PERICARDIUM

- **Pericardium greek – Peri - around**

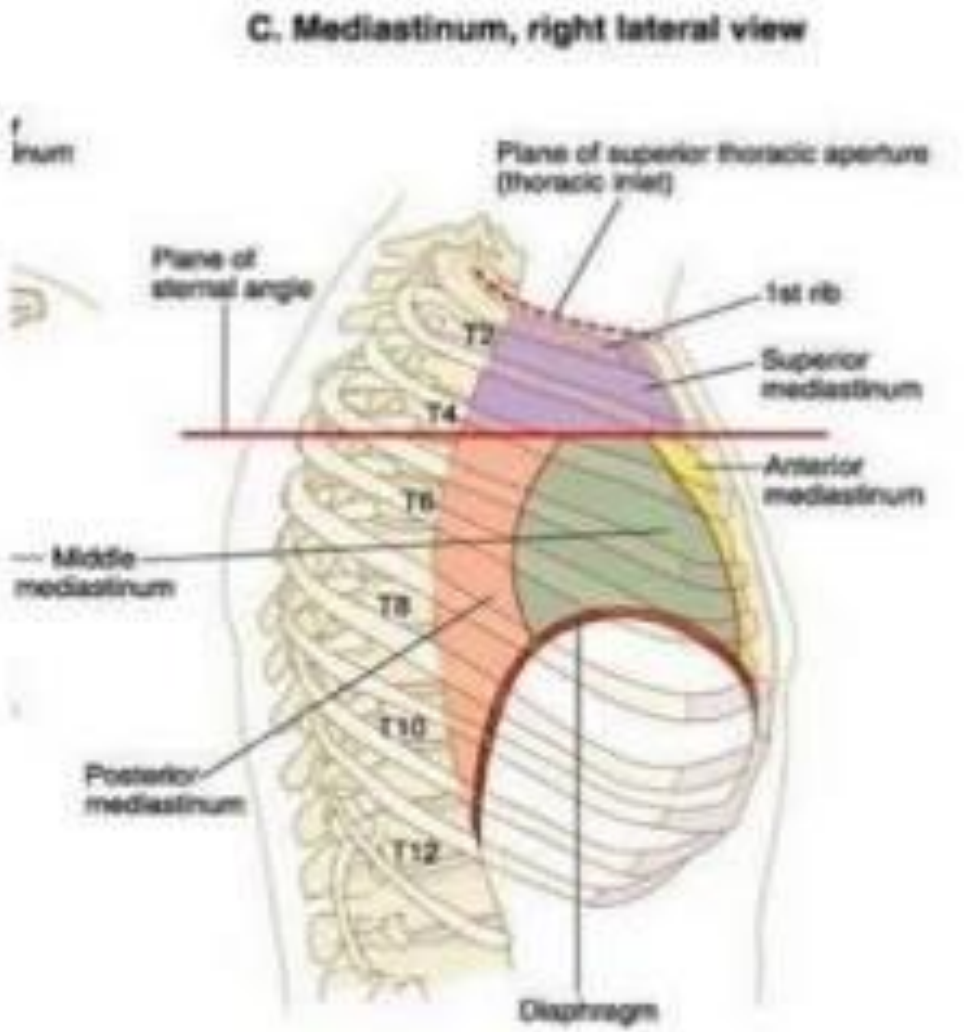
  Cardium- heart

- **It is a fibroserous sac which enclose the heart and roots of great blood vessels.**

Location- Middle mediastinum.

- **Behind the sternum opposite to 2^{nd} to 6^{th} costal cartilage.**

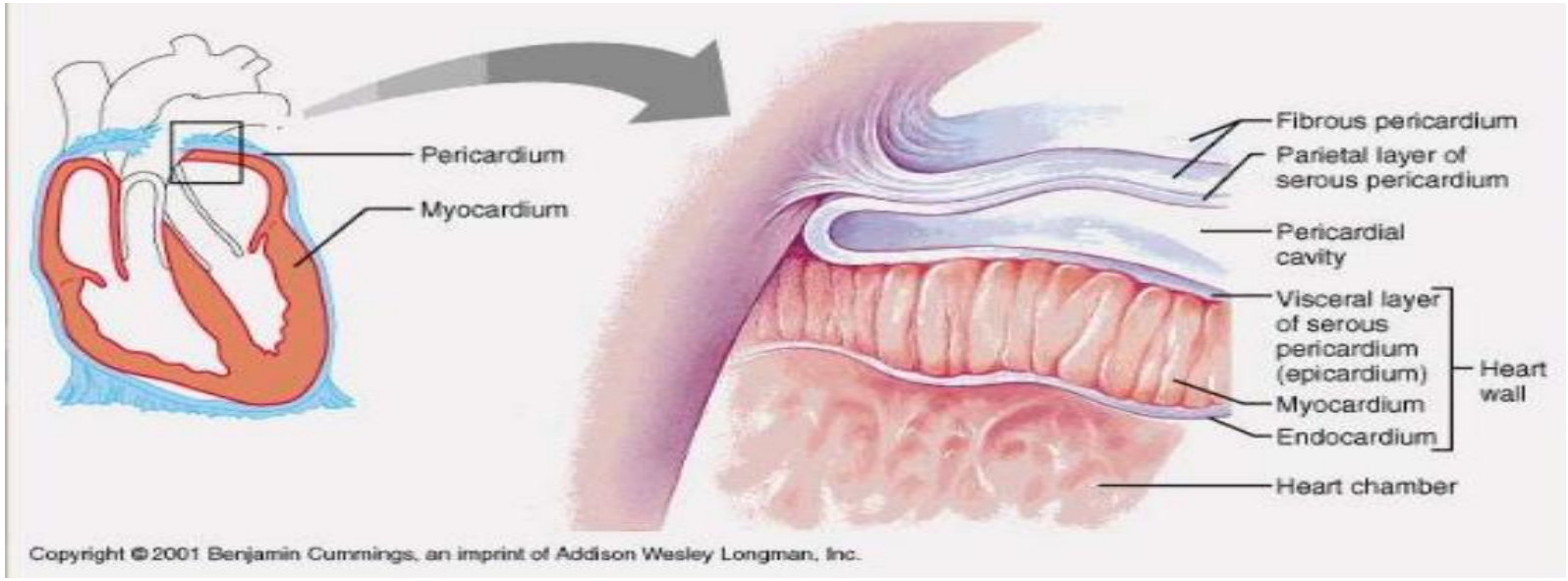
Situation of Pericardium



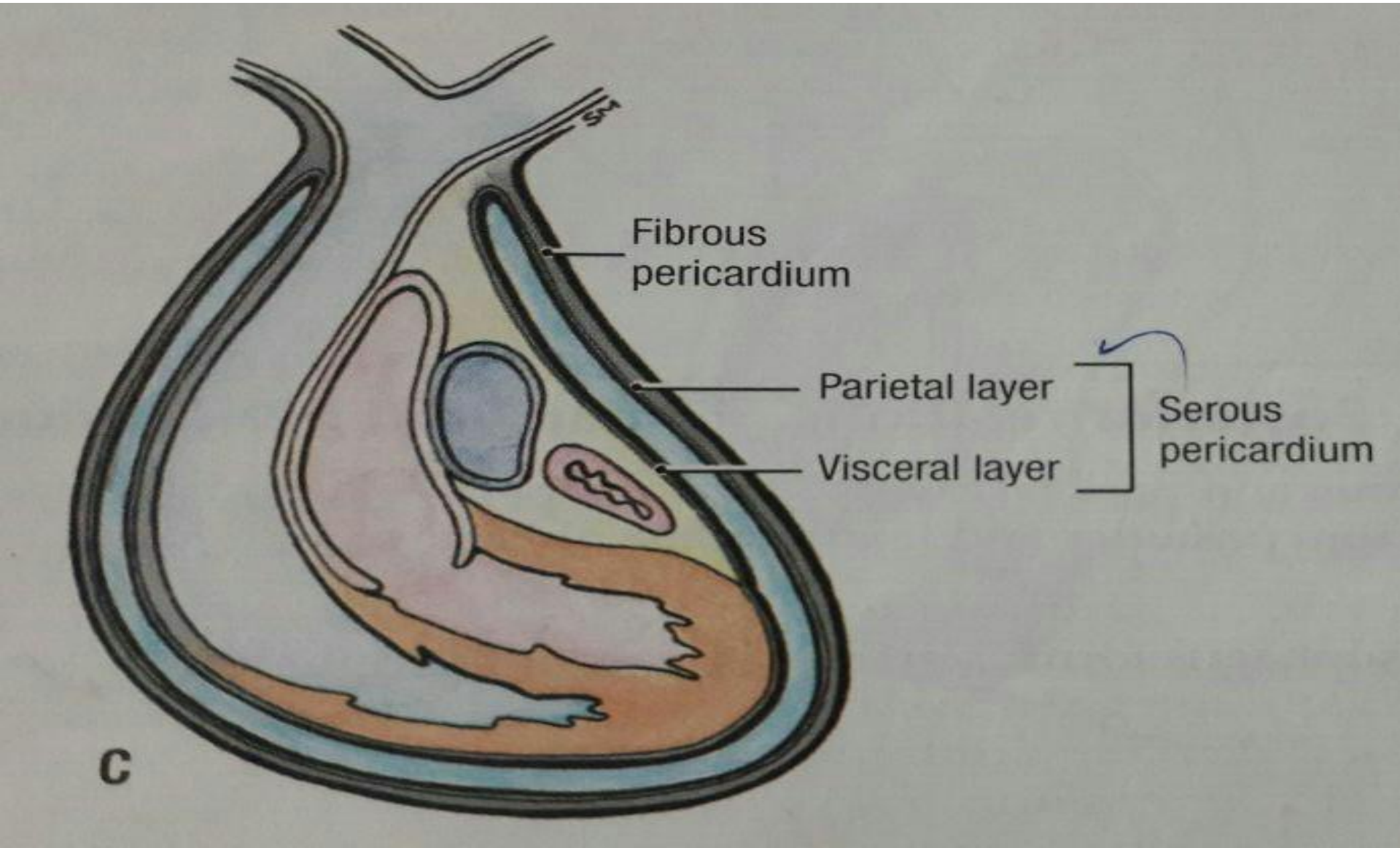
ANATOMY PRECIS

PERICARDIUM

- **Inner serous**
  - Visceral
  - Pericardial cavity
  - Parietal
- **Outer fibrous**
  - **Single layer**



FIBROUS LAYER



FIBROUS PERICARDIUM

- ✓ Outer layer of pericardium
- ✓ It is a cone shaped open sac and has apex and base
- ✓ **Apex**- it merges with tunica adventitia (pulmonary trunk and ascending aorta) and pre tracheal layer of the deep cervical fascia
- ✓ **Base** – it fuse with the upper surface of central tendon of the diaphragm
- ✓ **Front**- it is attached to the upper and lower ends of the body of sternum by the sup. And inf. Sterno pericardial ligaments

CONTENTS OF FIBROUS PERICARDIUM

- ✓Heart with cardiac vessels and nerves.
- ✓Ascending aorta and pulmonary trunk.
- ✓Two venae cavae (SVC and IVC)
- ✓The terminal part of pulmonary vein

Blood supply

Arterial supply

- ✓ **Internal thoracic arteries**
- ✓ **The descending thoracic aorta**

Venous drainage

- ✓ **Internal thoracic vein**
- ✓ **Azygos vein**

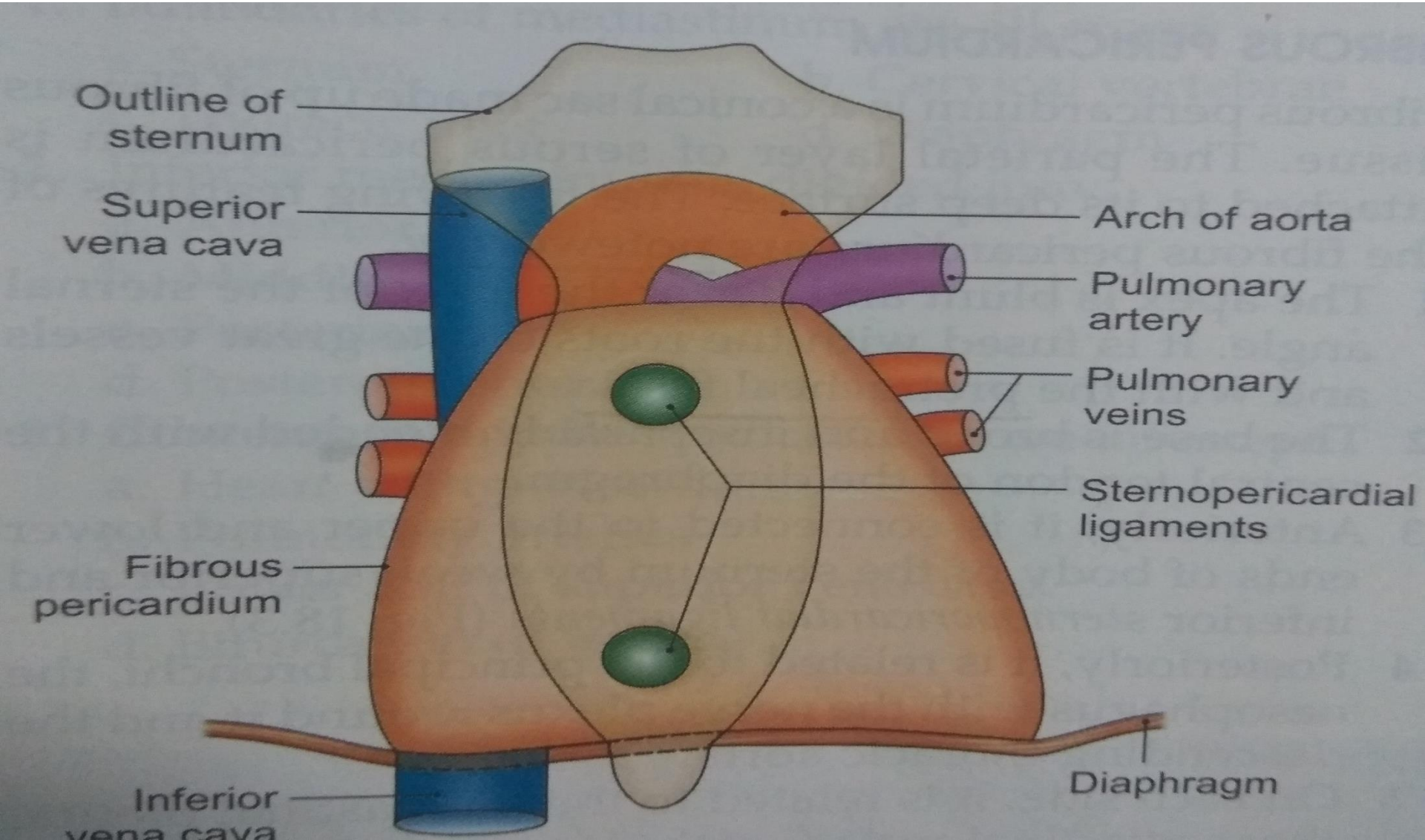
Nerve supply

- ✓ Parietal & fibrous “sensitive to pain
- ✓ Phrenic nerve (C3-C5) sensory fibers.

FUNCTION

- ✓ It keep the heart in position
- ✓ It prevent the over distension of the heart

Relation Of Fibrous Pericardium



SEROUS LAYER

- Inner layer of pericardium
- It is the Thin double layered membrane lined by mesothelium.
- Inner layer or visceral layer or epicardium is fused to the heart except along the cardiac grooves.
- The two layers are continuous with each other at the root of great vessels.

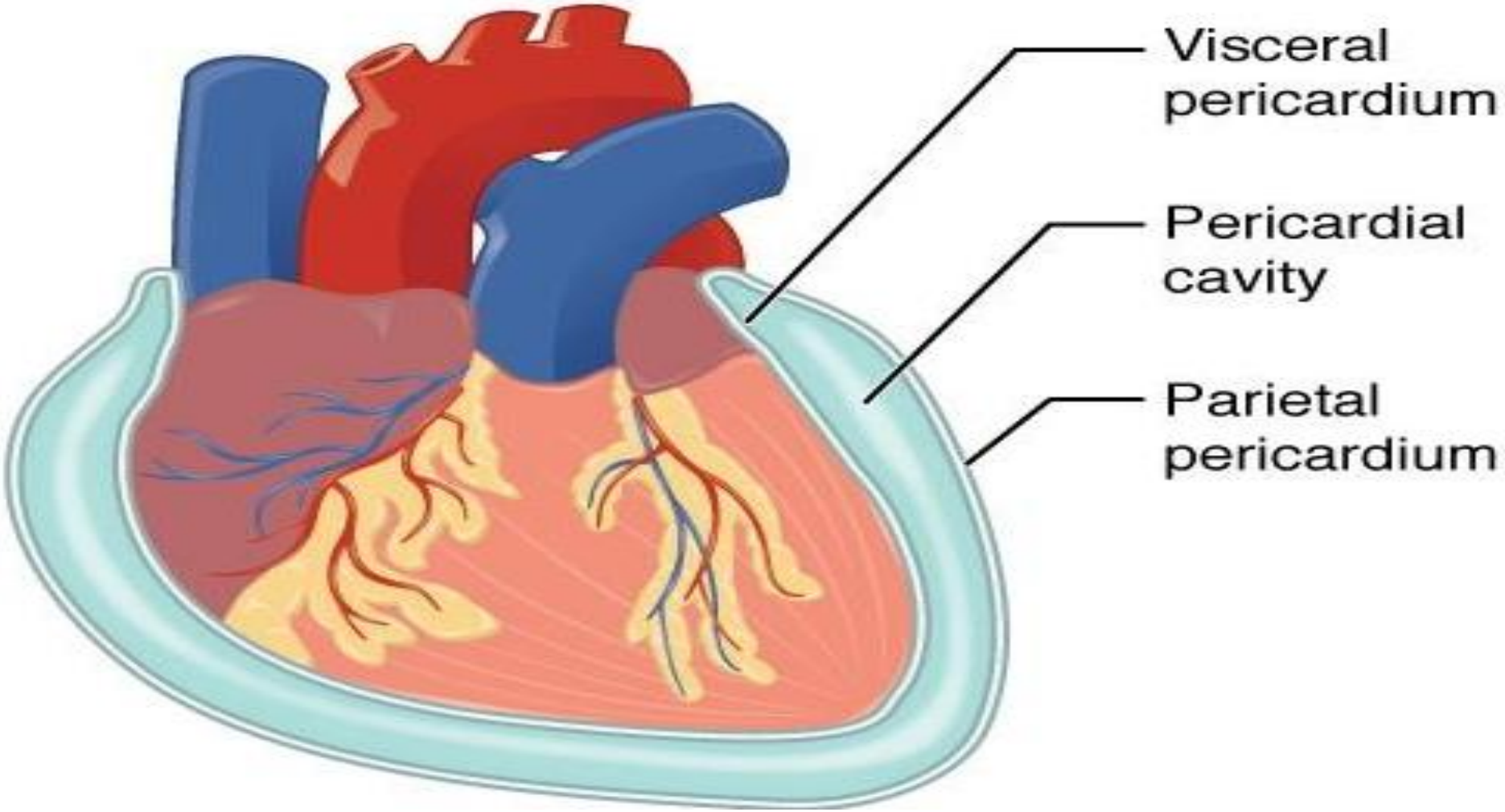
- ✓ **It consists of**

1. Parietal layer

2. Visceral layer (epicardium)

- ✓ **There is a potential space between parietal and visceral layer**
- ✓ **The maximum capacity of the sac is 300 ml**

PERICARDIAL CAVITY



FUNCTION OF PERICARDIUM

- ✓ It allow the free movement of the heart
- ✓To minimize the friction .
- ✓To prevent the excessive fall of diastolic pressure.
- ✓Prevent infection.

BLOOD SUPPLY

Arterial supply

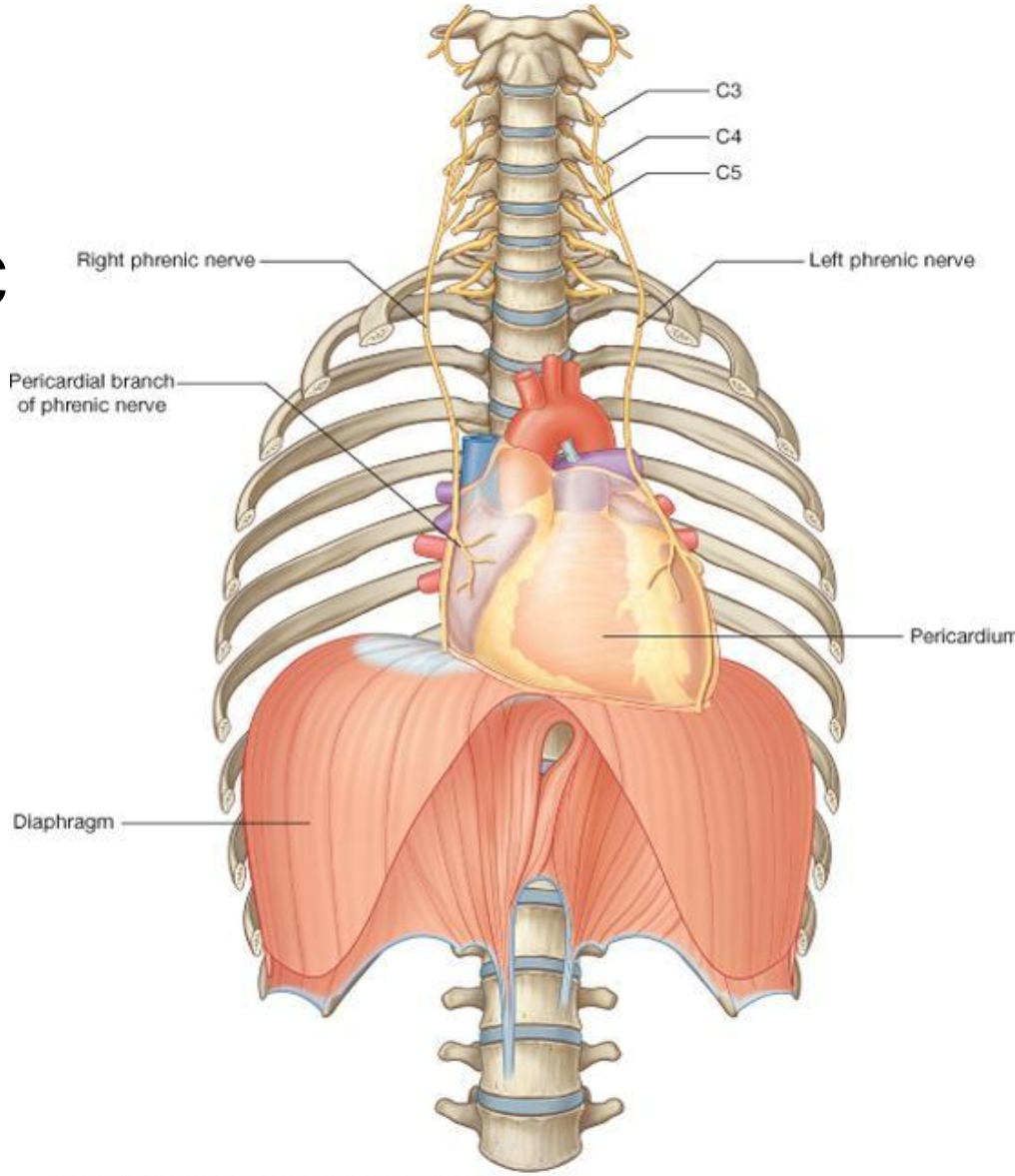
- Coronary artery (branch of ascending aorta)

Venous drainage

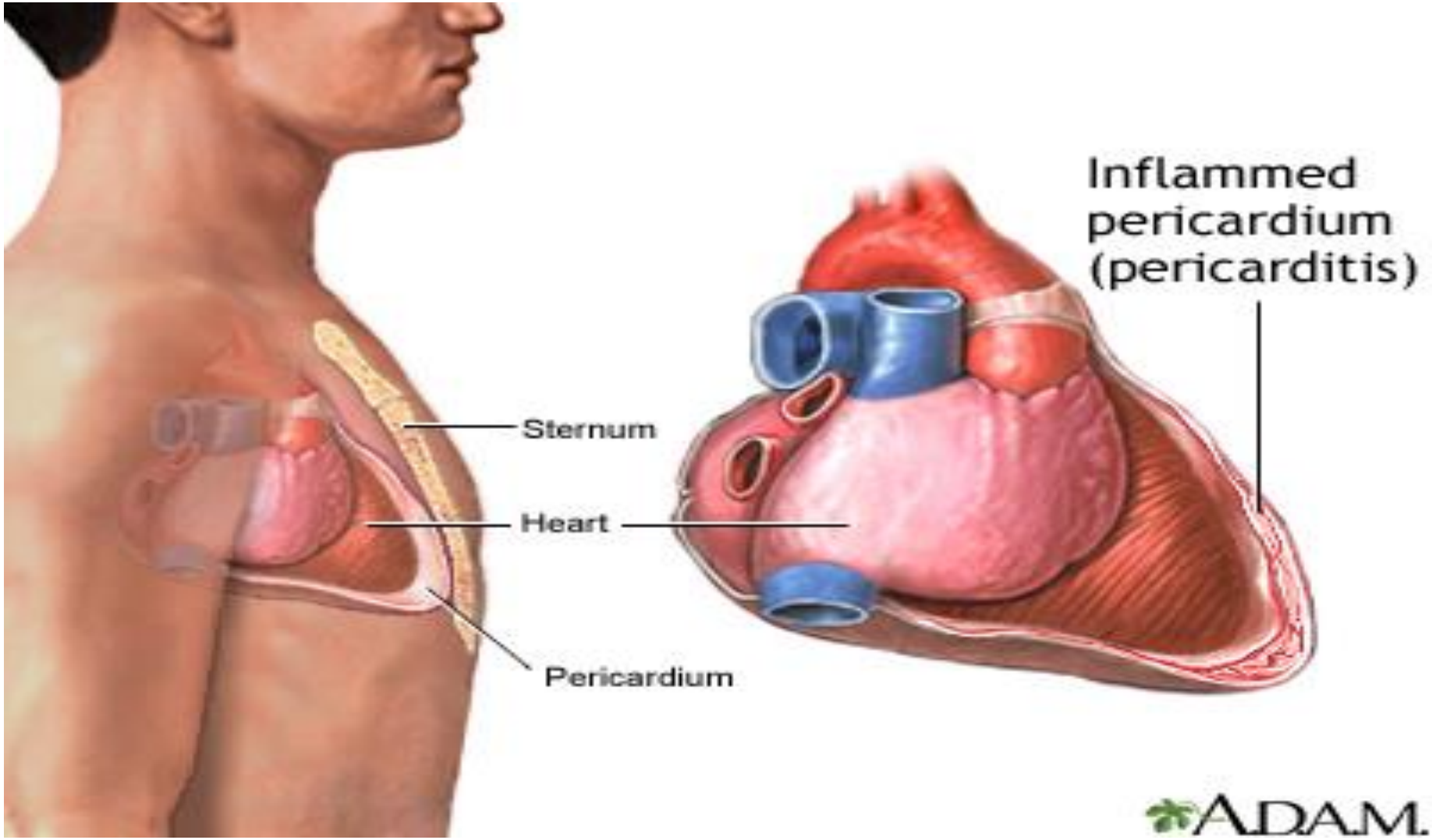
- Coronary sinus

INNERVATIONS

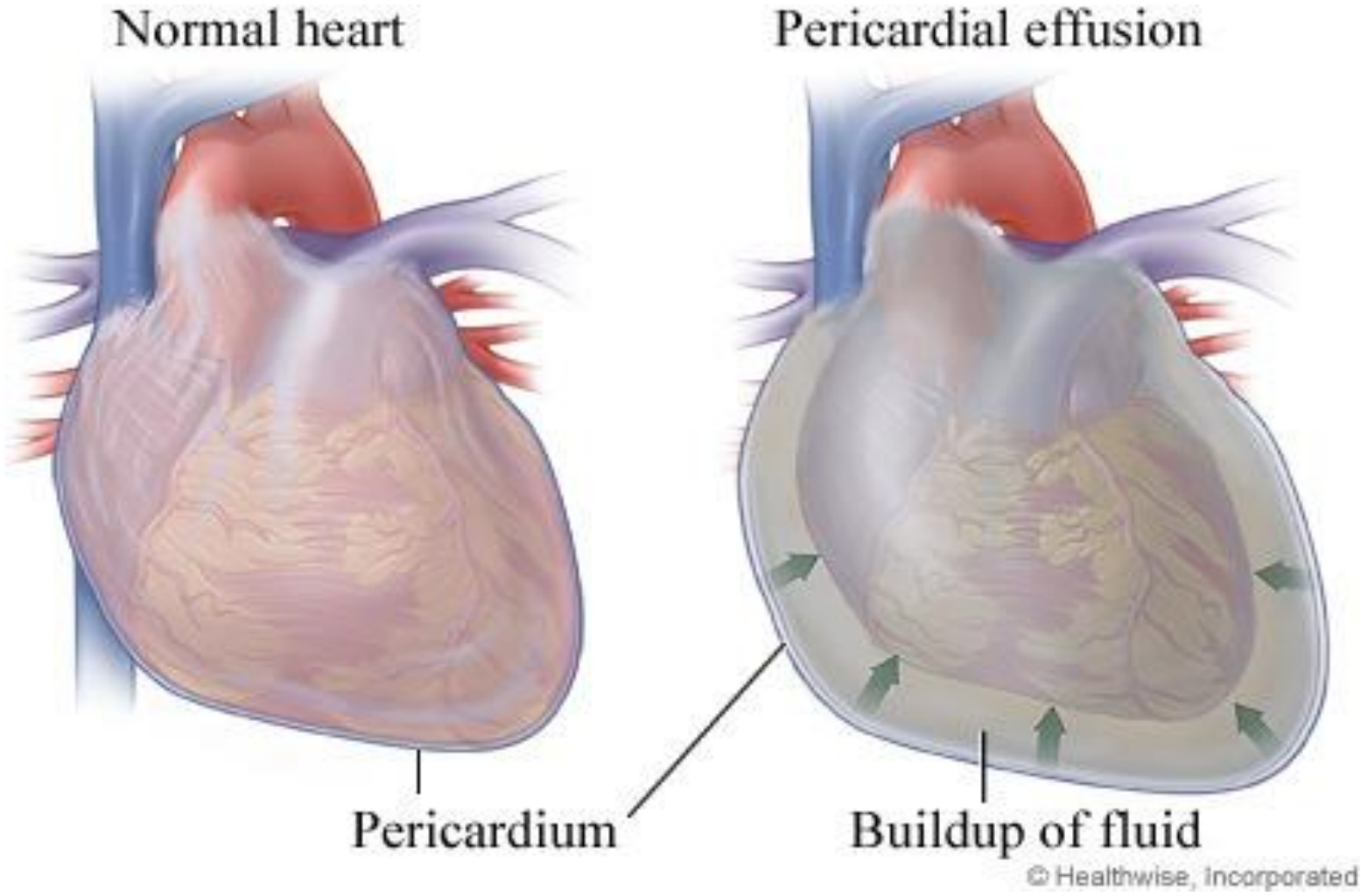
- ✓Cardiac plexus
- ✓Vagus,Sympathatic nerves fibers.



PERICARDITIS

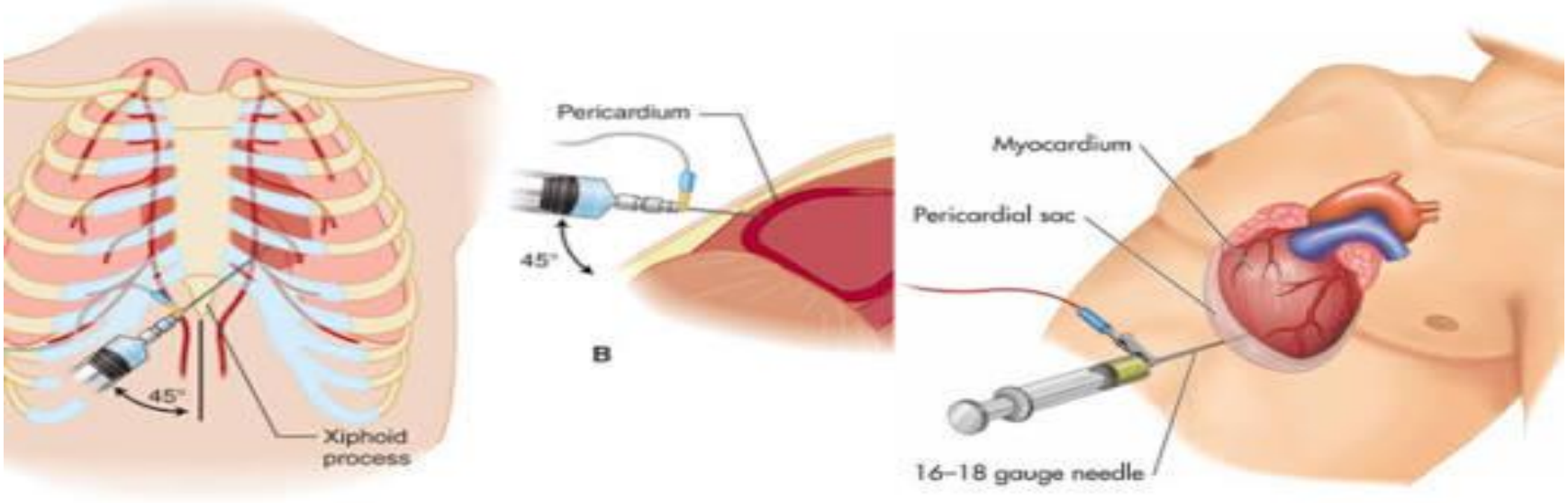


PERICARDIAL EFFUSION



PERICARDIOCENTESIS

- ✓ **Aspiration of pericardial fluid is called pericardiocentesis**
- ✓ **It is done by 1. subcostal route 2. parasternal route**




THANKYOU