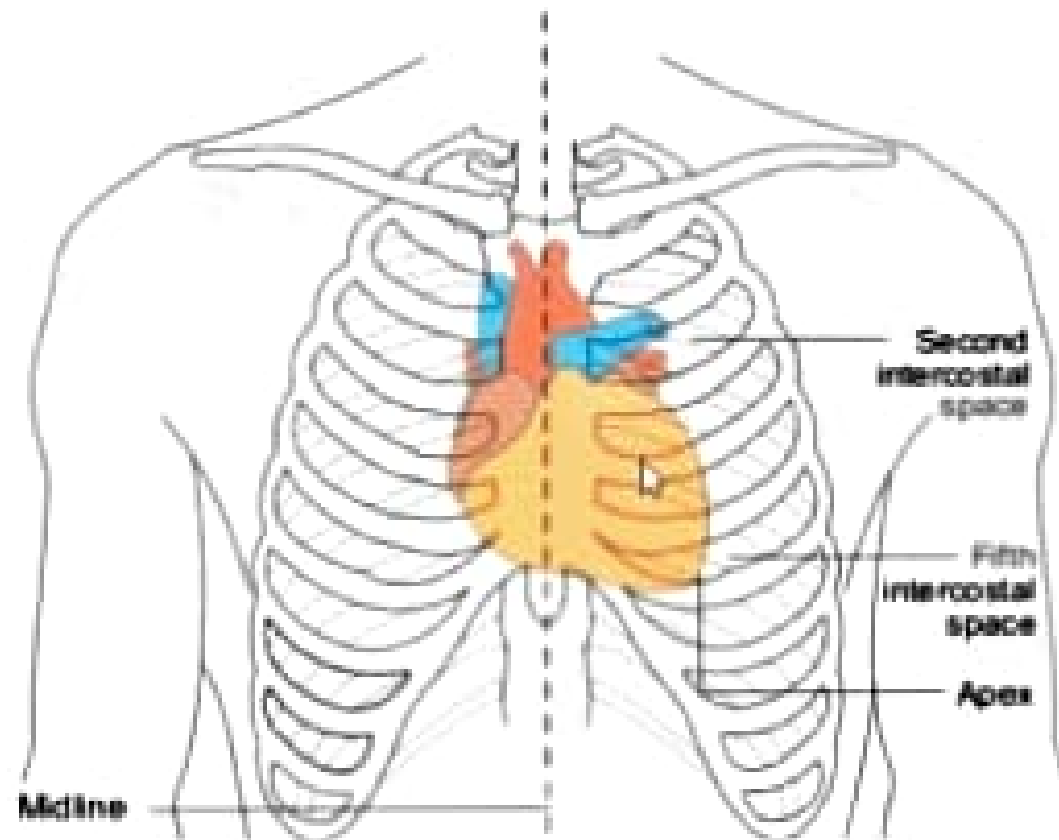


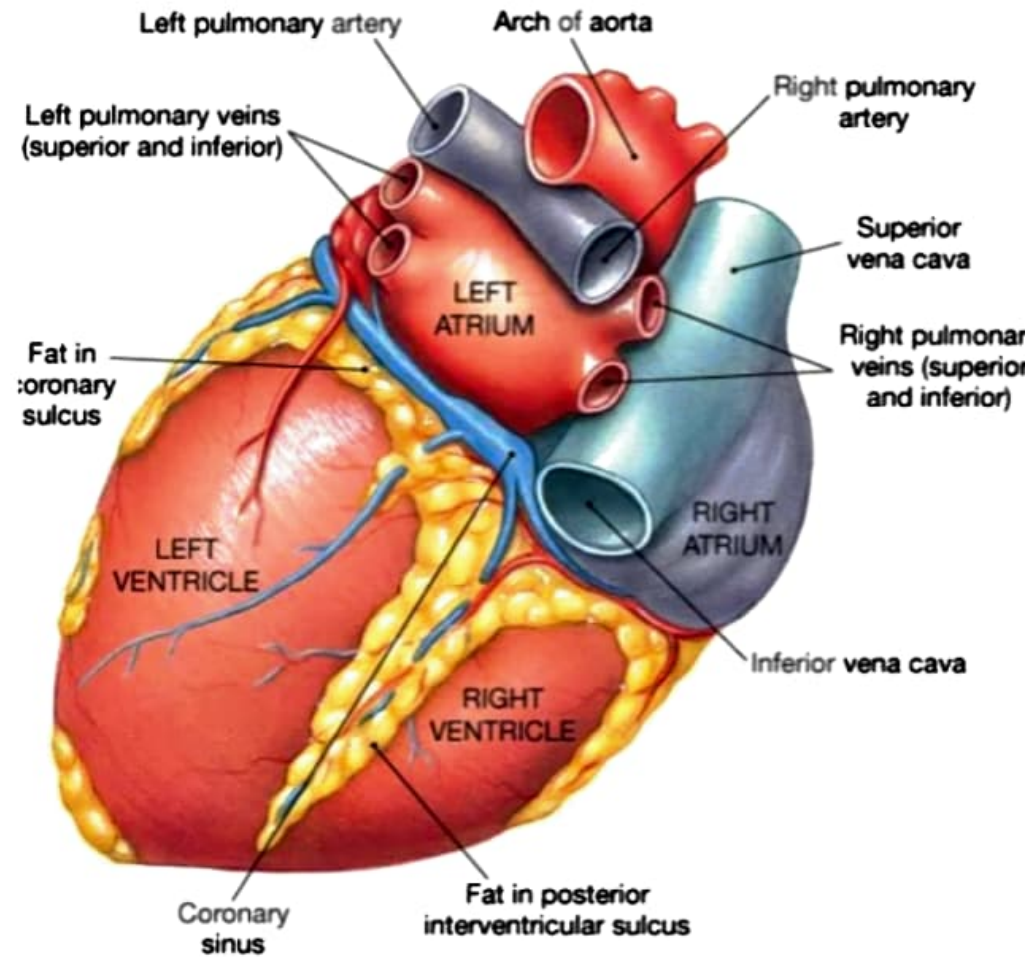
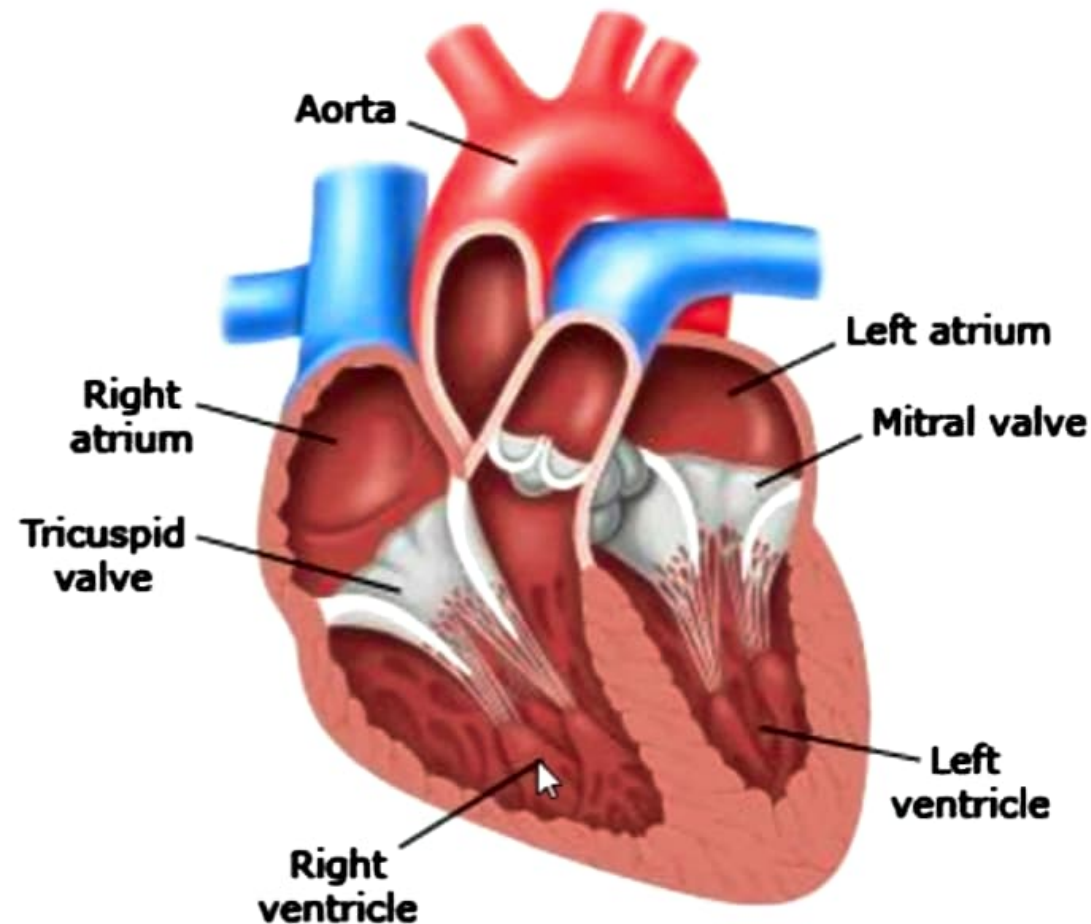
HEART LOCATION



EXTERNAL FEATURES OF HEART

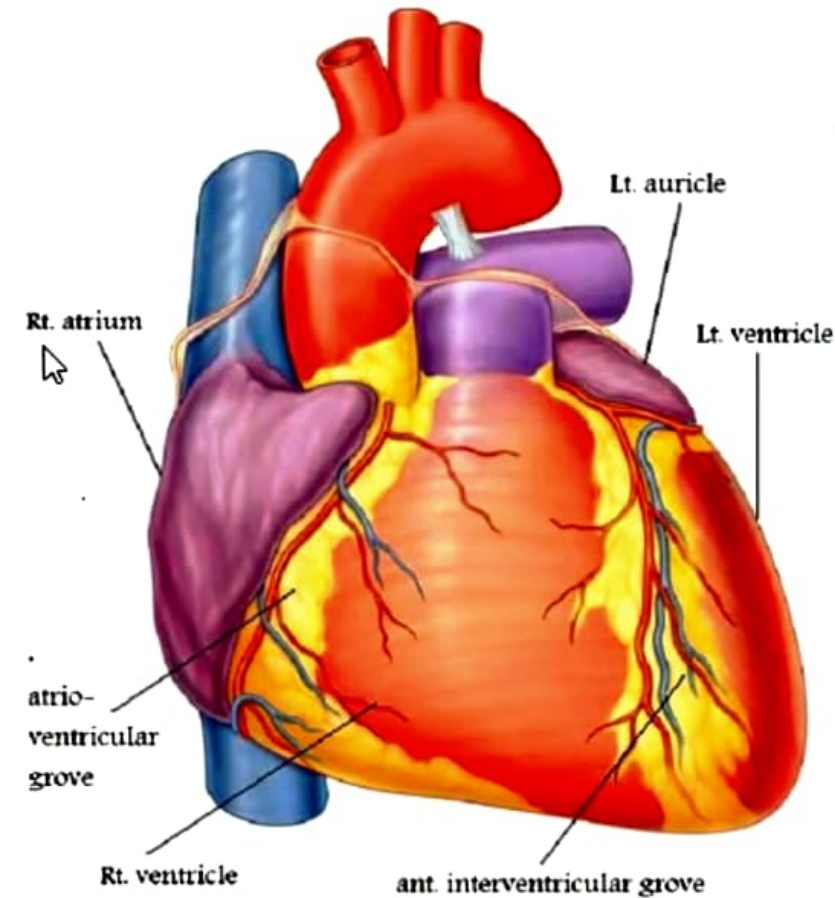
Chambers of heart

Normal



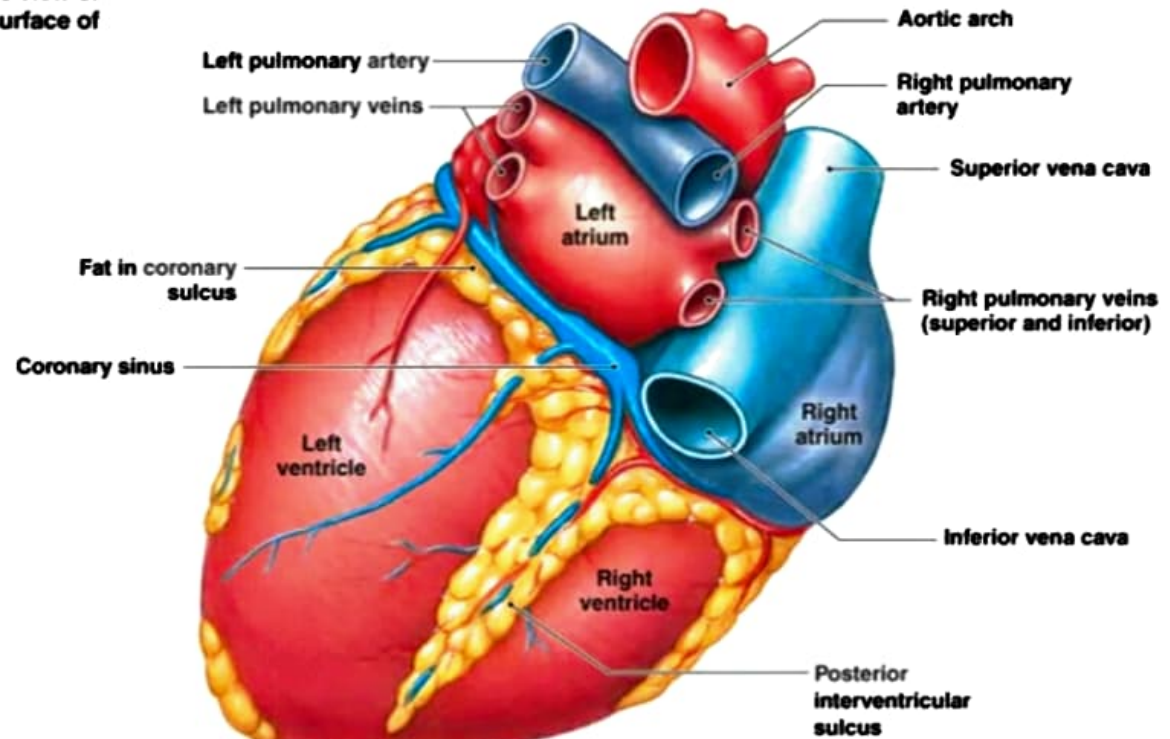
(b) Posterior (diaphragmatic) surface

SULCI / GROOVES



Atrioventricular / coronary sulcus
Interatrial groove

Anterior view of surface of



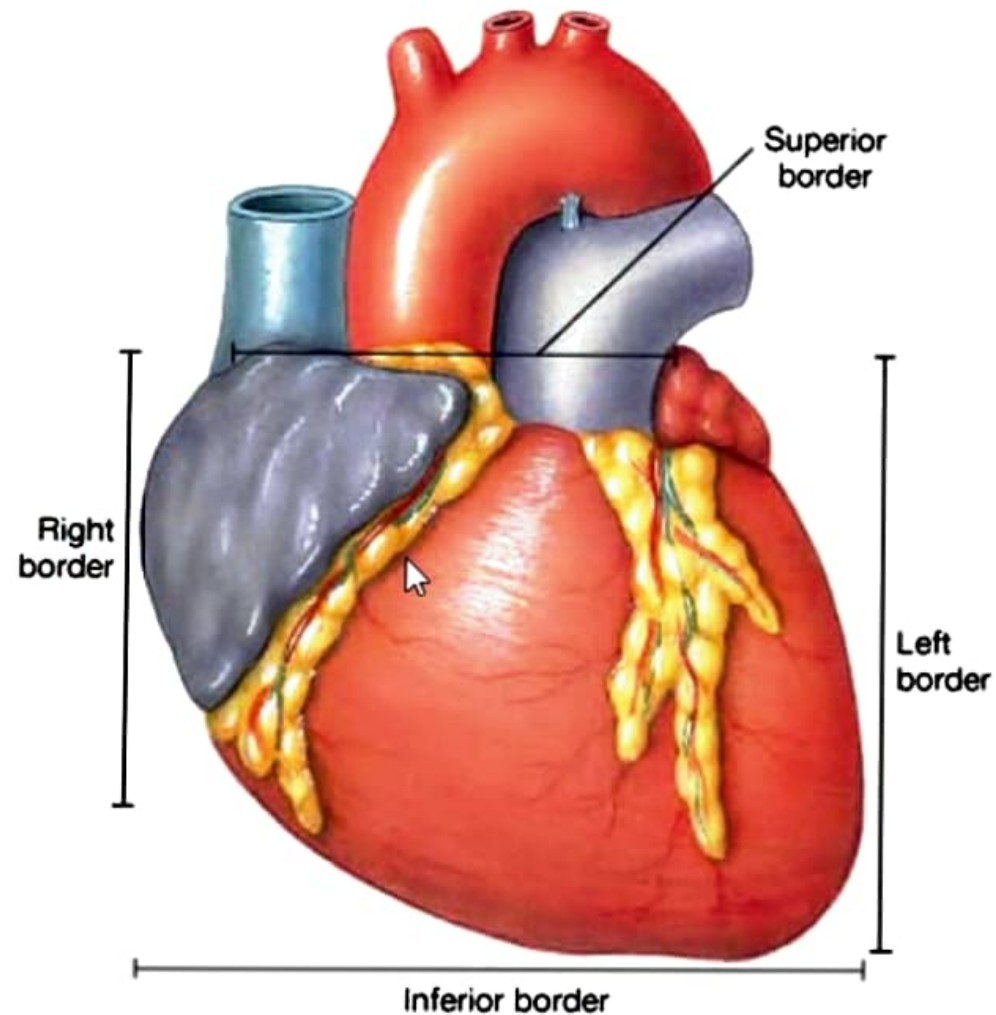
Posterior surface

**Interventricular groove-
 anterior
 posterior**

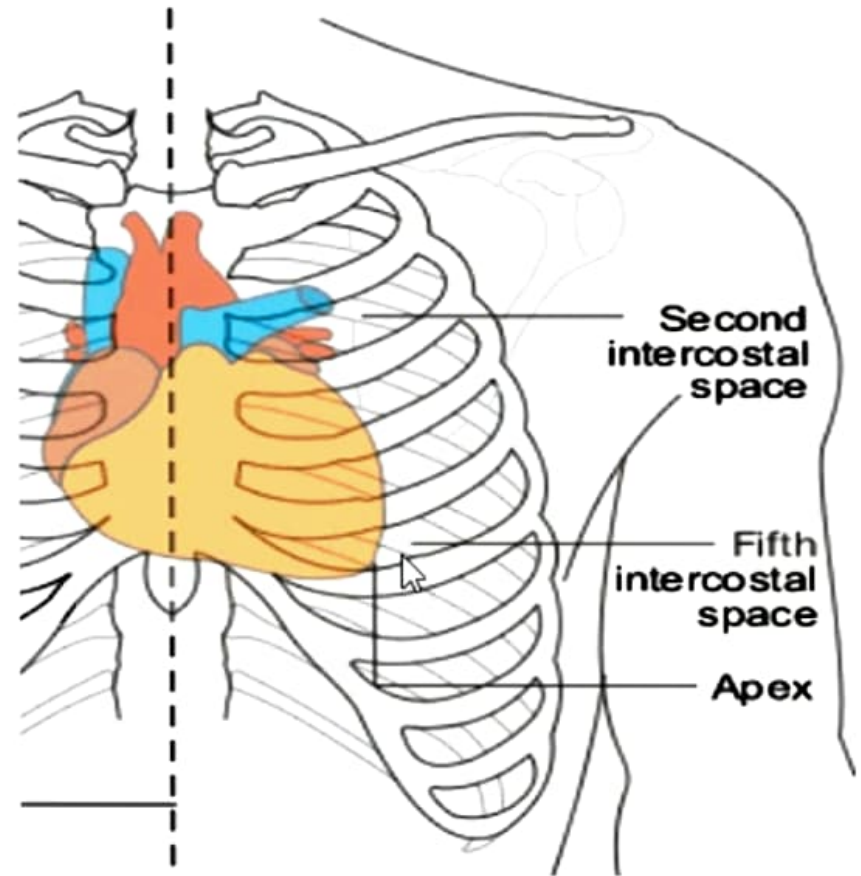
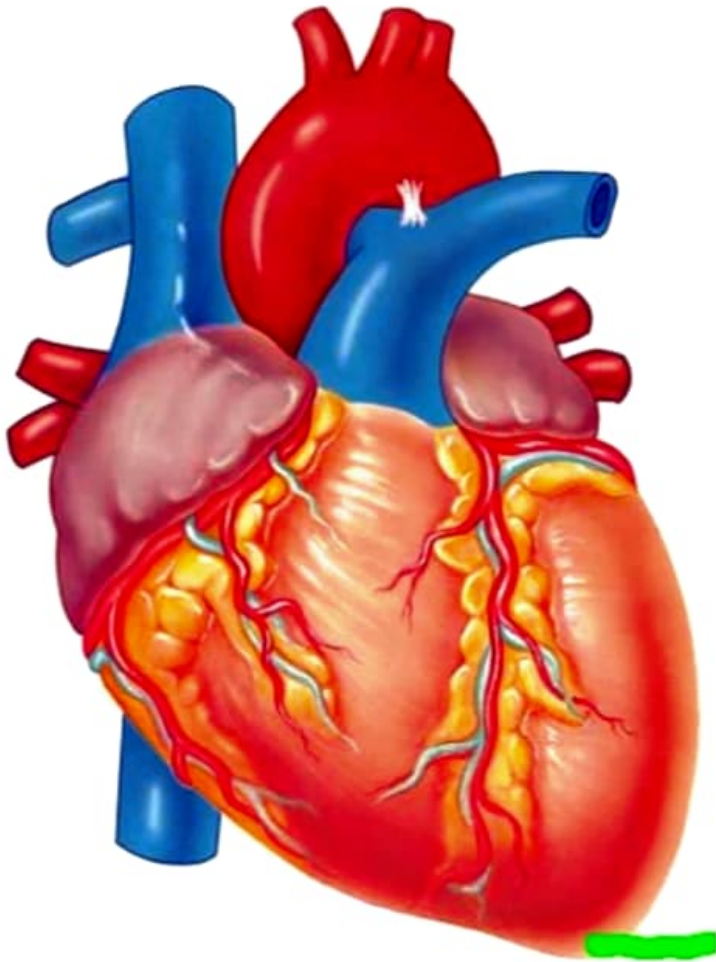
PARTS Apex

Base

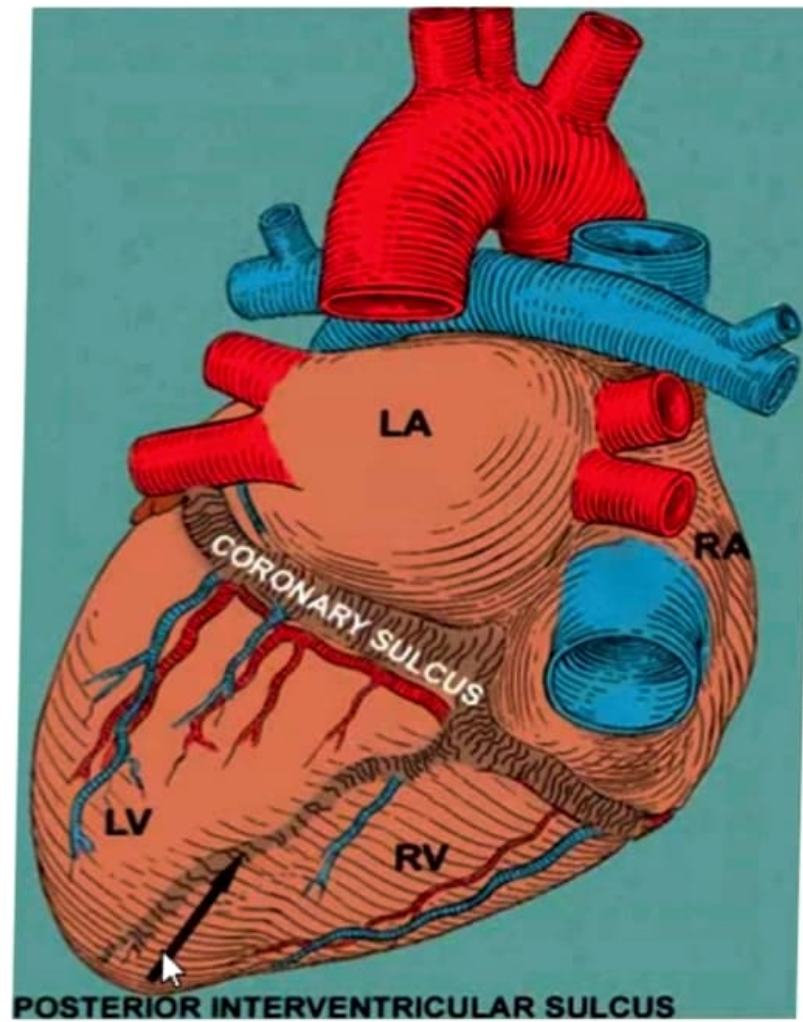
- Borders –Sup, inf, rt, lt
- Surfaces - anterior
inferior
left



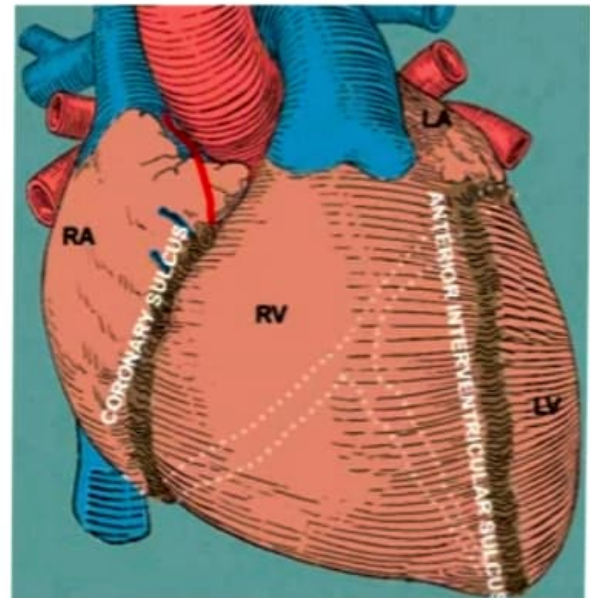
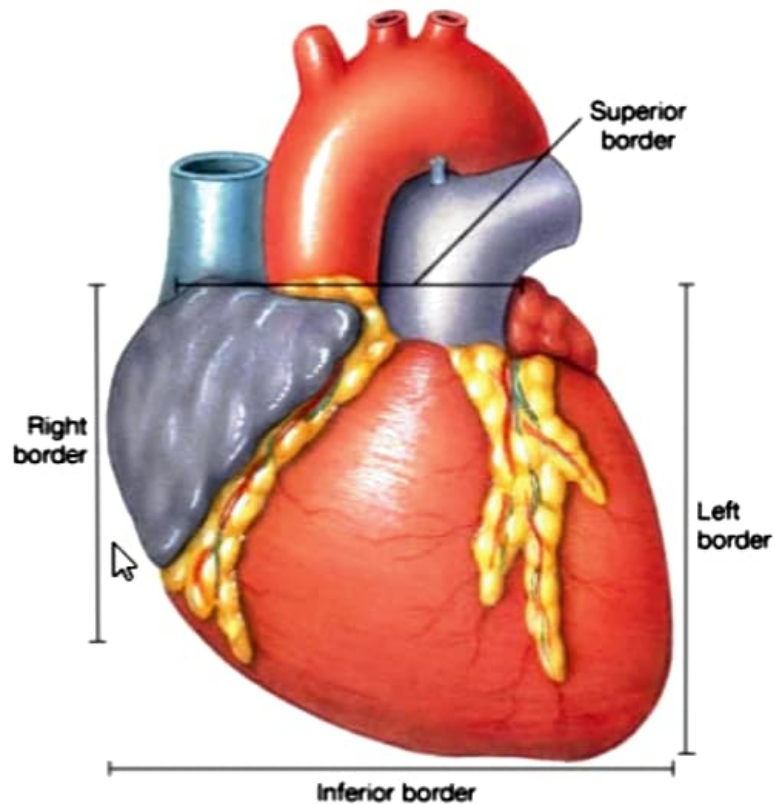
APEX



BASE

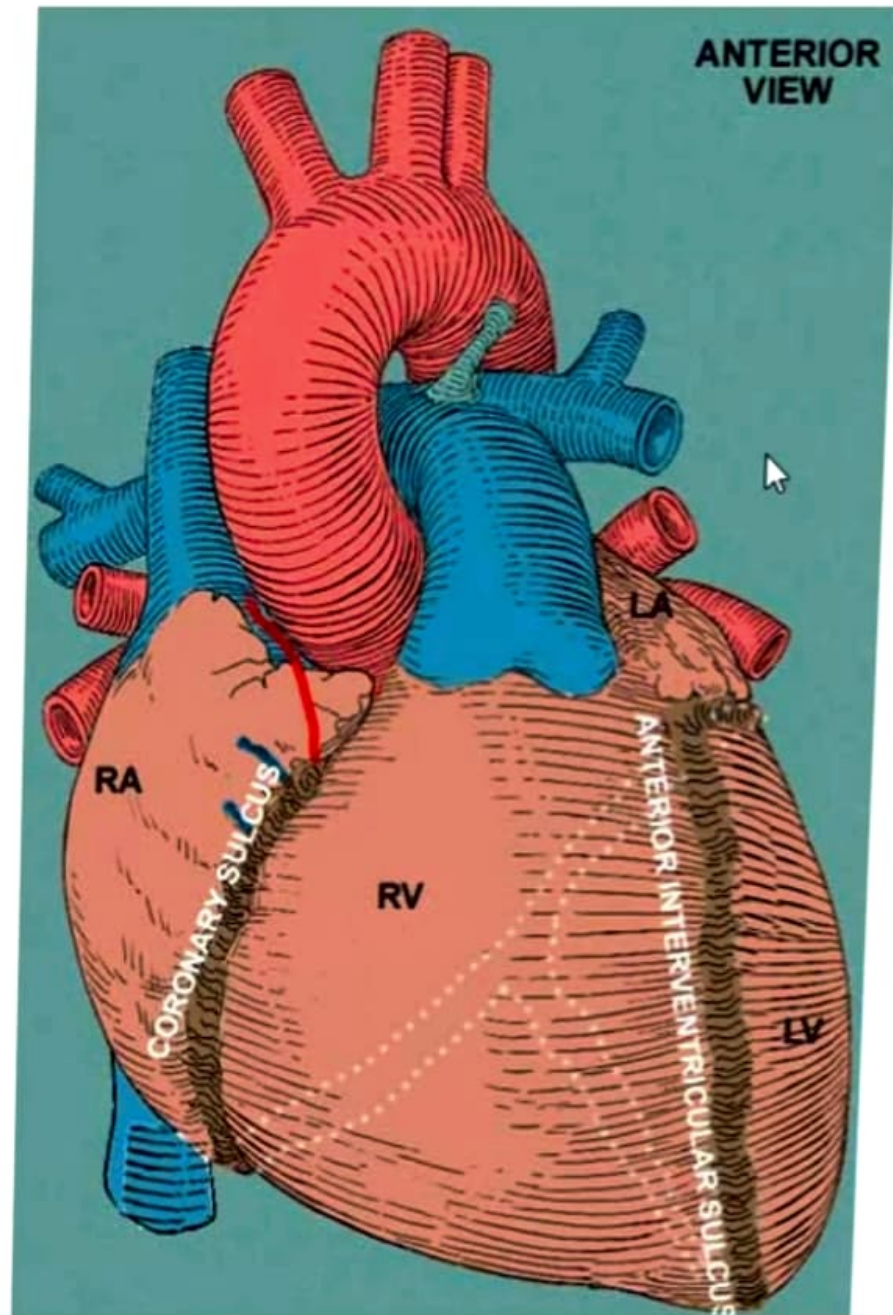


BORDERS OF HEART



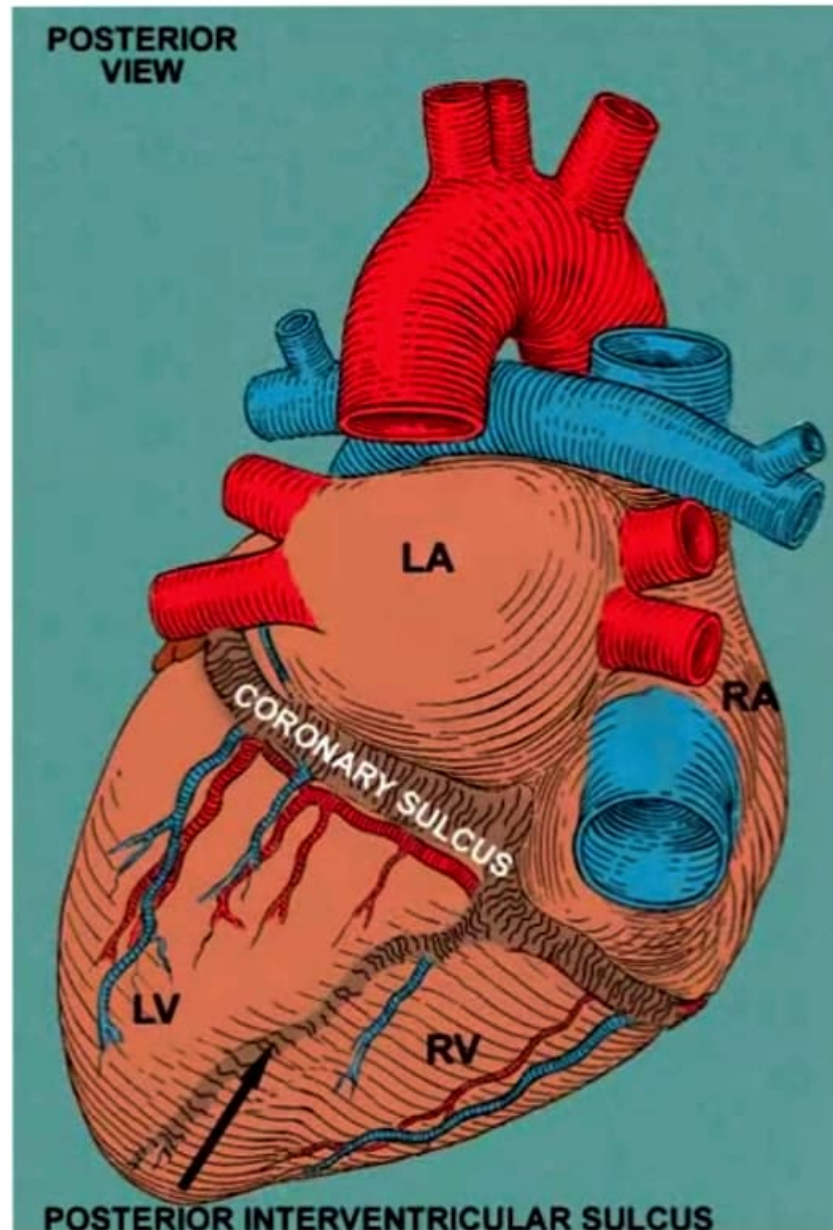
SURFACES OF HEART

- **Anterior /
Sternocostal
surface**
- **Left surface**
LV, Left auricle



SURFACES OF HEART

**Inferior /
Diaphragmatic
surface**



CORONARY CIRCULATION

- CONSIST OF

- 1) Arterial supply

- 2) Venous drainage





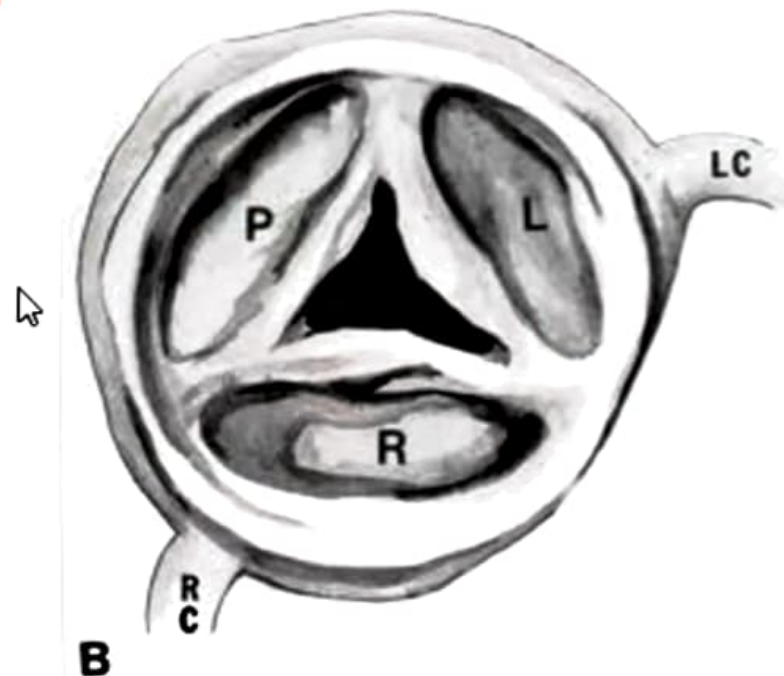
Coronary artery

- Coronary artery is a vasa vasorum that supplies the heart.
- Anatomically not end arteries but functionally.

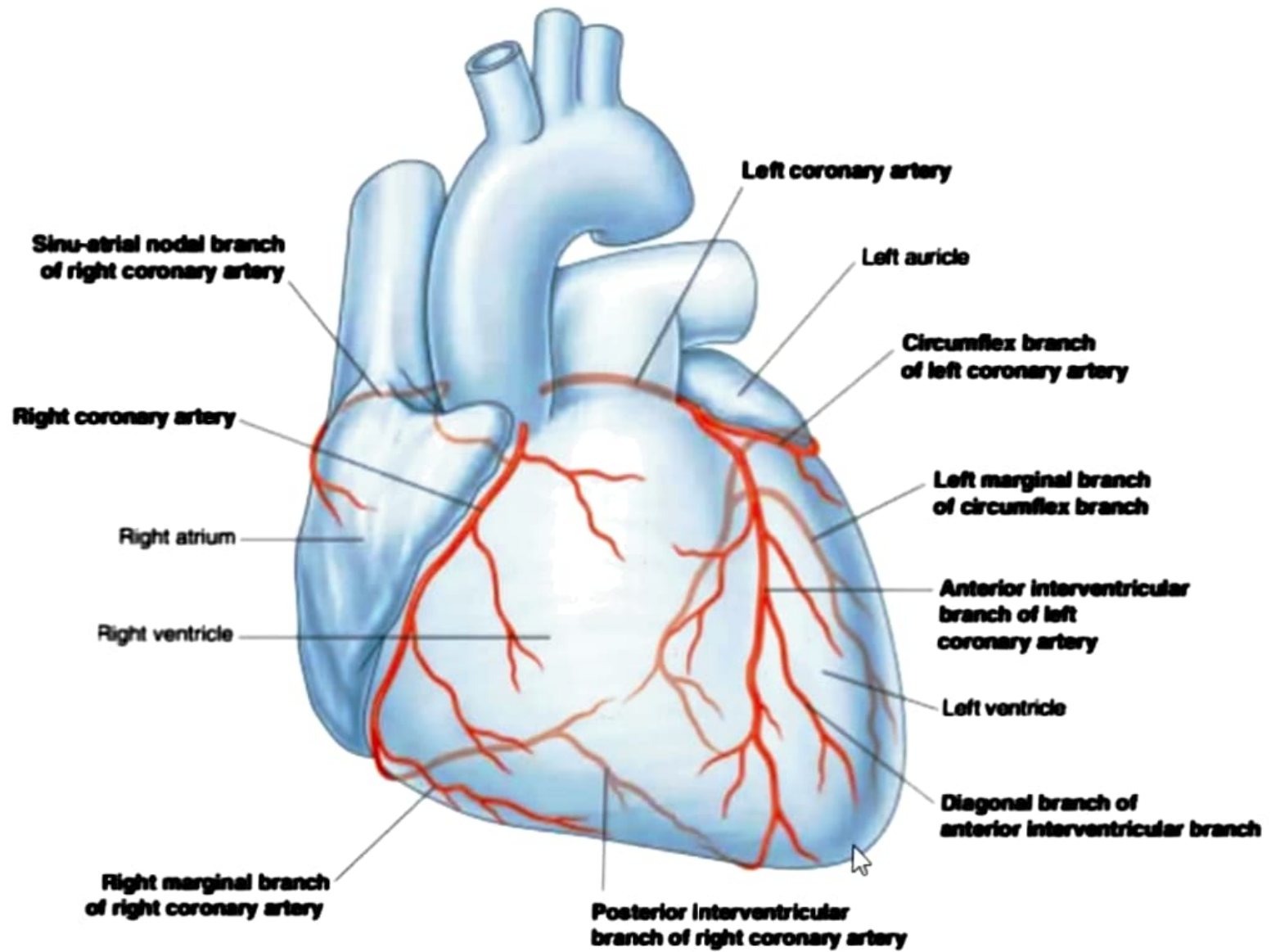


CORONARY CIRCULATION

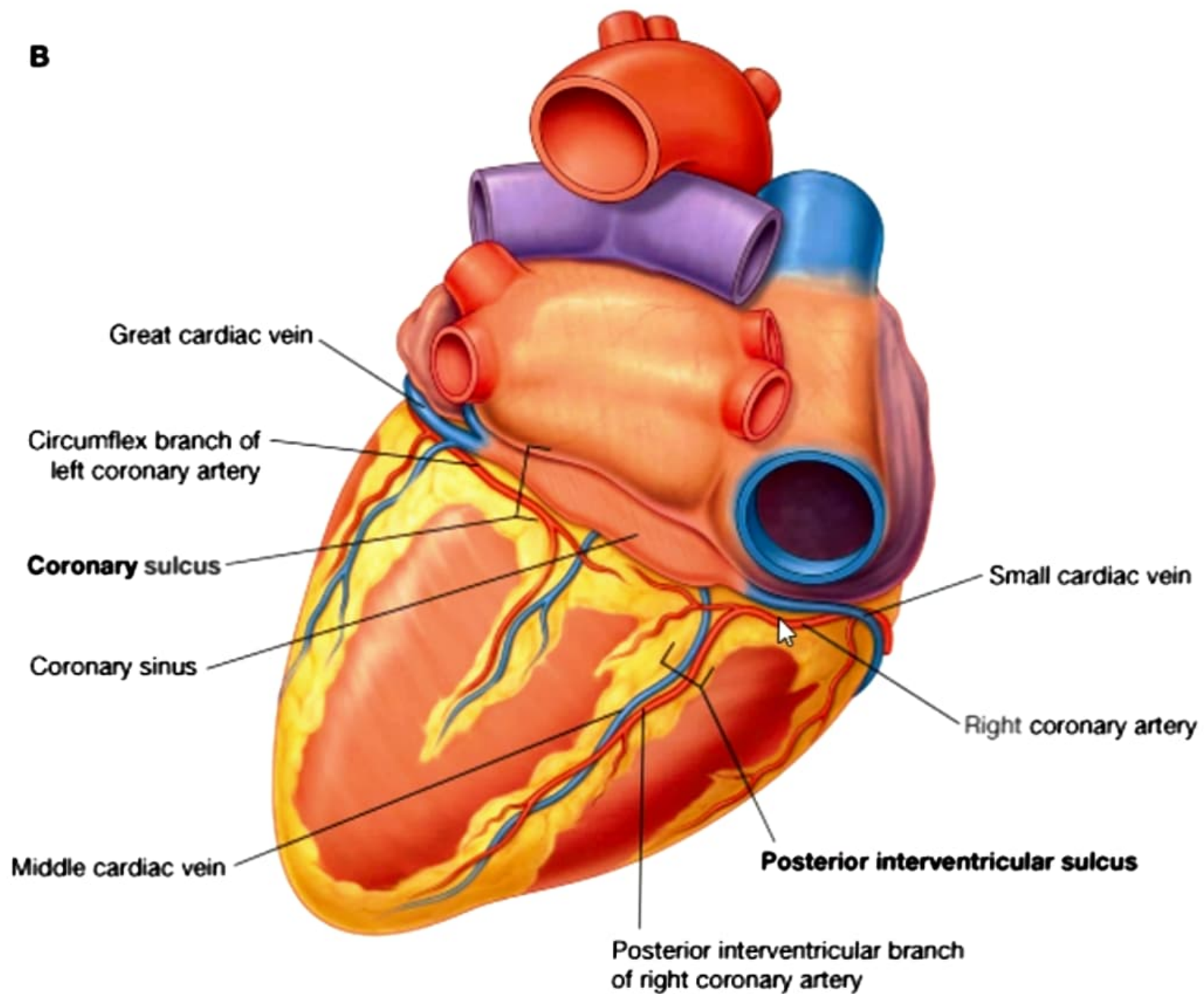
- Heart is supplied by TWO CORONARY arteries:
 - 1- Right coronary artery---(RCA)- anterior aortic sinus
 - 2- Left coronary artery---(LCA)- left post. aortic sinus
- These coronary arteries arise from aortic sinuses at the root of the **Ascending aorta**.



Right coronary artery



B



Branches

1.SA NODAL A-

2. ATRIAL BR.

Anterior, posterior & lateral

3. RT CONUS A

4. VENTRICULAR BR- Anterior & posterior

5. RT MARGINAL

6.POST INTERVENTRICULAR BR-

Septal br – post. part of interventricular septum & AV Node

Area of distribution

RT CORONARY ARTERY----

1)Right atrium

2)Ventricles

i) greater part of rt. Ventricle except the area adjoining the anterior IV groove.

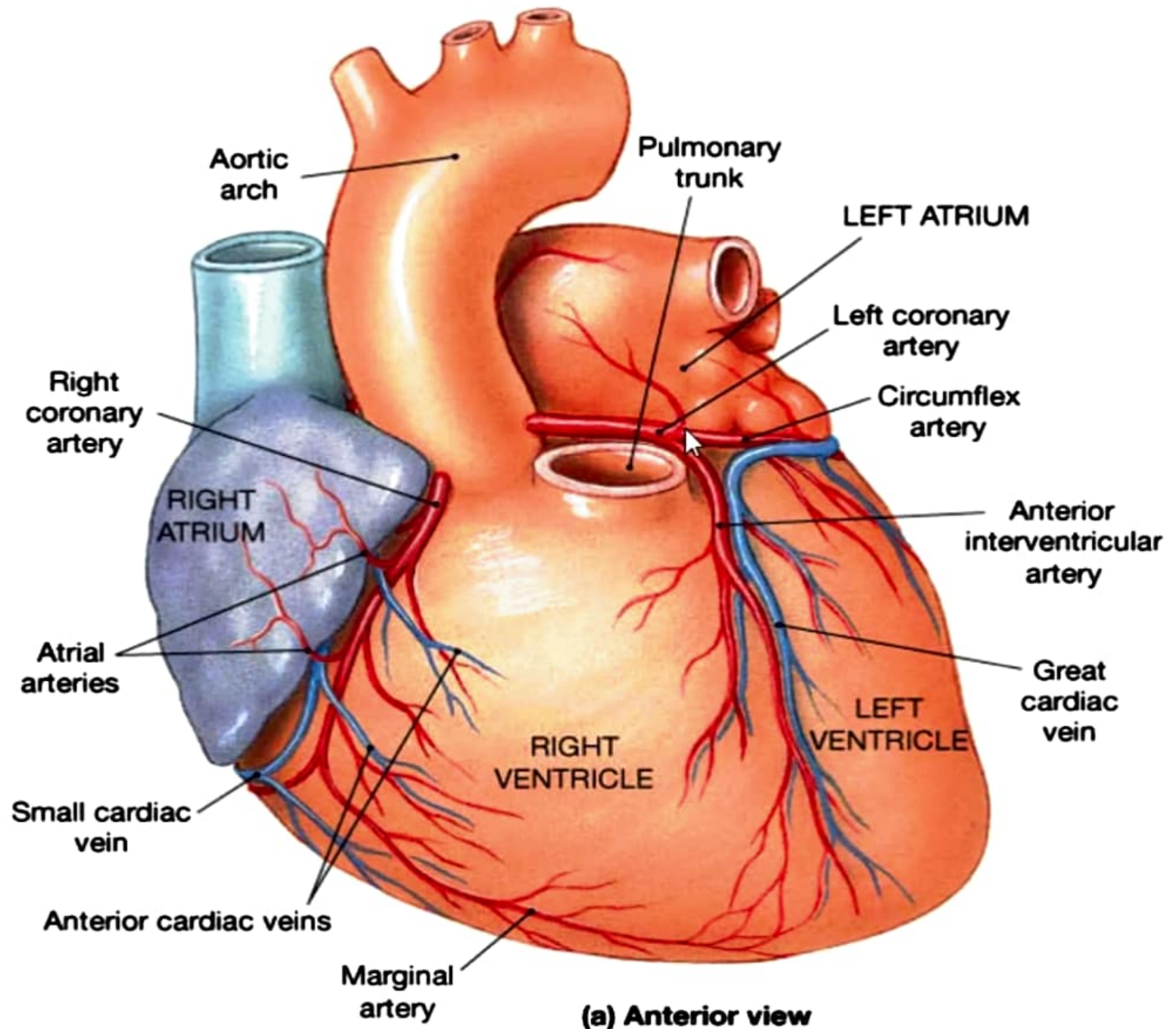
ii) a small part of the lt ventricle & adjoining posterior IV groove.

3)Posterior part of the IV septum

4)Whole of the conducting system of the heart, except part of the left br of AV bundle

left coronary artery





Left coronary artery

LAD

Circumflex artery

Diagonal artery

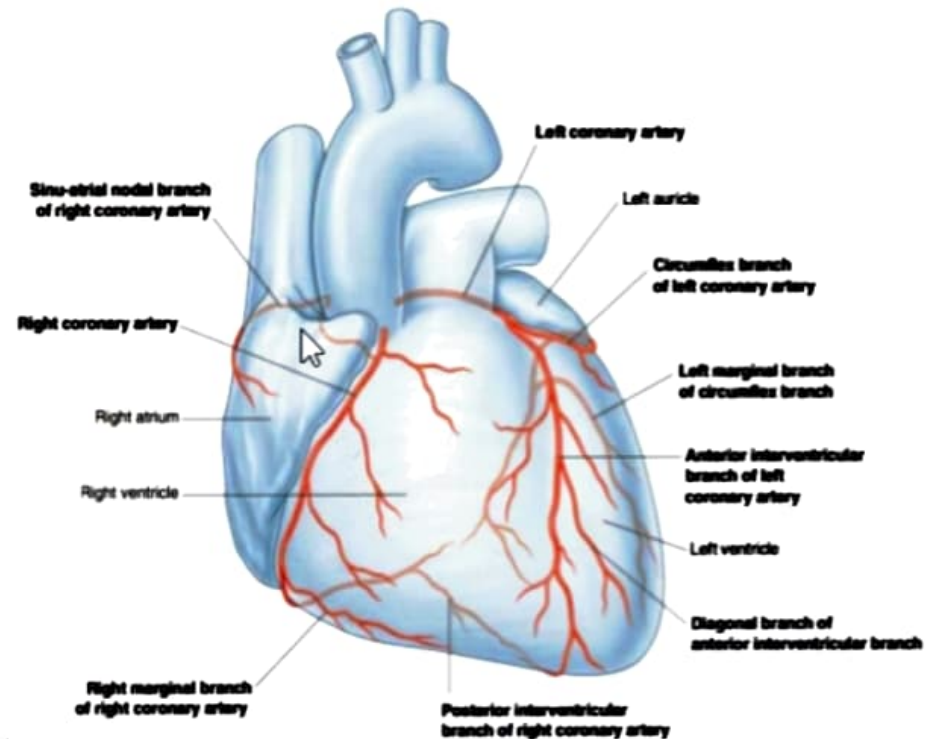
Lt marginal branches

Lt Conus artery

Ventricular branches

Anterior Septal br

Atrial rami



A

Area of distribution

LEFT CORONARY ARTERY

- 1) Left atrium.
- 2) Ventricles
 - i) Greater part of the left ventricle, except the area adjoining the posterior IV groove.
 - ii) A small part of the right ventricle adjoining the anterior IV groove.
- 3) Anterior part of the IV septum.
- 4) A part of the left br. Of the AV bundle.

VENOUS DRAINAGE OF THE HEART

- The venous drainage of the heart is by three means:
 - Coronary sinus.
 - Anterior cardiac veins
 - Venae Cordis minimae.

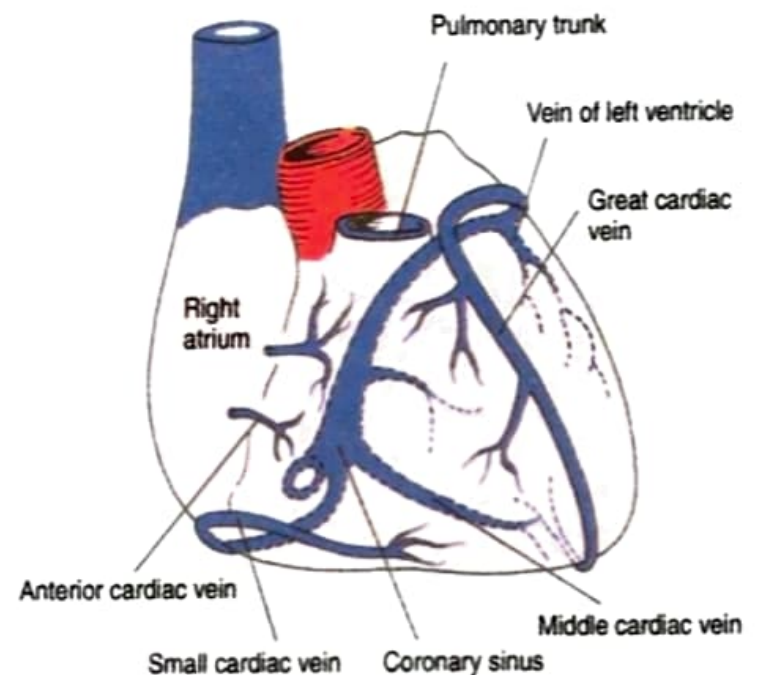
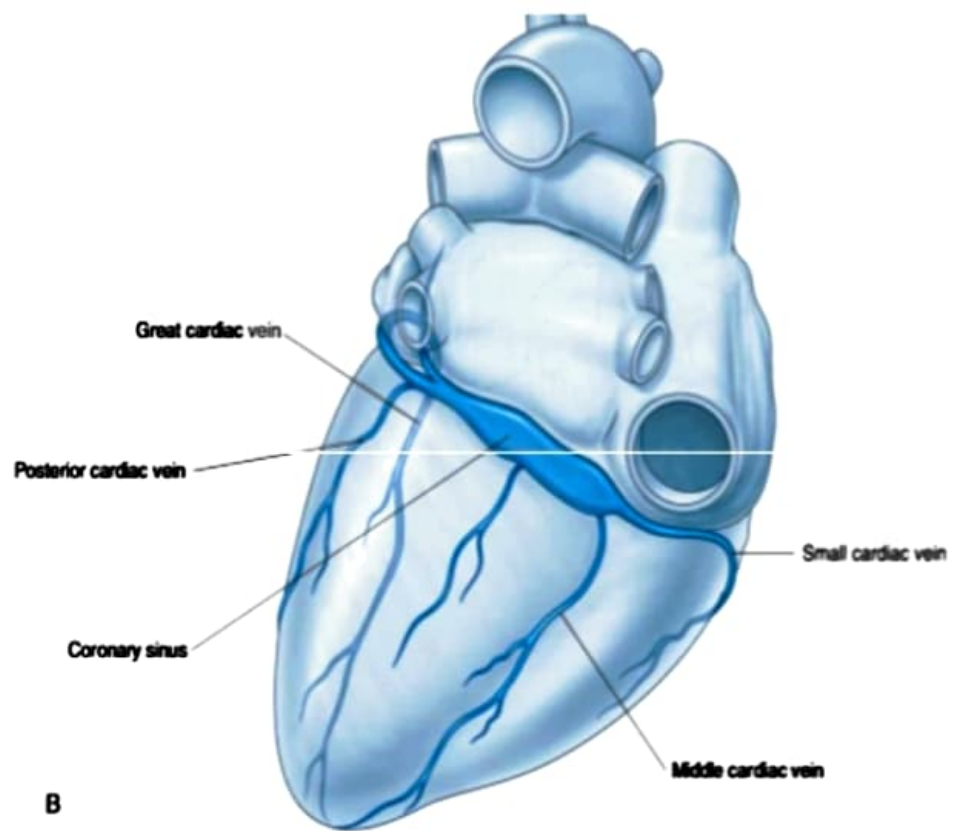
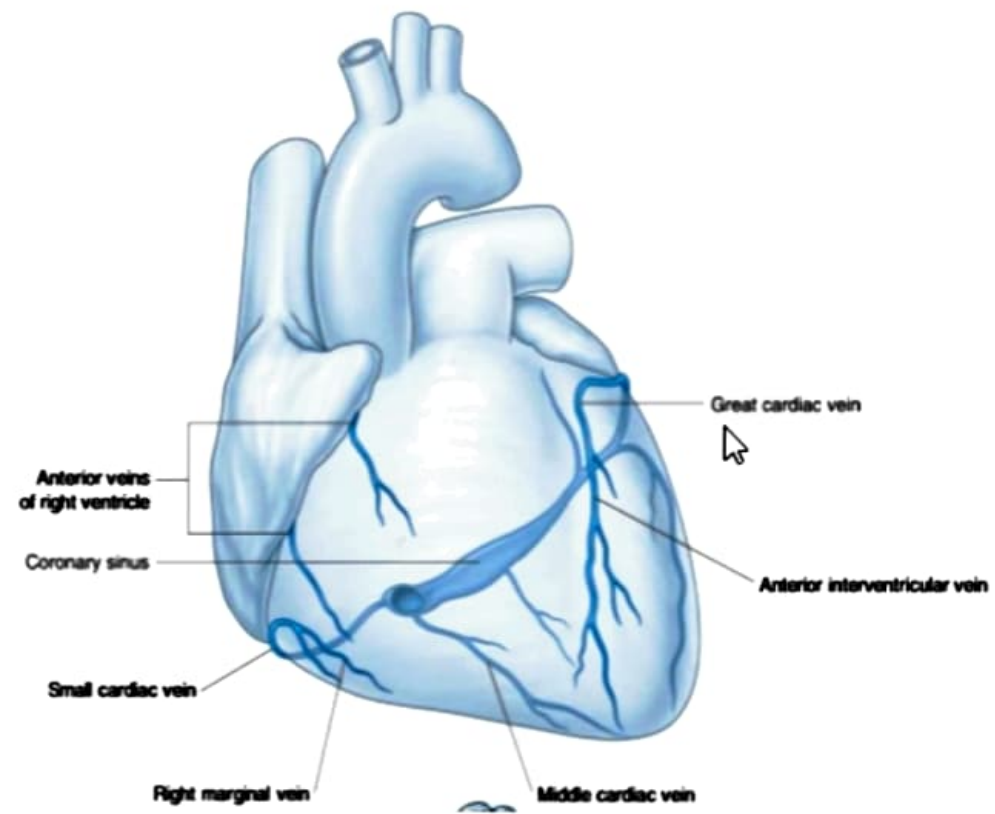



Fig. 18.22: Veins of the heart.

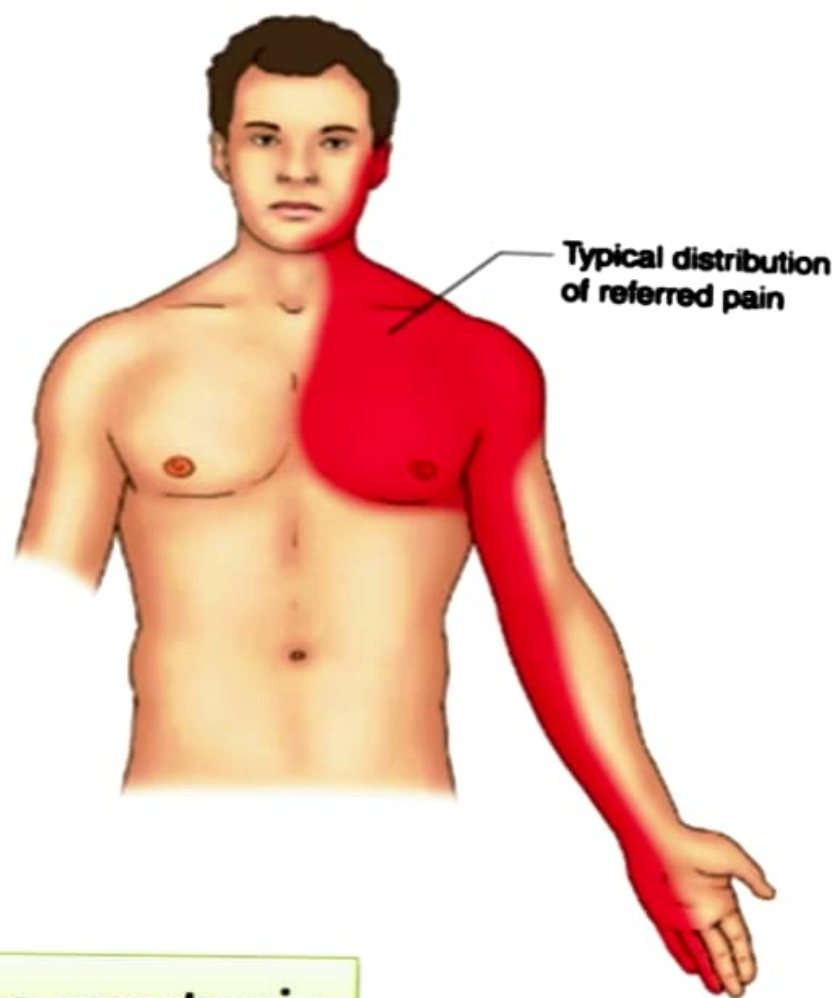


- Great cardiac V
- Middle cardiac V
- Small cardiac V
- Right marginal V
- Oblique V of left atrium

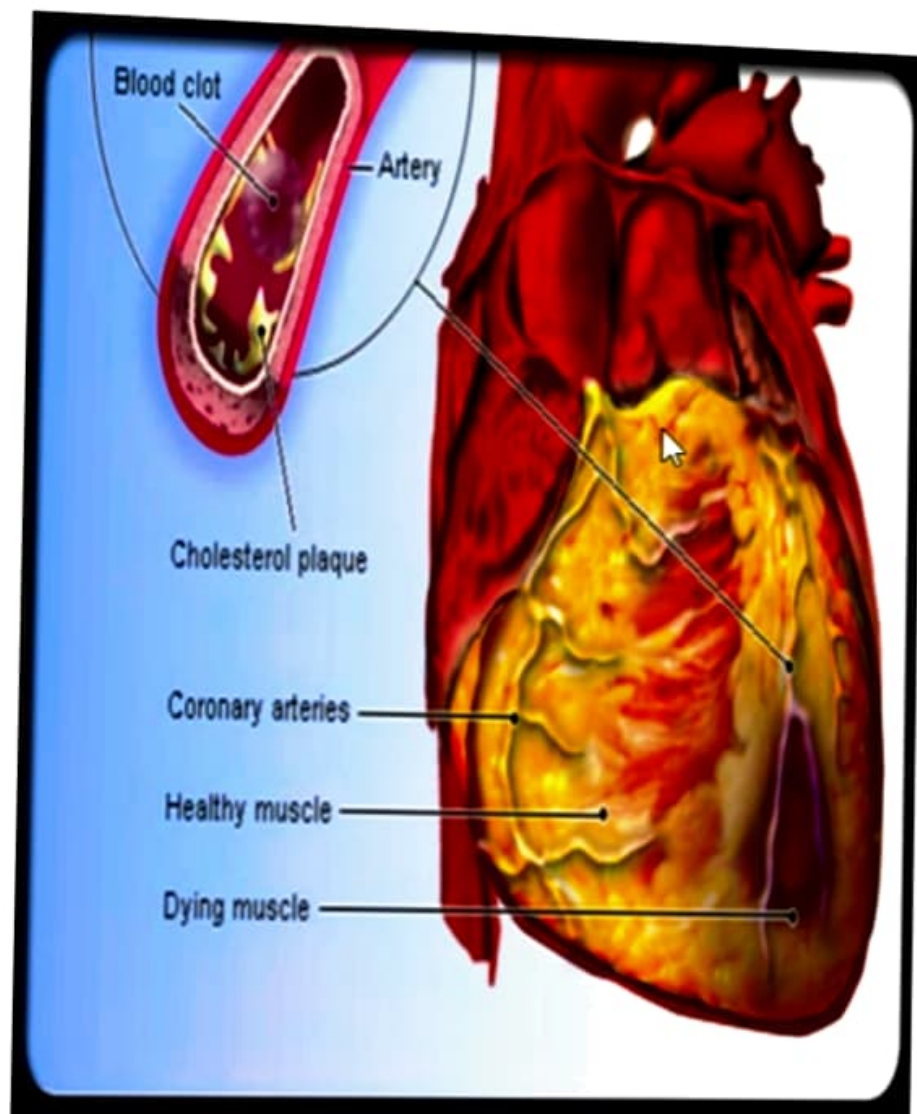


Drains into
coronary sinus
which opens into
right atrium

- Anterior cardiac V
- Venae cordis minimi

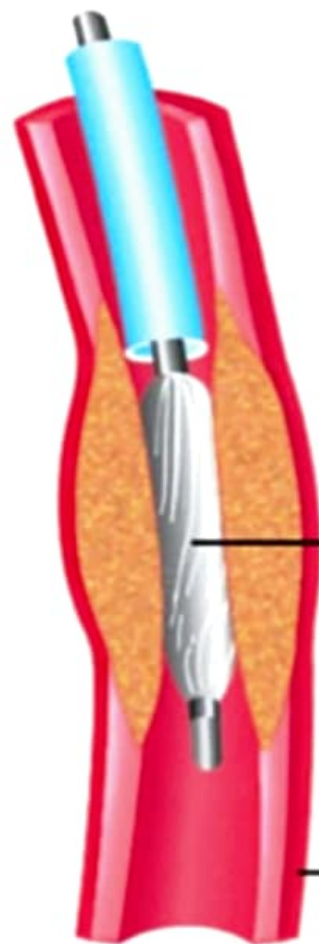


Angina pectoris





a. Artery is closed.



b. Balloon is released.



c. Balloon is inflated.

Angioplasty