

Mediastinum

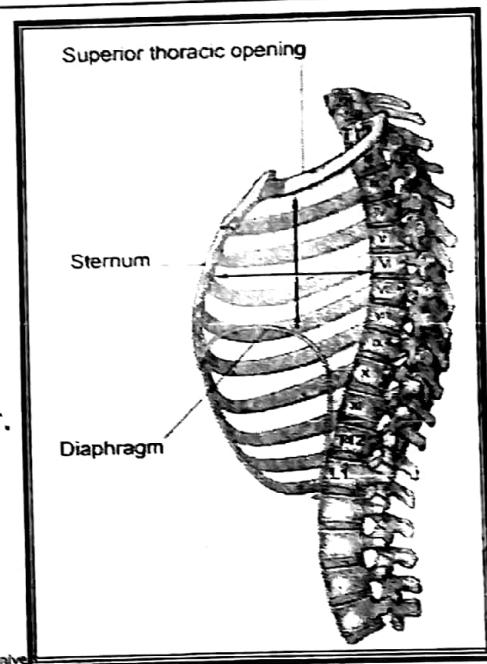
Central part between pleural sacs.

Borders:

- Thoracic inlet \Rightarrow Superior.
- Diaphragm \Rightarrow Inferior.
- Sternum \Rightarrow Anterior.
- All thoracic vertebrae \Rightarrow Posterior.

Spring 2018

Dr. Maher Hadidi, Unive



37

Subdivisions

An Imaginary line extending from sternal angle anterior to IVD between T4/T5 divides mediastinum into:

1. Superior mediastinum.
 2. Inferior mediastinum,
- The pericardium and its contents divides Inferior mediastinum into:
- a. Anterior mediastinum.
 - b. Middle mediastinum.
 - c. Posterior mediastinum.
- Each part has its borders and contents.

Spring 2018

Imaginary line between sternal angle – anterior and intervertebral disc between T4/T5 posterior

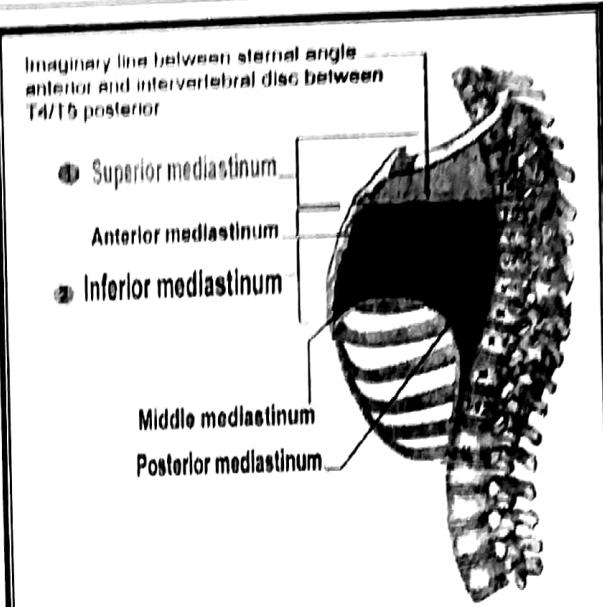
● Superior mediastinum

Anterior mediastinum

■ Inferior mediastinum

Middle mediastinum

Posterior mediastinum



Dr. Maher Haddad, University of Jordan

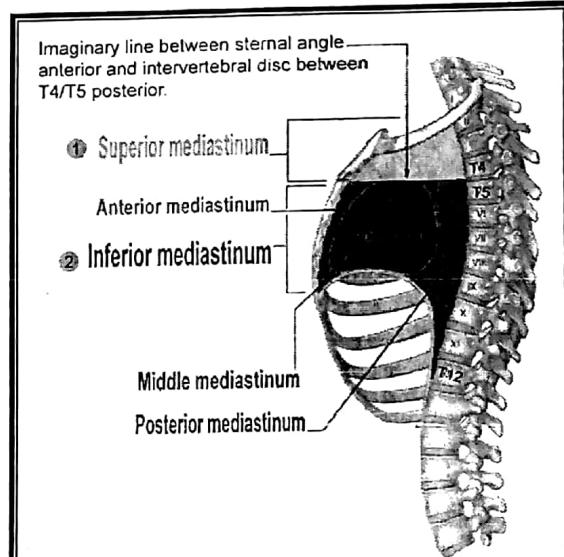
38

Superior mediastinum

Borders:

- Superior ➡ Thoracic inlet.
- Inferior ➡ Imaginary line.
- Anterior ➡ Manubrium.
- Posterior ➡ upper 4 thoracic vertebrae.

Contents: Next



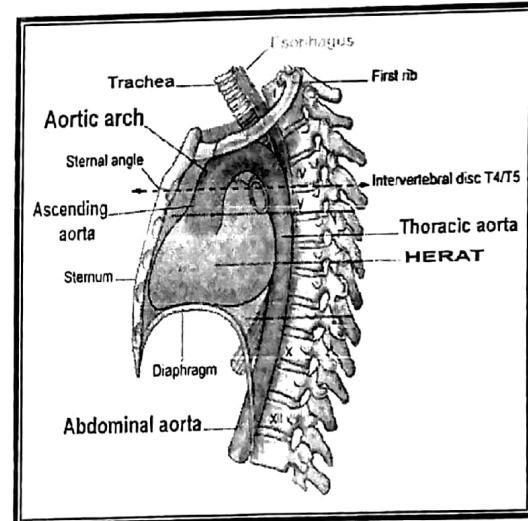
Dr. Maher Hadidi, University of Jordan

39

Superior mediastinum

CONTENTS:

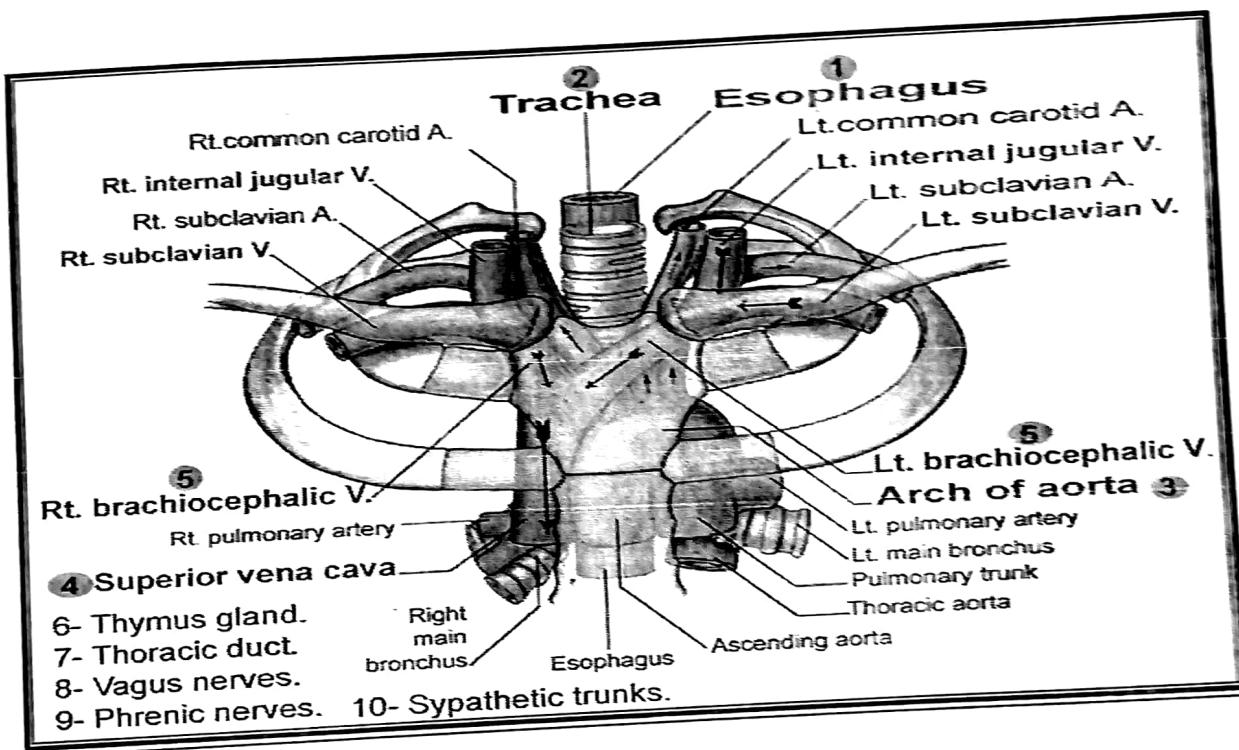
1. Esophagus.
2. Trachea.
3. Arch of aorta and its 3 large branches.
4. Superior vena cava.
5. Right and left brachiocephalic Vs.
6. Thymus gland.
7. Thoracic duct.
8. Phrenic nerves.
9. Vagus (X) nerves.
10. Sympathetic trunks.

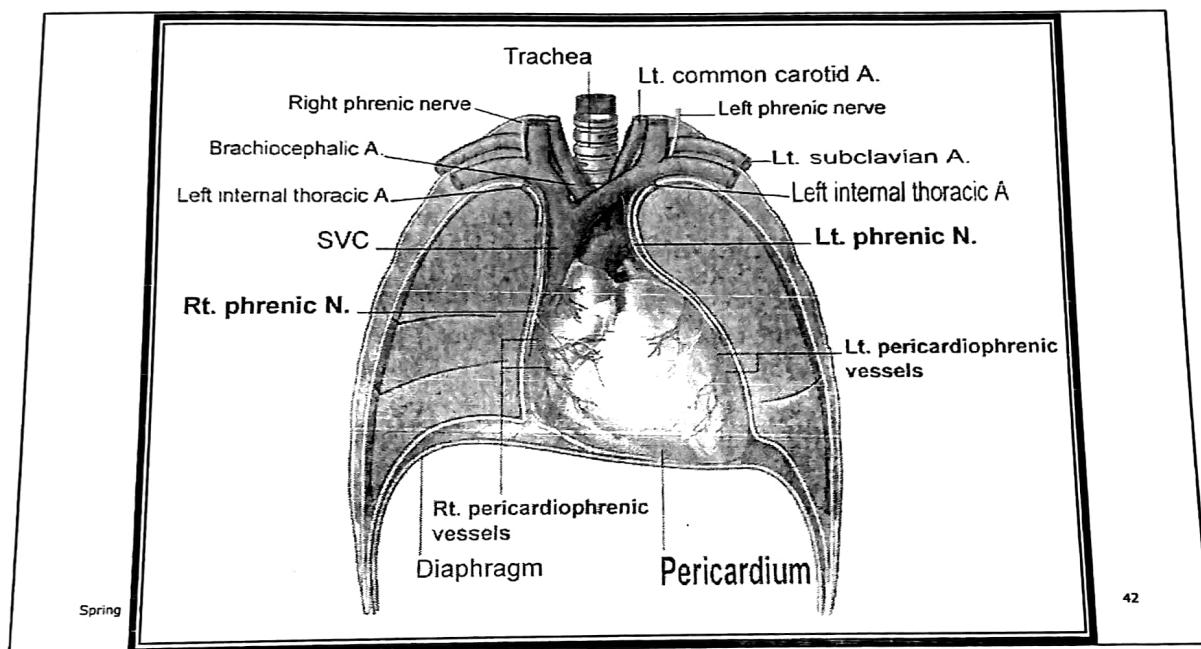


Spring 2018

Dr. Maher Hadidi, University of Jordan

40





Spring

42

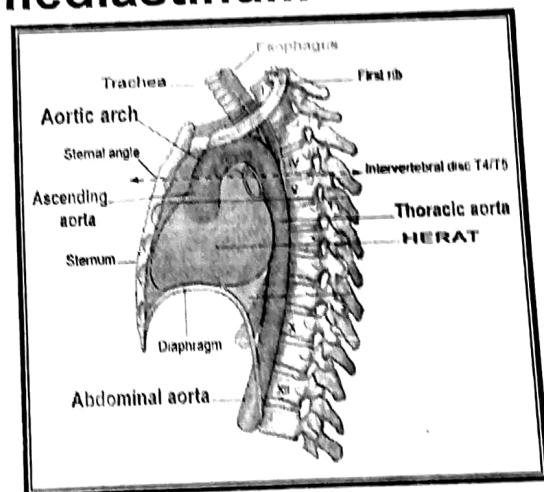
Anterior mediastinum

- **Borders:**

- Superior → Imaginary line.
- Inferior → Diaphragm
- Anterior → Body of sternum.
- Posterior → Pericardium.

- **Contents:**

- Thymus gland.
- Fat.



Spring 2018

Dr. Maher Haddad, University of Jordan

43

Posterior Mediastinum

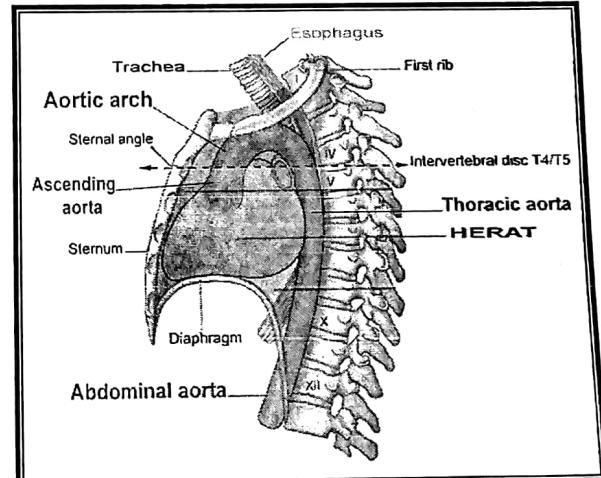
Borders:

- Superior \Rightarrow Imaginary line.
- Inferior \Rightarrow Sloping part of diaphragm.
- Anterior \Rightarrow Pericardium.
- Posterior \Rightarrow Lower 8 thoracic vertebrae.

Contents:

- Esophagus.
- Thoracic aorta.
- Azygos veins.
- Thoracic duct.
- Sympathetic trunks.

Spring 2018

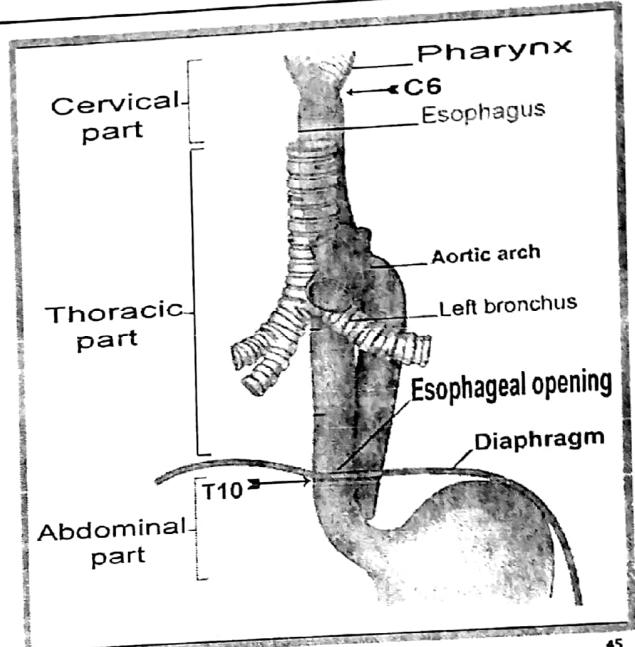


Dr. Maher Hadidi, University of Jordan

44

Esophagus

- About 25 cm long.
- Extends from C6-T10.
- Pass in 3 Region/Parts:
 - Cervical.
 - Thoracic.
 - Abdominal.



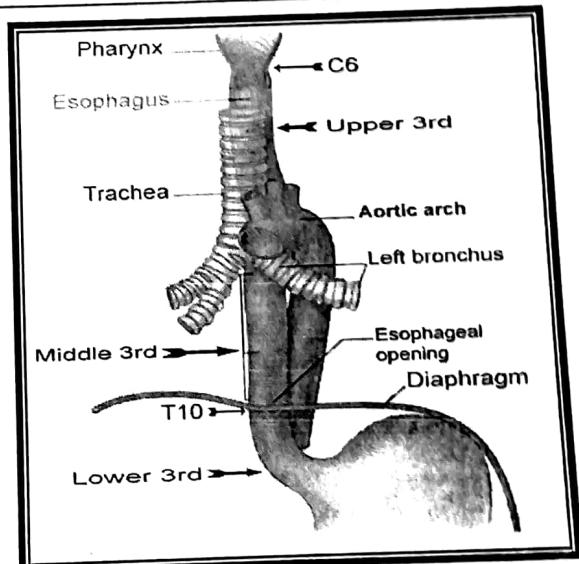
Dr. Maher Hadidi, University of Jordan

45

Spring 2018

Esophagus

- Divide into 3 Parts according to arterial, veins and nerve supply:
 - 1- Upper 3rd.
 - 2- Middle 3rd.
 - 3- Lower 3rd.
- Muscular layer has 2 layers:
 1. Inner circular.
 2. Outer longitudinal.
 - Upper 3rd: Voluntary.
 - Middle 3rd: Mixed.
 - Lower 3rd: Involuntary.



Spring 2018

Dr. Maher Hadidi, University of Jordan

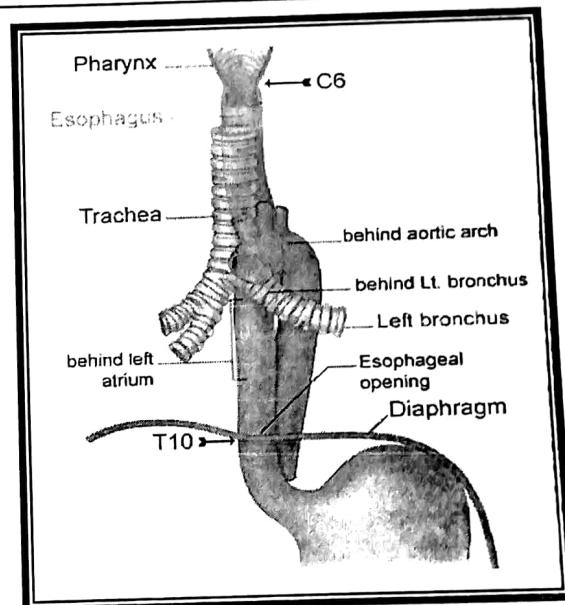
46

Esophagus constrictions

The sites of delay in the pathway of food or fluids during swallowing.

Locations:

- At its **beginning**.
 - **Behind aortic arch and left bronchus.**
 - At **diaphragm**.
- Common sites of cancer.



Spring 2018

Dr. Maher Hadidi, University of Jordan

47

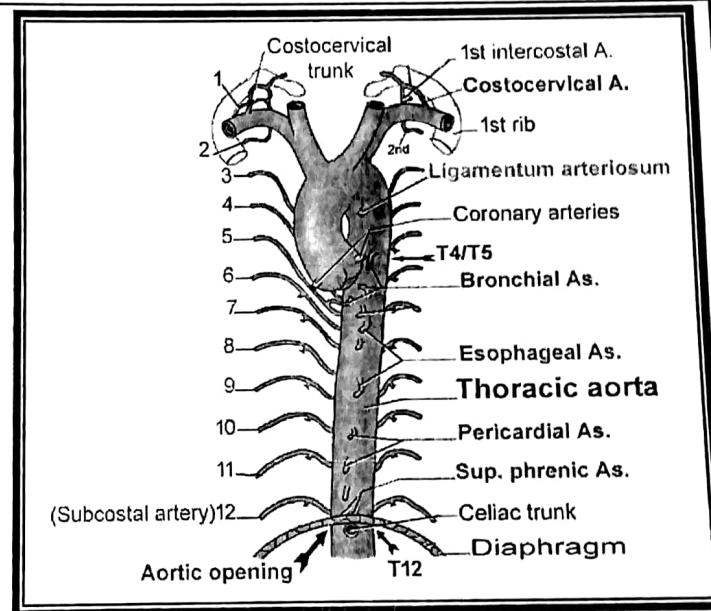
Thoracic Aorta

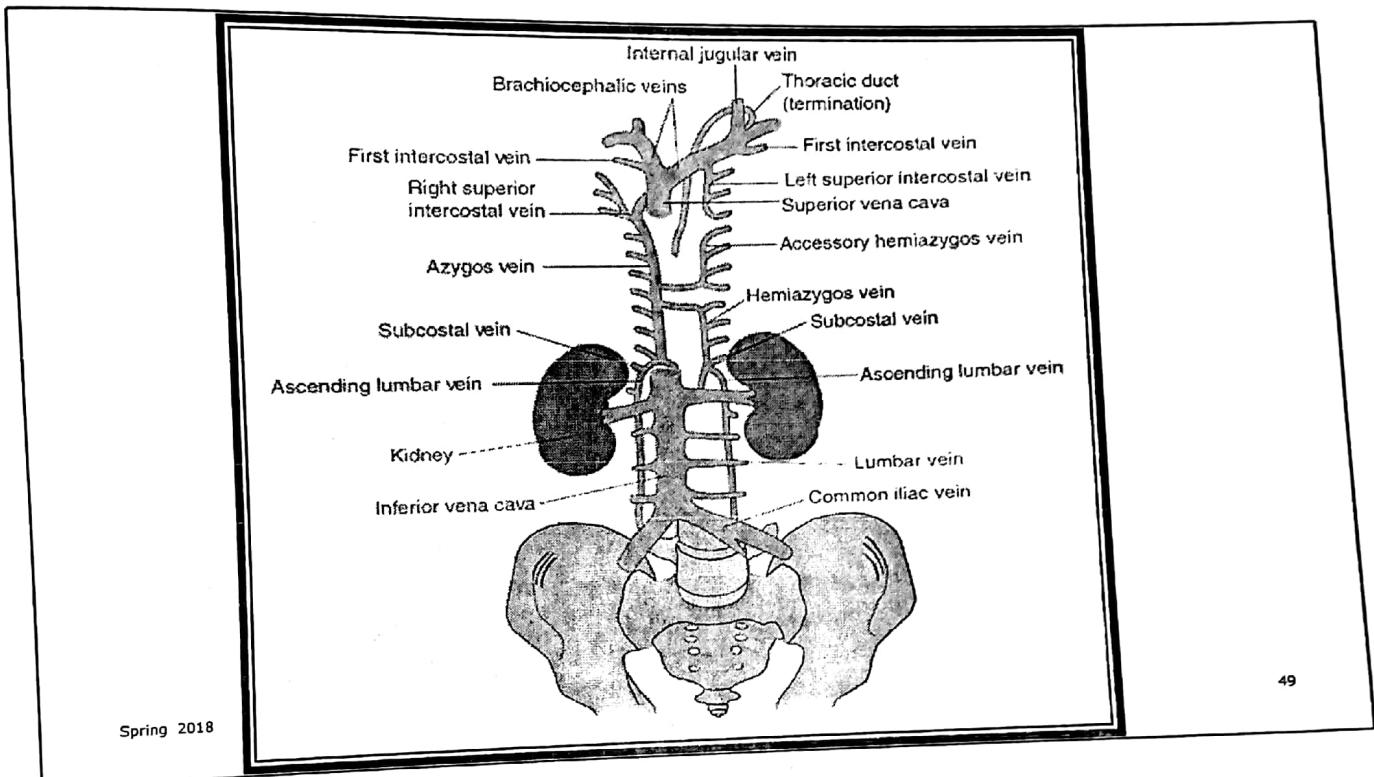
- Begins at T4/T5 level to T12 level.
- Descends on the left side of the vertebral column and then anterior to enter the **aortic hiatus** of the diaphragm.
- Parietal branches:
- Lower **9 pairs** of **post. ICAs** and **1 pair** of **subcostal As.**
- **2 superior phrenic arteries.**
- NB: The 1st 2 ICAs arise from highest intercostal a. of costocervical trunk.
- Visceral branches:
- Pericardial, Bronchial, Esophageal.

Spring 2018

Dr. Maher Hadidi, University of Jordan

48

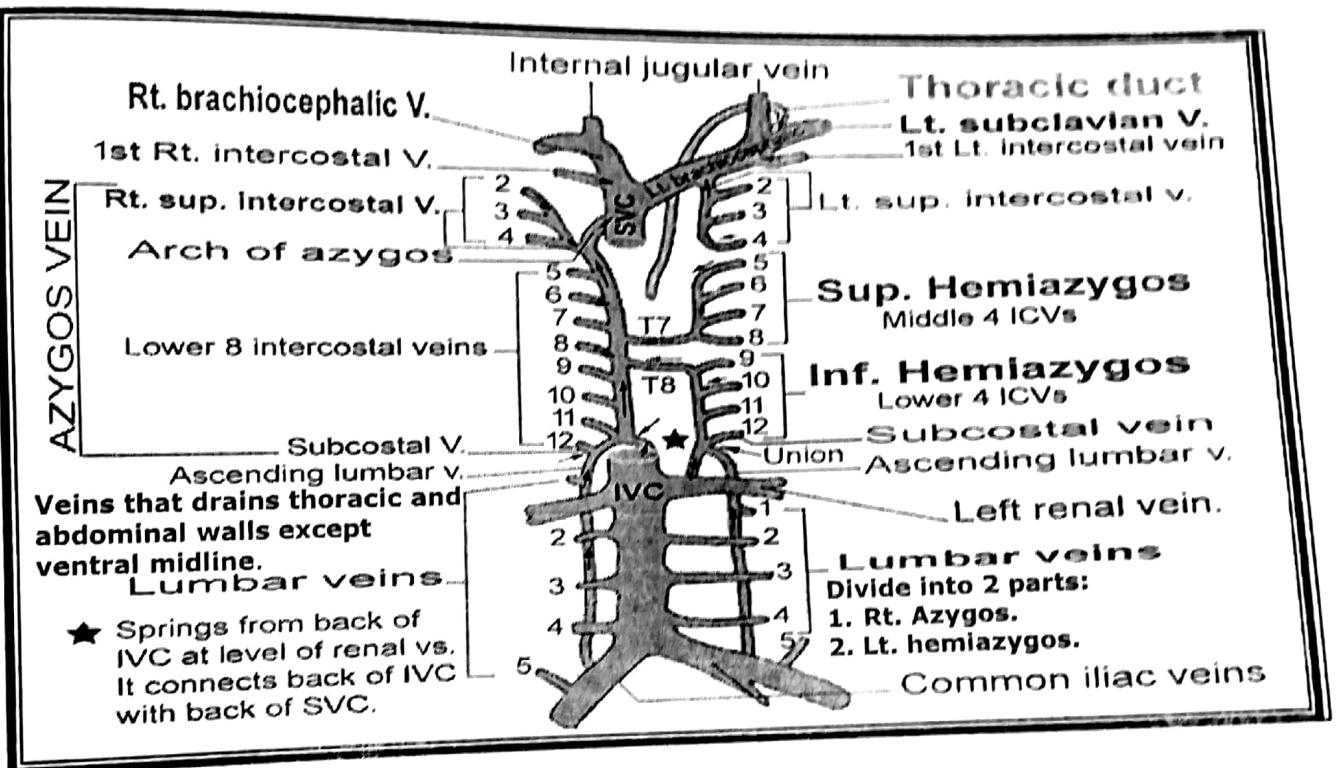




Spring 2018

49

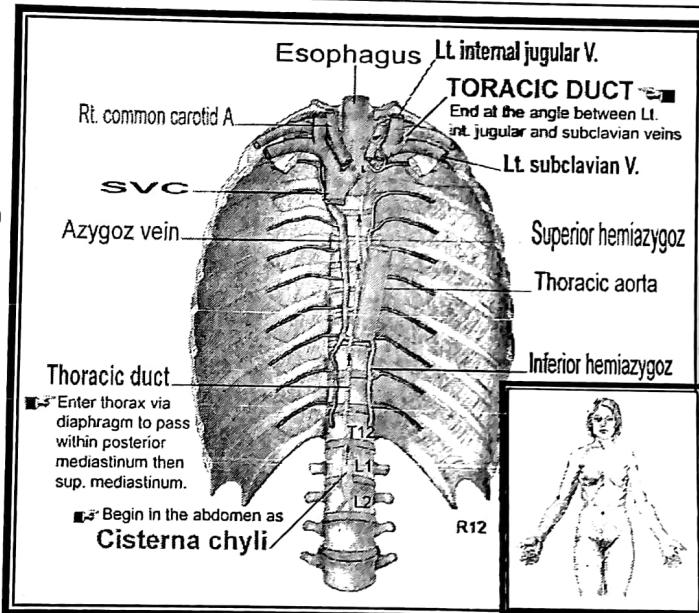
13



Thoracic Duct

- Begins in the abdomen as the **cisterna chyli**.
- Passes through the aortic opening to posterior mediastinum between aorta and azygos vein.
- **At T5 level** it crosses obliquely from Rt. To Lt. behind aorta and esophagus then to sup. Mediast.
- Arches ant. to the apex of left pleura and lung, then downward to end into the angle between Lt. int. jugular v. and subclavian v.
- Beaded, has numerous valves.
- Drains the lower limbs, pelvis, abdomen, left thorax, left upper limb, and left side of the head and neck.

Spring 2018

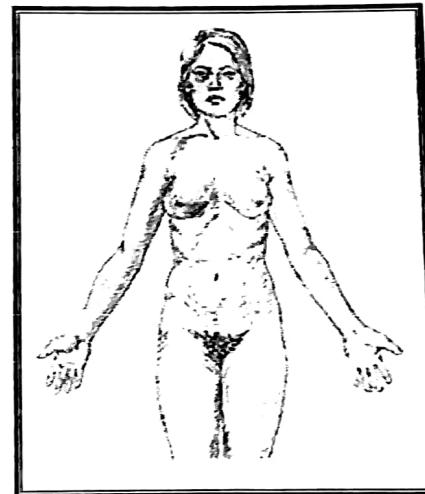


Dr. Maher Hadidi, University of Jordan

51

Thoracic Duct

All areas are drained by the thoracic duct except the (upper right quadrant) by the right lymphatic trunk



Spring 2018

Dr. Maher Hadidi, University of Jordan

52