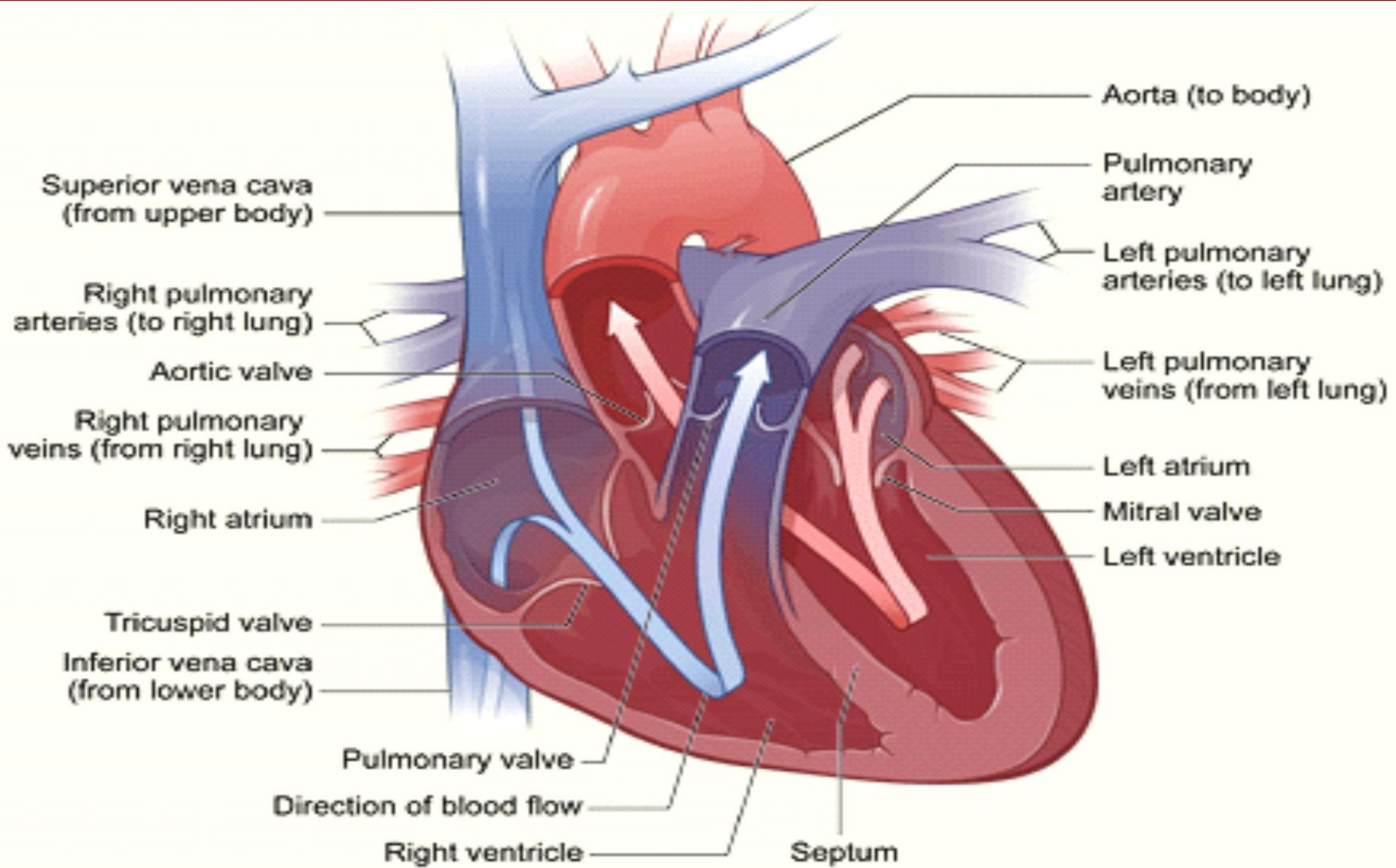


A pair of hands, one from the top and one from the bottom, are gently holding a large, textured red heart. The heart is the central focus of the image. The background is plain white.

CARDIAC DISEASES WITH PREGNANCY

Prof: Abdou Saeed

Normal heart



● Objectives:

- Incidence
- Types
- Hemodynamic changes in normal pregnancy.
- Symptoms & signs of normal pregnancy may mimic heart diseases.
- Effect of pregnancy on heart diseases
- Effects of heart diseases on pregnancy.
- Management of pregnant cardiac patient.
- Patients with prosthetic valve
- Patients with peripartum cardiomyopathy.

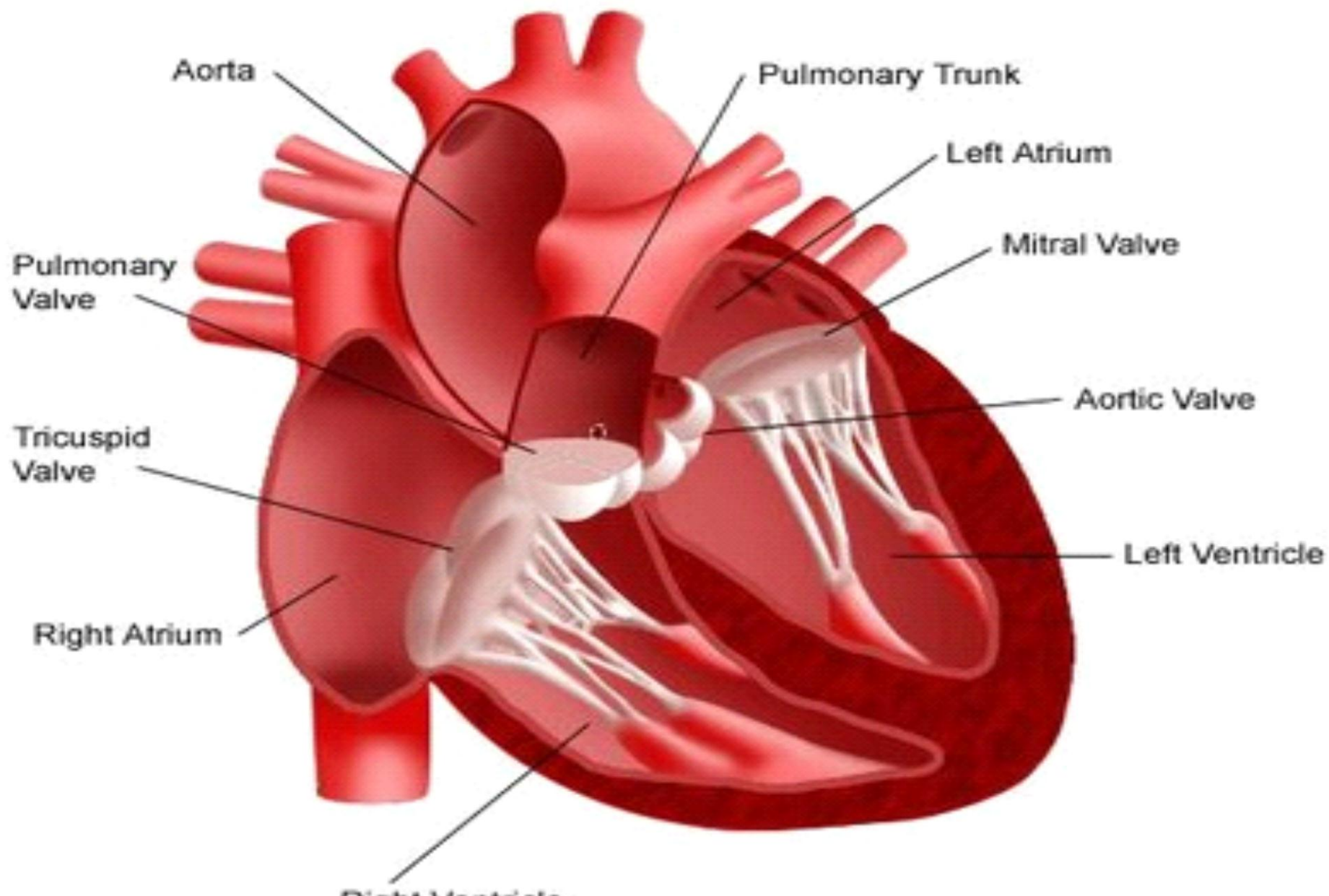
● Incidence:

- Range from 0.1-4%
- Overall incidence is about 1%
- Hospital statistics in industrialized countries have shown ↓ in the incidence from 0.9% to 0.3%.
- Sharp decline in the incidence of rheumatic heart disease.
- ↑ survival of patients with congenital heart disease to reproductive age.

- **Types:**

- **Rheumatic heart disease:** → 90% of cases (MS is the commonest).
- **Congenital heart disease:** → 5% of cases.
- **Others:** hypertensive heart disease, coronary heart disease, thyrotoxic heart disease and cardiomyopathy → 5%

Valves of the Heart



- **Haemodynamic changes:**

- A- During pregnancy:

- ↑ blood volume 30-50% by 20-24 weeks
- ↑ COP 30-50% by 32 weeks
- ↓ PVR
- ↓ blood pressure (mid trimester)
- ↓ plasma & interstitial colloid pressure.

- B- Intrapartum cardiovascular changes:

- First stage
- Second stage

- C-Postpartum cardiovascular changes:

- Immediately
- Few days later
- Later

Symptomes & signs of normal pregnancy that may mimic heart disease:

1-Symptomes

2- Signs

3-Auscultatory findings.

4- X-ray chest.

5- ECG



Hb 15.8
28-5-58

Tyr 6*

A



● **Effect of pregnancy on heart disease:**

- **1- Congestive heart failure**
- ↑ danger of decompensation
- A- 28-32 weeks
- B- 1st and 2nd stage of labour
- C- Immediately postpartum
- D- 45 days postpartum

- **2-Pulmonary oedema**

- **3-Maternal mortality**

- Statistics have demonstrated a decline in maternal mortality from cardiac disease since 1950 from 5.6 to 3 per 100000 births.

- **Effects of heart disease on pregnancy:**

- 1- **Fetal morbidity**

 - Prematurity

 - IUGR

 - Congenital heart disease

- 2- **Fetal deaths (20%)**

- **Management (Obstetrician & Cardiologist)**

- 1-Preconceptional counseling

- Contraindications to pregnancy

 - Absolute

 - Relative

- 2-Antepartum management

 - History(NYHA classification)

 - Examination

 - Investigations

 - TTT

 - Indication for termination

- 3-Intrapartum management
 - First stage
 - second stage
 - Third stage
- 4-Postpartum management

- -Treatment of congestive heart failure

- -Treatment of pulmonary edema

- Management of pregnant patient with prosthetic valve

- Pregnancy outcome depends on:

- 1-Type of valve

- 2-Site & number of valve

- 3-Functional capacity of the valve (NYHA)

- Anticoagulant therapy

- 1-Warfarin

- 2-Heparin

Peripartum cardiomyopathy

- **Definition:** It is a rare form of CHF that is intimately related to pregnancy
- **Incidence:**
 - 1/4000-5000 live births
 - 20-35 years
- **Etiology:** Idiopathic
- **Clinical pictures**
- **Complications**
- **TTT**
- **Prognosis**