

CORONARY ARTERY DISEASE

What is it?

Coronary artery disease (CAD) is a condition characterized by the narrowing or blockage of the coronary arteries due to atherosclerosis (build-up of fatty deposits or plaque). This reduces blood flow to the heart muscle and can lead to chest pain (angina), heart attacks, and other heart complications.

What causes it?

The primary cause of coronary artery disease is atherosclerosis, which results from factors like high cholesterol, high blood pressure, smoking, diabetes, sedentary lifestyle, and an unhealthy diet. These factors contribute to the build-up of plaque in the artery walls, leading to reduced blood flow.

What are the symptoms?

Symptoms of coronary artery disease include:

- Chest pain or discomfort (angina) that may feel like pressure, tightness, or heaviness.
- Shortness of breath, especially with physical exertion.
- Pain or discomfort in the neck, jaw, throat, upper abdomen, or back.
- Nausea or vomiting.
- Sweating.
- Fatigue.

What are the preventive measures?

Preventive measures include eating a heart-healthy diet, exercising, maintaining a healthy weight, quitting smoking, limiting alcohol, managing stress, and controlling blood pressure, cholesterol, and diabetes.

How is it diagnosed?

Diagnosis involves a physical exam, blood tests, ECG, echocardiogram, stress test, coronary angiography, and cardiac CT or MRI.

How is it treated?

- Medications to lower cholesterol, manage blood pressure, and reduce the risk of blood clots (e.g., statins, aspirin, beta-blockers).
- Lifestyle changes, including diet, exercise, and smoking cessation.
- Medical procedures such as angioplasty and stent placement to open blocked arteries.
- Coronary artery bypass grafting (CABG) surgery to create a new route for blood flow around blocked arteries.
- Cardiac rehabilitation programs to improve heart health and overall well-being.