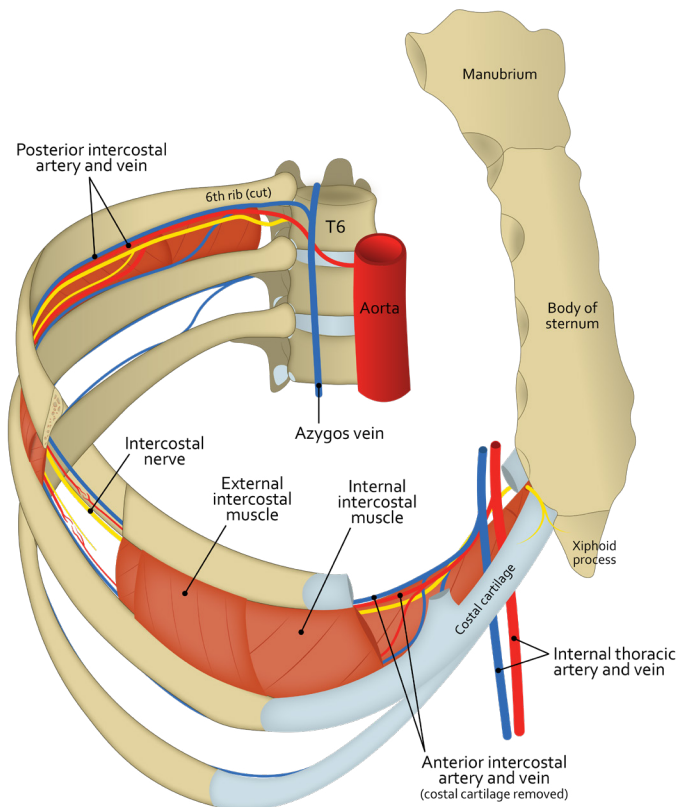
- ☐ Thoracic splanchnic nerves
- ☐ Descending (thoracic) aorta
- ☐ Azygos system of veins
- ☐ Thoracic duct (between descending aorta & azygos vein)
- ☐ Posterior intercostal arteries, veins & nerves
- ☐ Esophagus

- *The course and anatomical relationships of the esophagus in the thorax*
- *Be aware of the diagnostic importance of the relationship of the esophagus with the arch of the aorta, the left primary (main) bronchus and the left atrium*



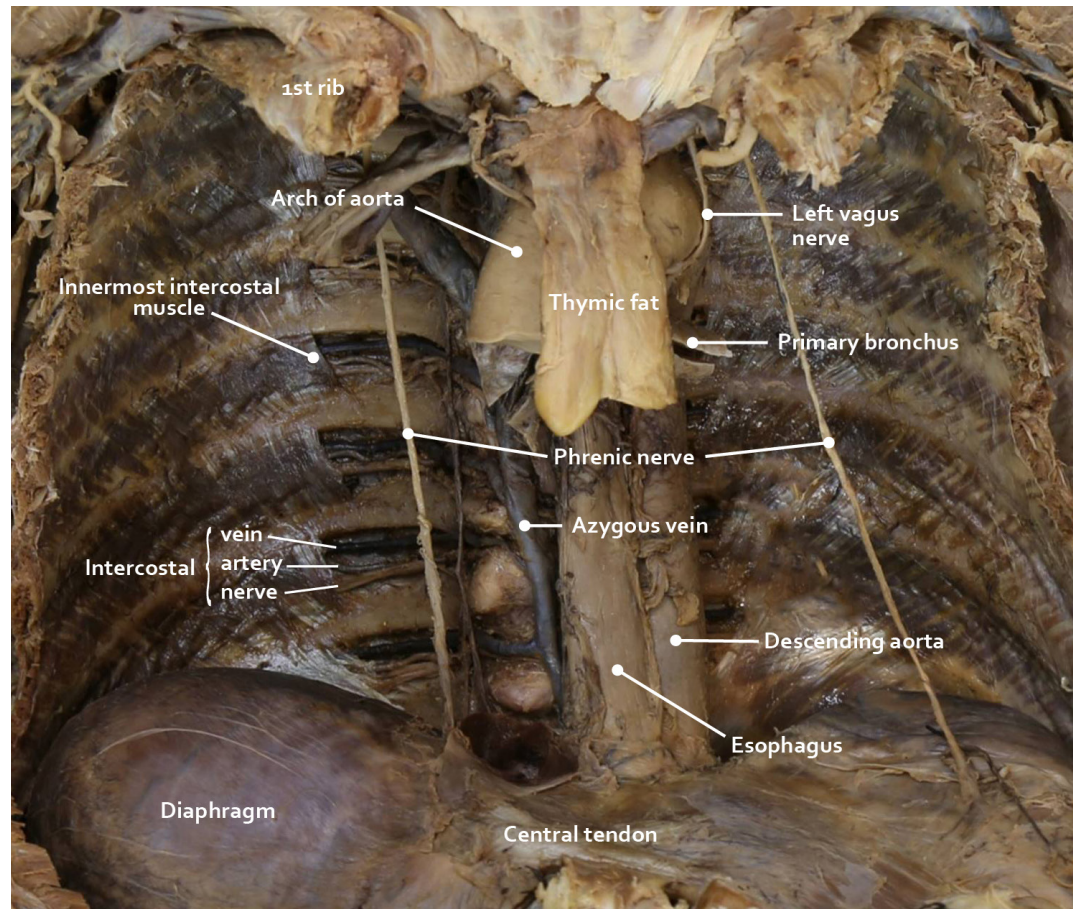
Posterior Mediastinum

October 7, 2026 - Dr. Doroudi (majid.doroudi@ubc.ca)



Contents of Intercostal Space

Hide Labels



Posterior Thoracic Wall
(B. Kathleen Alsup & Glenn M. Fox,
University of Michigan Medical
School, [BlueLink](#))

October 7, 2026 - Dr. Doroudi (majid.doroudi@ubc.ca)



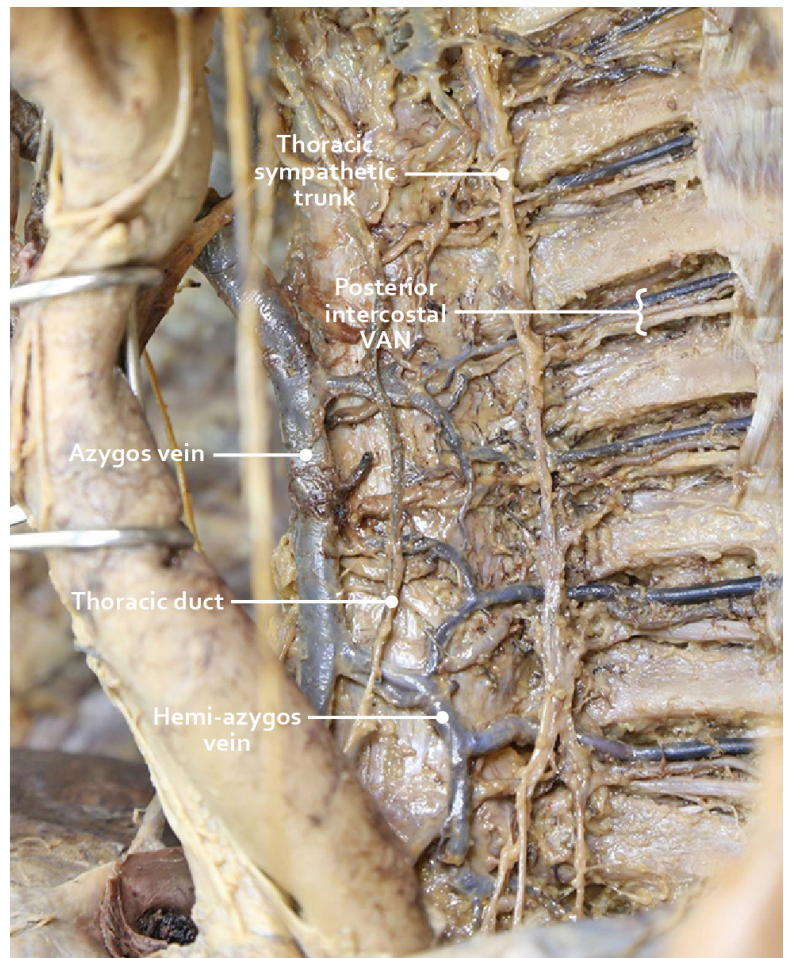
Hide Labels

Intercostal vein
Intercostal artery
Intercostal nerve
Splanchnic nerves
Phrenic nerve

Diaphragm

Neurovasculature of Posterior Thoracic Wall

Hide Labels



Thoracic sympathetic trunk

Posterior intercostal VAN

Azygos vein

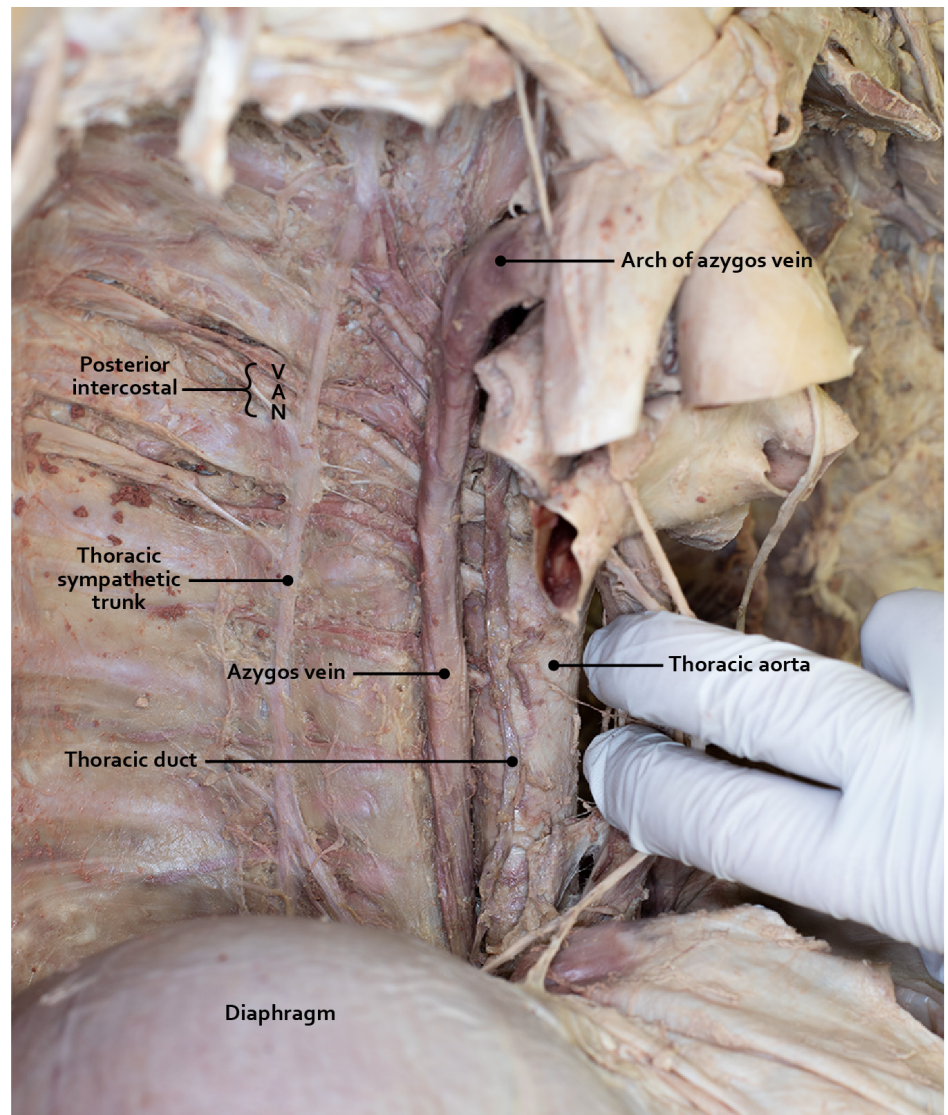
Thoracic duct

Hemi-azygos vein

Posterior Thoracic Wall
(B. Kathleen Alsup & Glenn M. Fox,
University of Michigan Medical
School, [BlueLink](https://bluelink.umich.edu))

October 7, 2026 - Dr. Doroudi (majid.doroudi@ubc.ca)

Hide Labels



Neurovasculature of Posterior Thoracic Wall

Be able to describe:

- The course and major relationships of the great vessels entering and leaving the heart
- The **vertebral levels** at which the following pierce the diaphragm to enter or leave the thoracic cavity:

- ☐ Inferior vena cava
- ☐ Esophagus
- ☐ Descending thoracic aorta

LAB 6 DISSECTOR

October 7, 2026 - Dr. Doroudi (majid.doroudi@ubc.ca)

Superior/Posterior Mediastinum
PreLab Talk (Video)

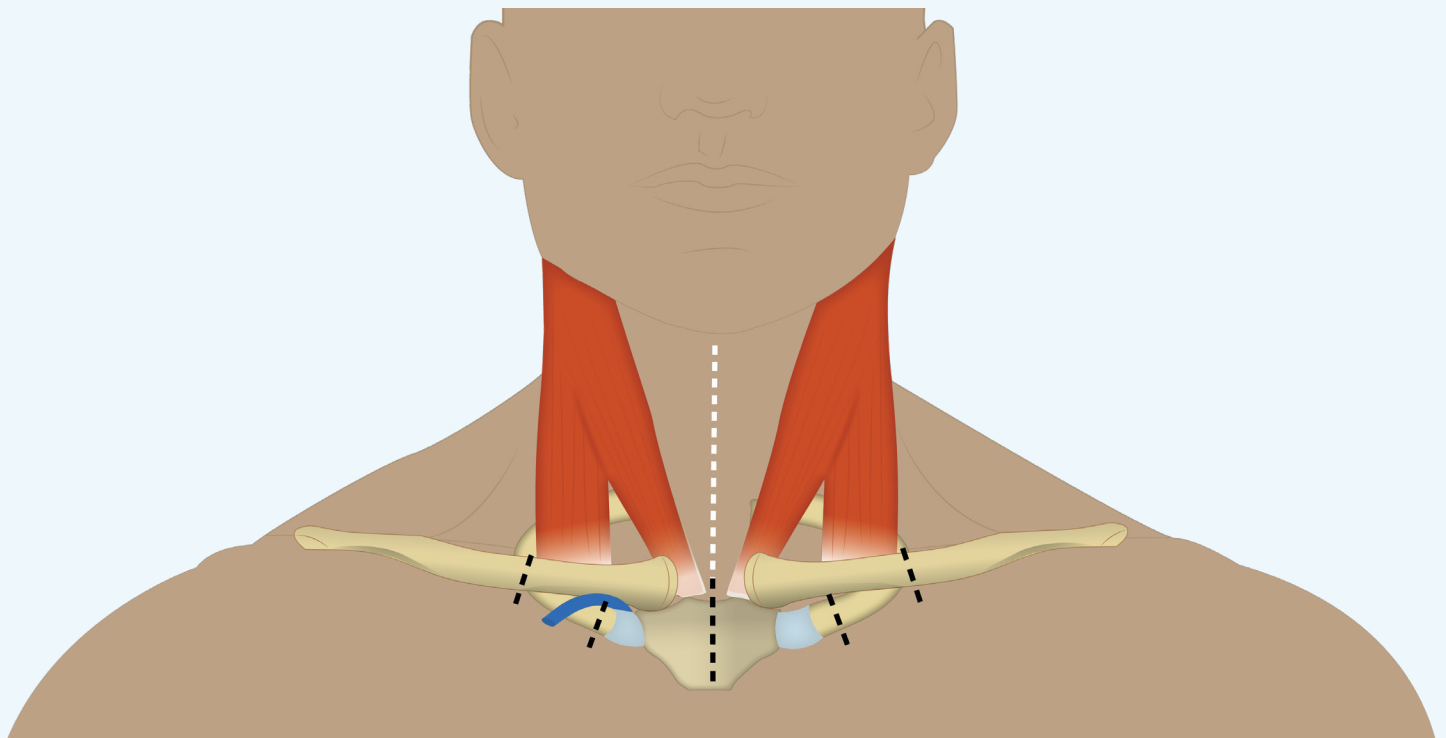
Superior/Posterior Mediastinum
Dissection Process (Video)

Dissection to Expose Structures in the Superior Mediastinum

1. Cut through the skin of the lower half of the neck (as indicated by white line).
2. Saw through the medial third of each clavicle and first rib (preserving the subclavian veins).
3. Saw through the middle of the manubrium.
4. Retract the remains of the manubrium superiorly.



Splanchnic nerves and azygos vein on posterior thoracic wall



Dissection of the superior mediastinum (steps 1 - 2)