



Cardiovascular system

Anatomy Department
Beni-Suef University

Intended learning objectives (ILOs)

By the end of this lecture the student will be able to:

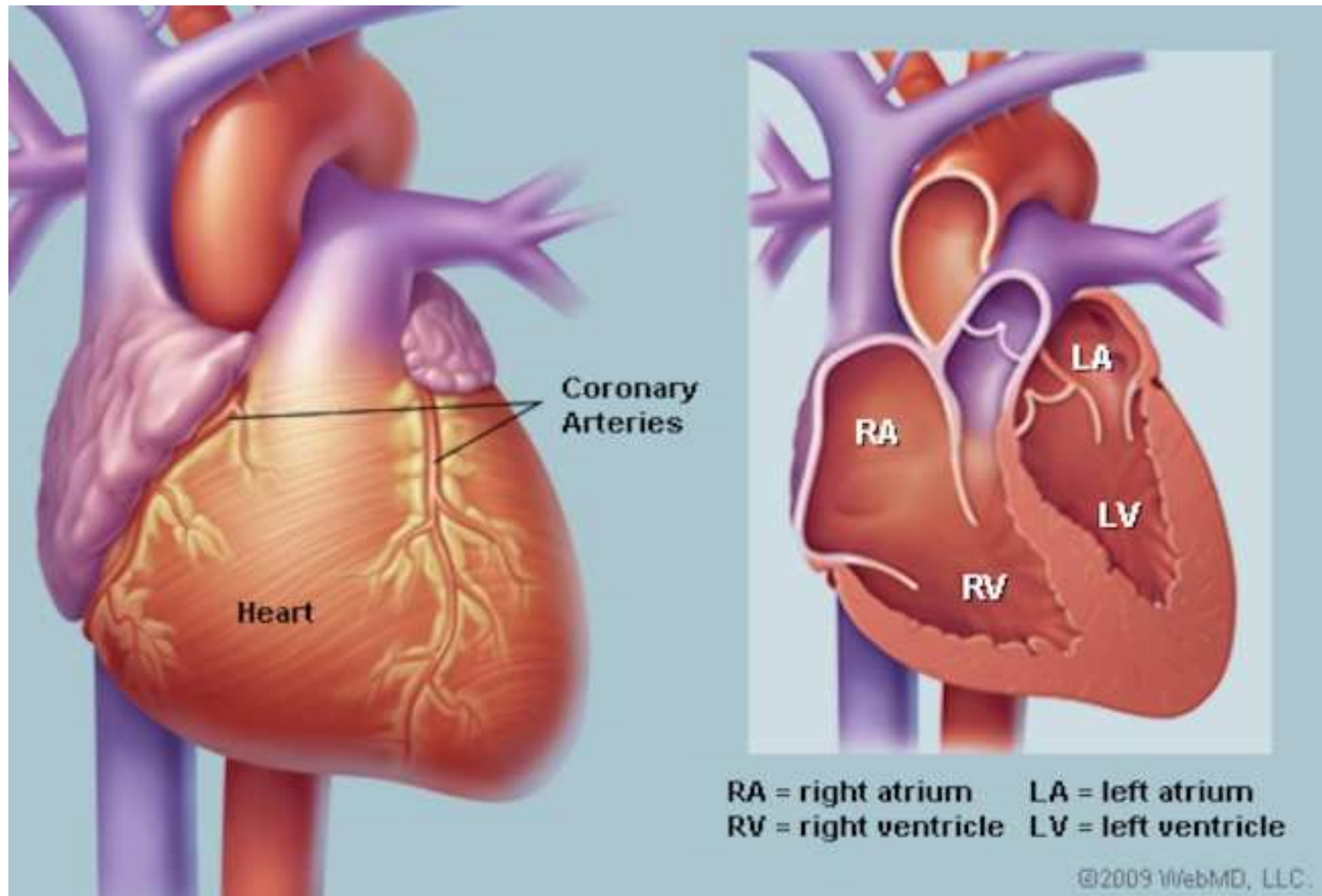
1. Describe the site, size, shape and location of the heart.
2. Discuss the external and internal anatomy of the chambers of the heart.
3. Identify the main arteries and veins of the human body.

Formation of CVS:

- The heart
- The blood vessels
- Blood elements

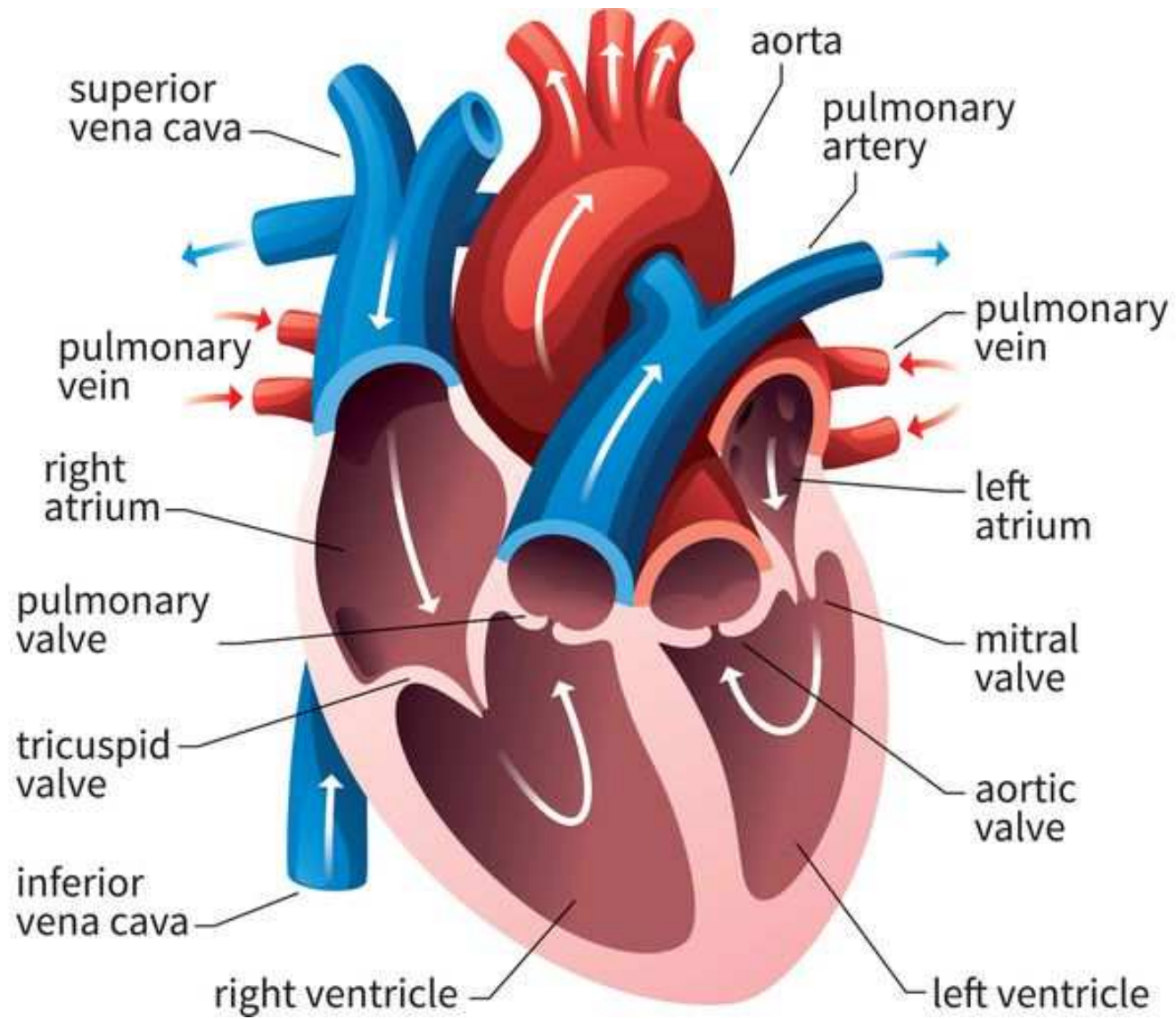
Heart:

- Site
- Size
- Shape
- Apex
- Chambers
- Coverings
- Arterial supply



Body circulations:

1. The systemic circulation
2. The pulmonary circulation
3. The portal circulation



Clinical correlations:

- Myocardial ischemia
- Myocardial infarction

The blood vessels

1. Arteries:

- Thick elastic wall
- Pulsate
- Deep
- No valves
- Three types

Tortuous arteries: facial, lingual, splenic & uterine

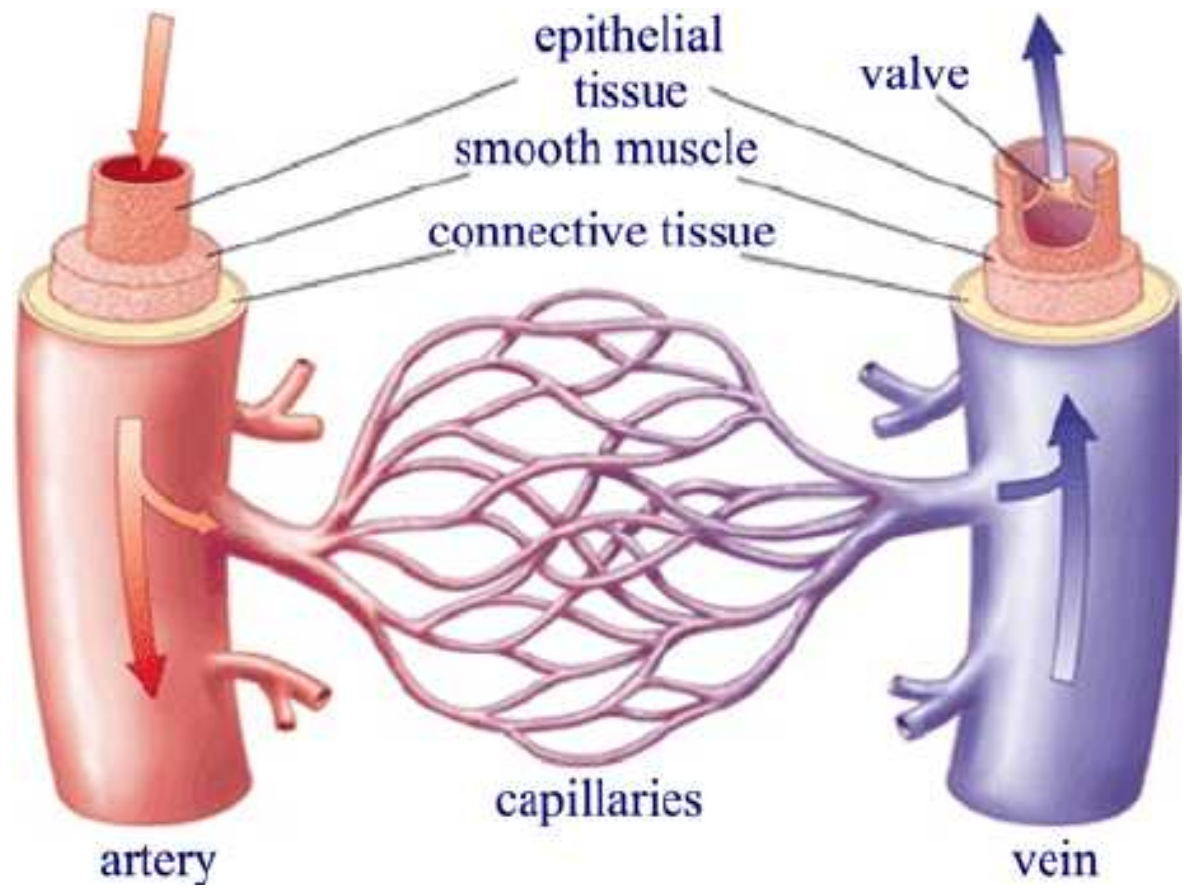
2. Veins:

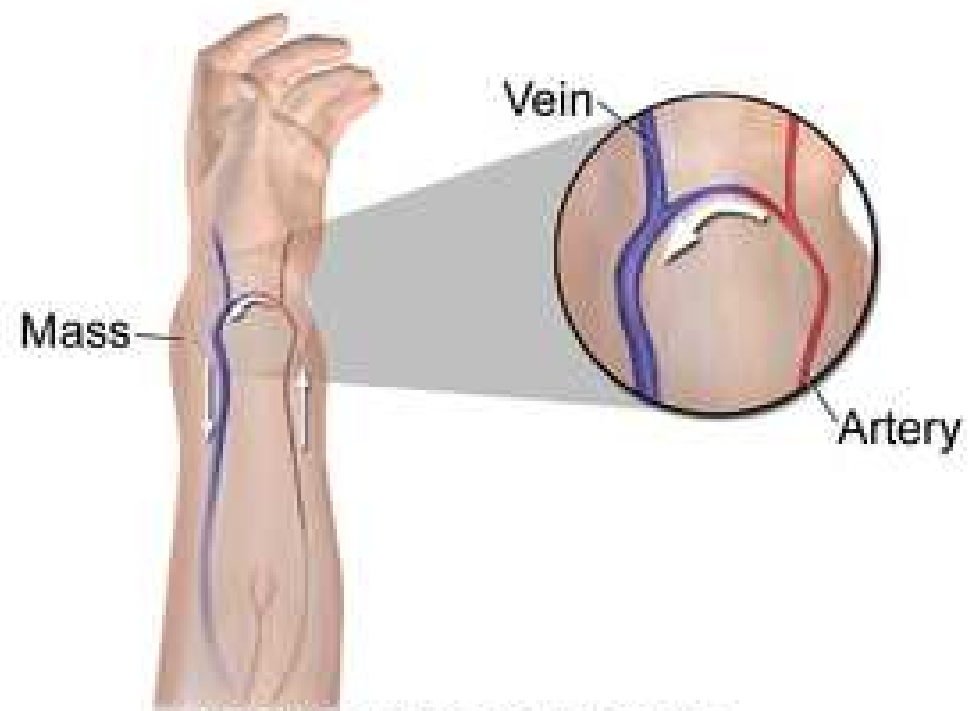
- Thin wall & wide lumen
- Do not pulsate
- Have valves
- Three types

3. Capillaries

Connections between arteries and veins

- Capillaries
- Sinusoids
- Arteri-ovenous shunts

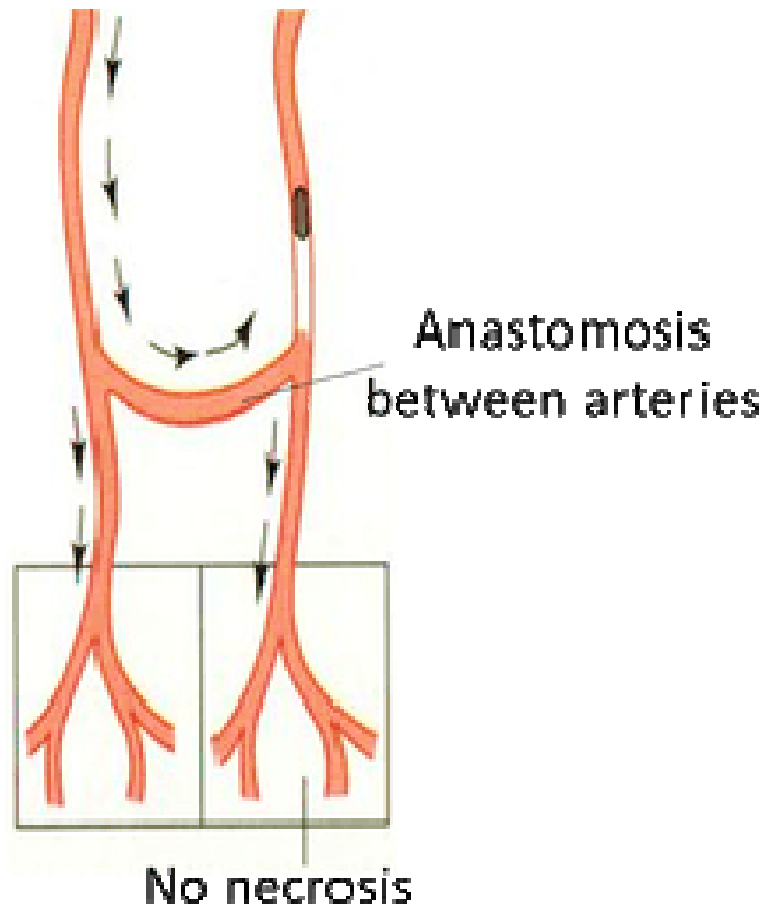




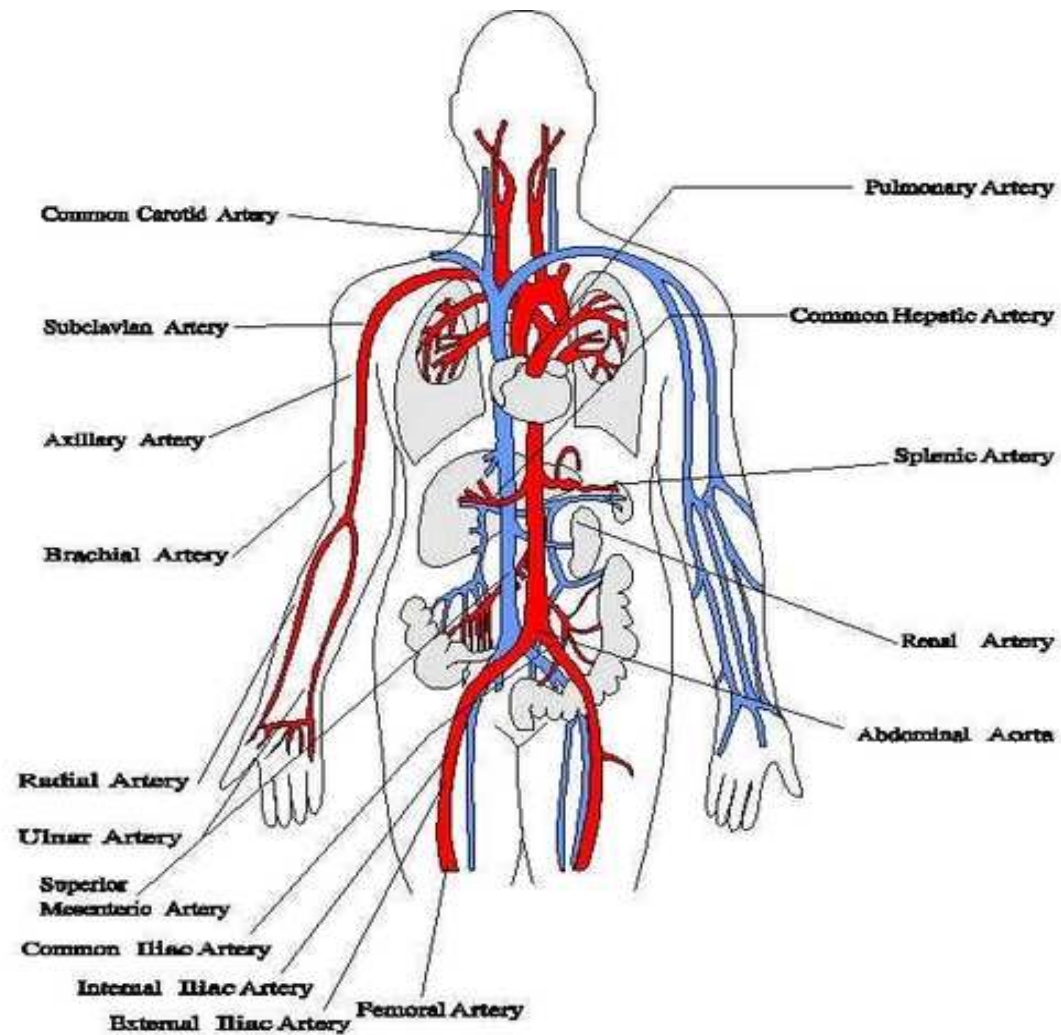
Arteriovenous Fistula

Arterial anastomosis

- Anastomosis by convergence
- Anastomosis between smaller arteries
- Anastomosis by end to end



Major arteries in the body



Quiz

1. The apex of the heart lies at the level of
intercostal space.
 - a. 3rd
 - b. 4th
 - c. 5th
 - d. 6th

2. All veins of the systemic circulation drain into

a. Superior vena cava

b. Inferior vena cava

c. Pulmonary trunk

d. Superior and inferior vena cava

3. The left atrium receives blood from

a. Liver

b. Body systems

c. Lung

d. Spleen

4. In which organ sinusoids are found

a. Liver

b. Stomach

c. Heart

d. Kidney

Thank you