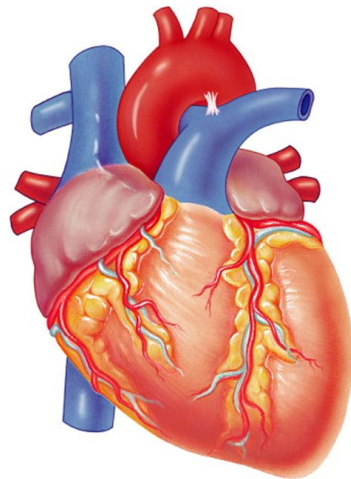


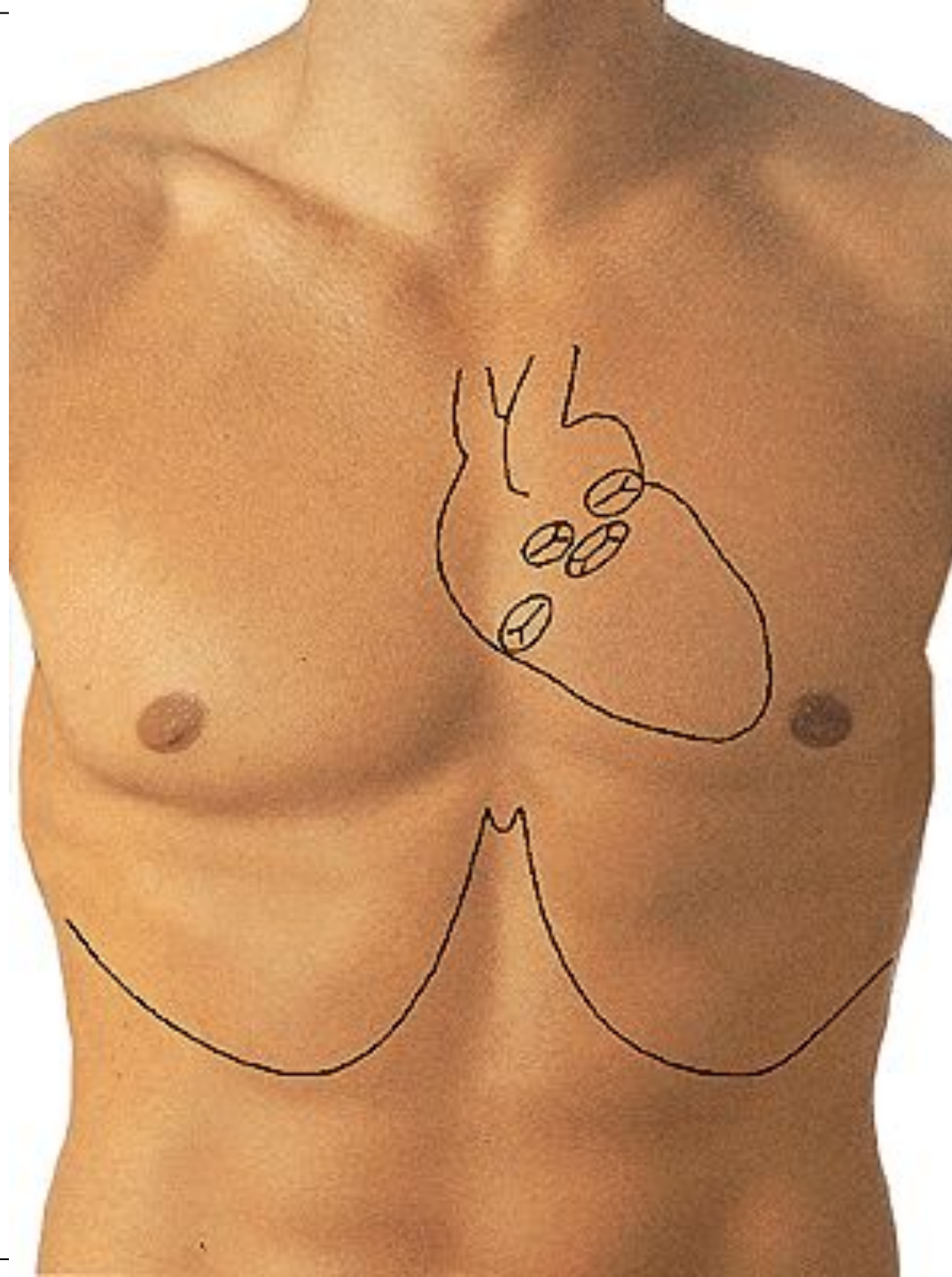
Anatomy of the heart

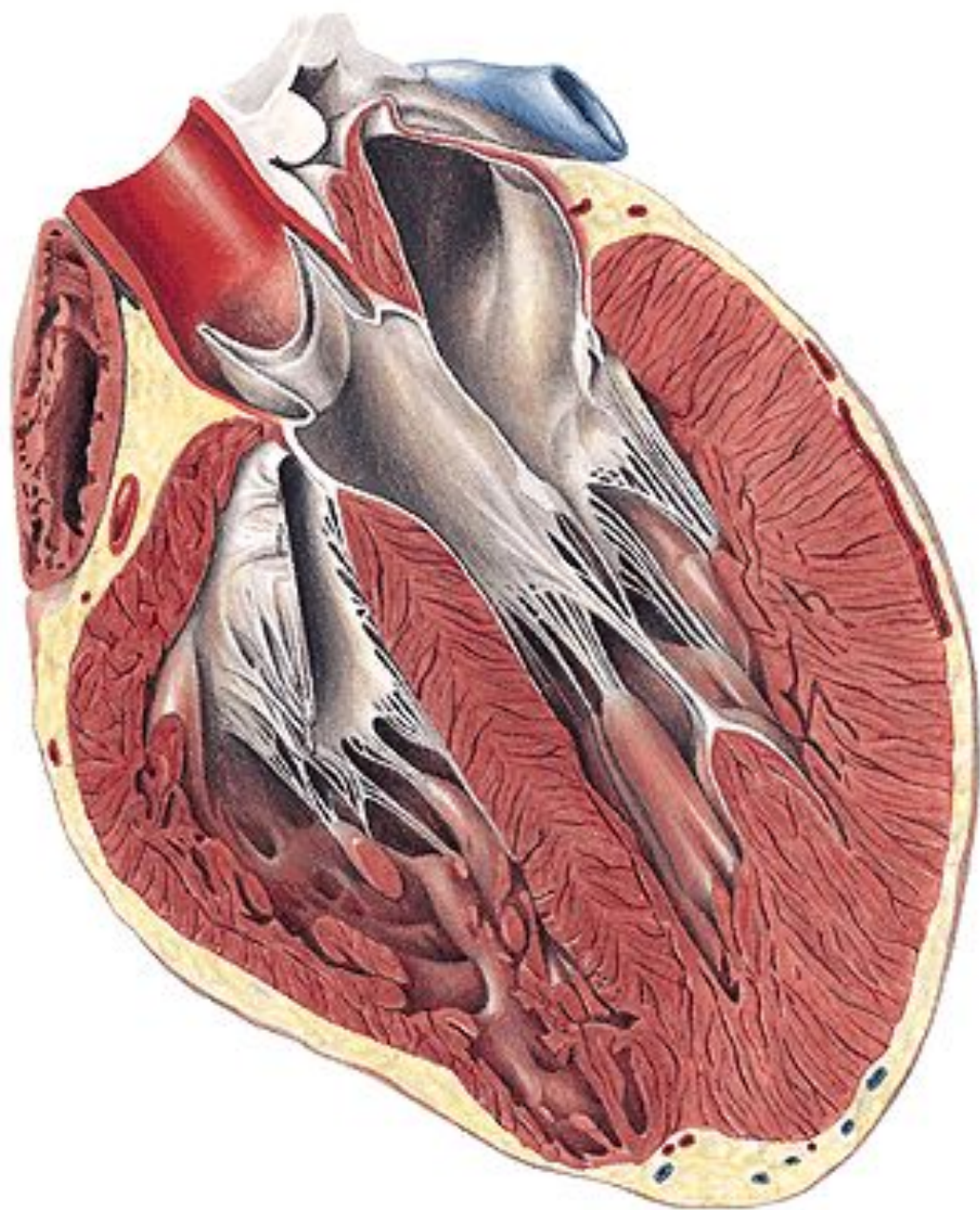


work was made by Imangali Maira

Plan:

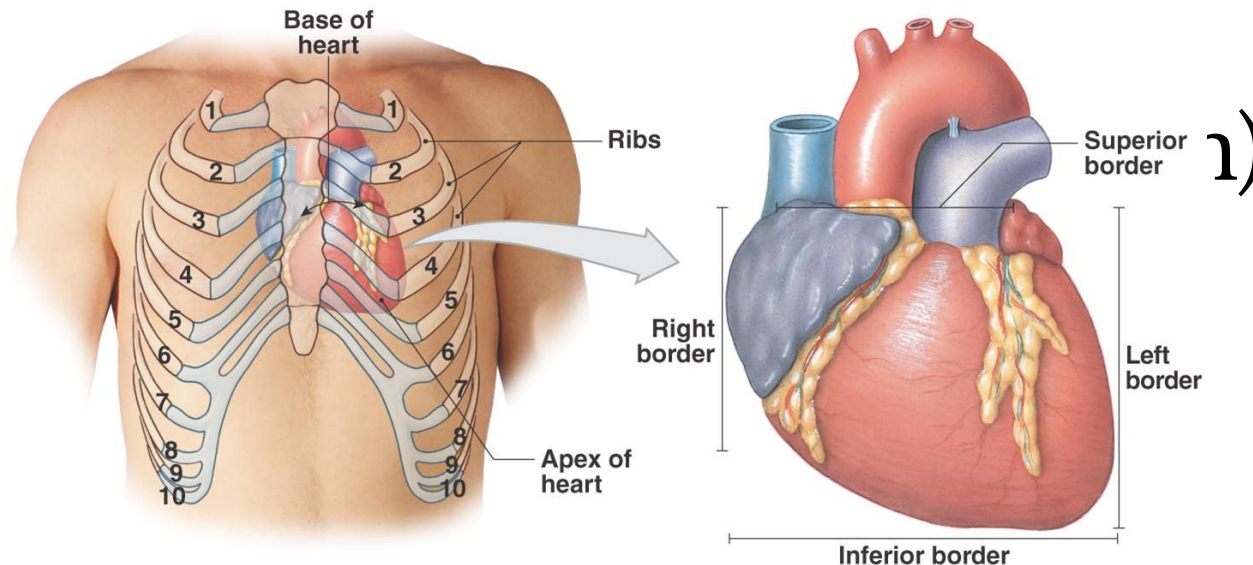
- **Size, Location, and Orientation**
- **Coverings**
- **Heart Wall**
- **Chambers**
- **Chest x ray**





Heart Anatomy

- **Size, Location, and Orientation**
- Enclosed in the mediastinum
- Base (posterior superior



Heart Anatomy

- **Coverings**

- Pericardium

- protects the heart
- anchors the heart to surrounding structures such as the diaphragm and the great vessels
- prevents overfilling of the heart with blood

Heart Anatomy

- **Coverings**

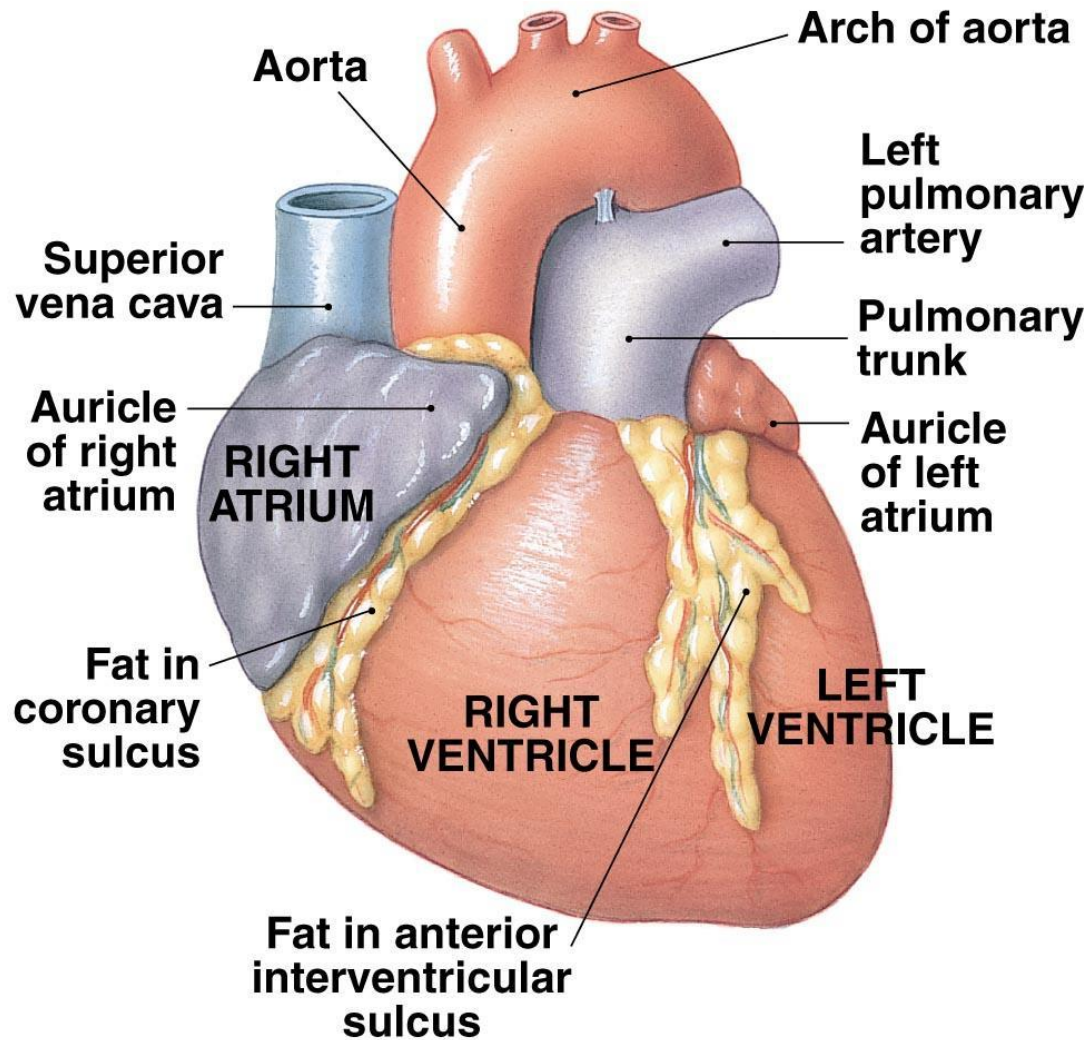
- pericardial cavity contains a film of serous fluid
- pericarditis: inflammation of the pericardium which may lead to adhesions between the layers or the buildup of fluid in the pericardial cavity (cardiac tamponade)

Heart Anatomy

- **Heart Wall**
 - Epicardium
 - Myocardium
 - bulk of the heart consisting mainly of cardiac muscle

Heart Anatomy

- **Heart Wall**
 - Endocardium
 - simple squamous epithelium and a thin CT layer that lines the heart chambers and valves and is continuous with the endothelial lining of the blood vessels



(a) Anterior surface (1 of 2)

Heart Anatomy

- Chambers

- Atria

- Features

- small, thin-walled chambers

- Functions

- receiving chambers for blood returning to the heart from the circulation

- push the blood into the adjacent ventricles.

Heart Anatomy

- Chambers

- Atria

- Receive blood from

- right side

- ❖ Superior and Inferior Vena Cava

- ❖ Coronary Sinus (draining the myocardium)

- left side

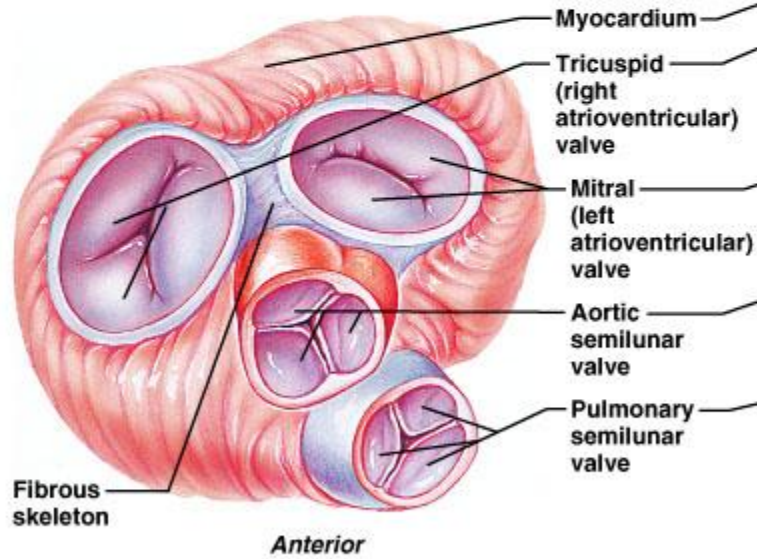
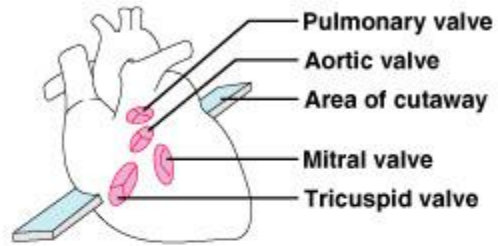
- ❖ Pulmonary Veins

Heart Anatomy

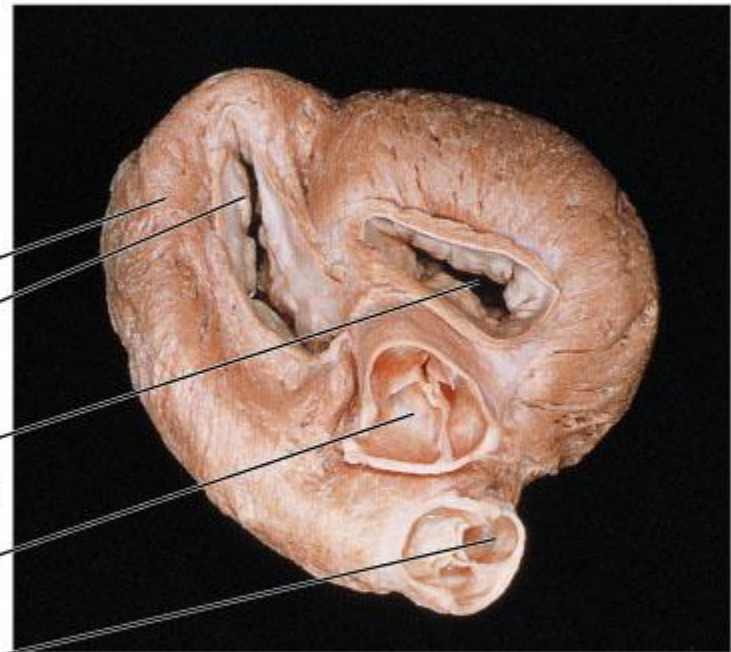
- Chambers
 - Ventricles
 - Features
 - make up most of the mass of the heart
 - the walls of the left ventricle are 3X thicker than those of the right

Heart Anatomy

- **Chambers**
- **Ventricles**
- **Functions**
 - discharging chambers of the heart
 - propel blood to Pulmonary Trunk (right ventricle), Aorta (left ventricle)



(a)



(b)

CXR
(chest x ray)



Normal male



Normal female

List of bibliographies:

<http://www.innerbody.com/image/card01.html>

<http://www.texasheartinstitute.org/HIC/Anatomy/anatomy2.cfm>

<http://www.cardioconsult.com/Anatomy/>