

Overview of Cardiac (Heart) Diseases

1. Coronary Artery Disease (CAD)

Caused by narrowed or blocked coronary arteries due to atherosclerosis.

Examples:

- Angina Pectoris - chest pain due to reduced blood flow.
- Myocardial Infarction (Heart Attack) - complete blockage of coronary artery.

2. Arrhythmias (Abnormal Heart Rhythms)

Problems with the heart's electrical system.

Examples:

- Atrial Fibrillation (AFib) - irregular and often rapid heartbeat.
- Ventricular Tachycardia - fast heart rate from the ventricles.
- Bradycardia - abnormally slow heartbeat.
- Heart Block - interruption of electrical signals.

3. Cardiomyopathy (Disease of Heart Muscle)

Changes in the heart muscle that affect its ability to pump blood.

Types:

- Dilated Cardiomyopathy - enlarged and weakened heart chambers.
- Hypertrophic Cardiomyopathy - thickened heart muscle, often genetic.
- Restrictive Cardiomyopathy - stiff heart muscle, limited filling.

4. Heart Valve Diseases

Problems with one or more of the heart valves.

Examples:

- Mitral Valve Prolapse
- Aortic Stenosis
- Mitral or Tricuspid Regurgitation
- Endocarditis - infection of heart valves.

5. Heart Failure (Congestive Heart Failure)

The heart cannot pump blood effectively.

Can be due to CAD, hypertension, or cardiomyopathy.

6. Congenital Heart Diseases

Structural problems present at birth.

Examples:

- Atrial Septal Defect (ASD)
- Ventricular Septal Defect (VSD)
- Tetralogy of Fallot
- Patent Ductus Arteriosus (PDA)

7. Pericardial Diseases

Involve the pericardium (sac around the heart).

Examples:

- Pericarditis - inflammation of the pericardium.
- Pericardial Effusion - fluid around the heart.
- Cardiac Tamponade - compression due to excess fluid.

8. Aortic Diseases

Affect the aorta, the main artery from the heart.

Examples:

- Aortic Aneurysm
- Aortic Dissection

9. Hypertensive Heart Disease

Result of long-term high blood pressure.

Can lead to left ventricular hypertrophy, heart failure, arrhythmia.

10. Pulmonary Heart Disease (Cor Pulmonale)

Right heart failure due to lung disease or pulmonary hypertension.

11. Rheumatic Heart Disease

Caused by rheumatic fever (often from untreated strep throat).

Affects heart valves, often mitral valve.