

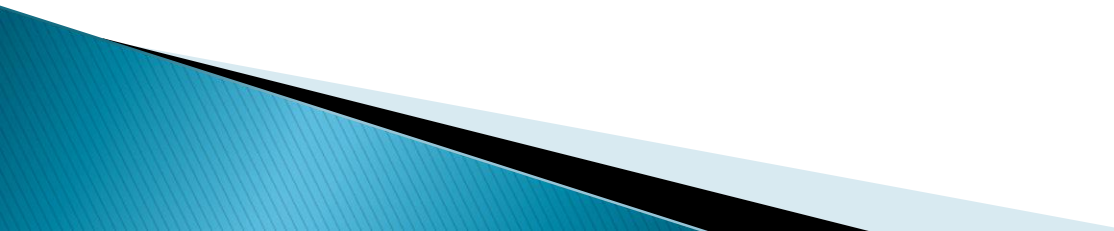
# Angina pectoris Myocardial infraction

Alaa Hamza

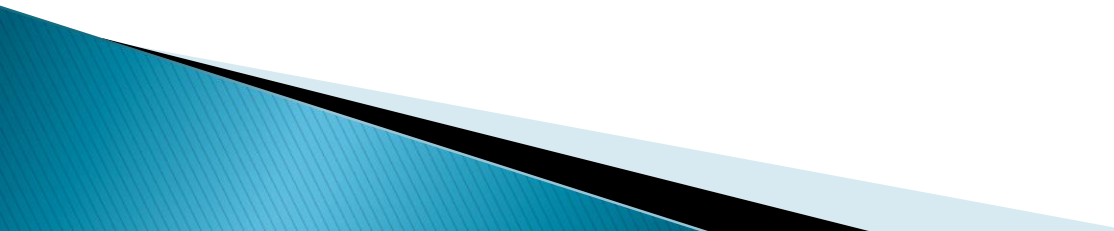


# Angina pectoris

**A narrowing of blood vessels to the coronary artery, results in inadequate blood flow through blood vessels of the heart muscle, causing chest pain. Pain can occur at rest or after exertion, excitement, or exposure to cold—due to increased oxygen demands or vasospasm. Usually relieved by rest.**



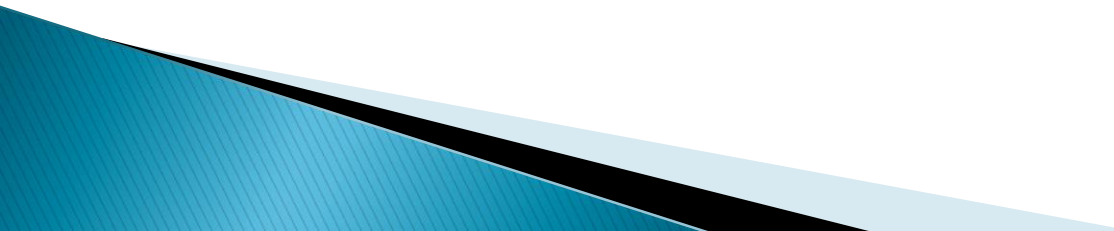
## There are three types of angina:

1. **Stable angina:** is chest pain or discomfort that occurs with exercise or emotional stress and is relieved by rest or nitroglycerin.
  2. **Unstable angina:** is chest pain or discomfort that occurs at rest or with exertion and causes severe activity limitation.
  3. **Variant angina :** is due to a coronary artery spasm, often occurring during periods of rest.
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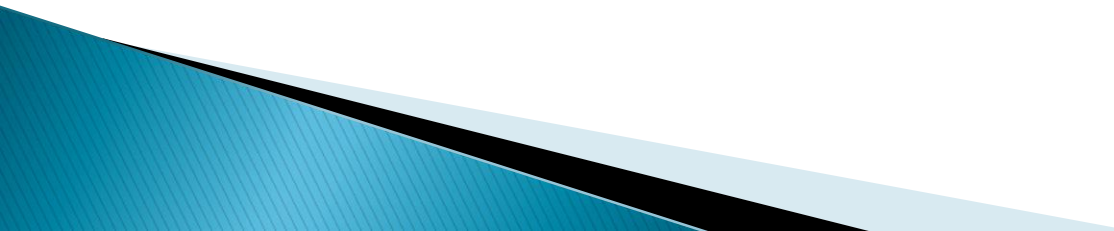
# Angina Types



## **Signs and Symptoms**

- 1. Pain may radiate to other parts of the body such as the jaw, back, or arms**
  - 2. Difficulty breathing, shortness of breath (dyspnea)**
  - 3. Sweating**
  - 4. Tachycardia**
  - 5. A feeling of weakness or numbness in the arms, wrists, and hands**
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## ***Nursing Care***

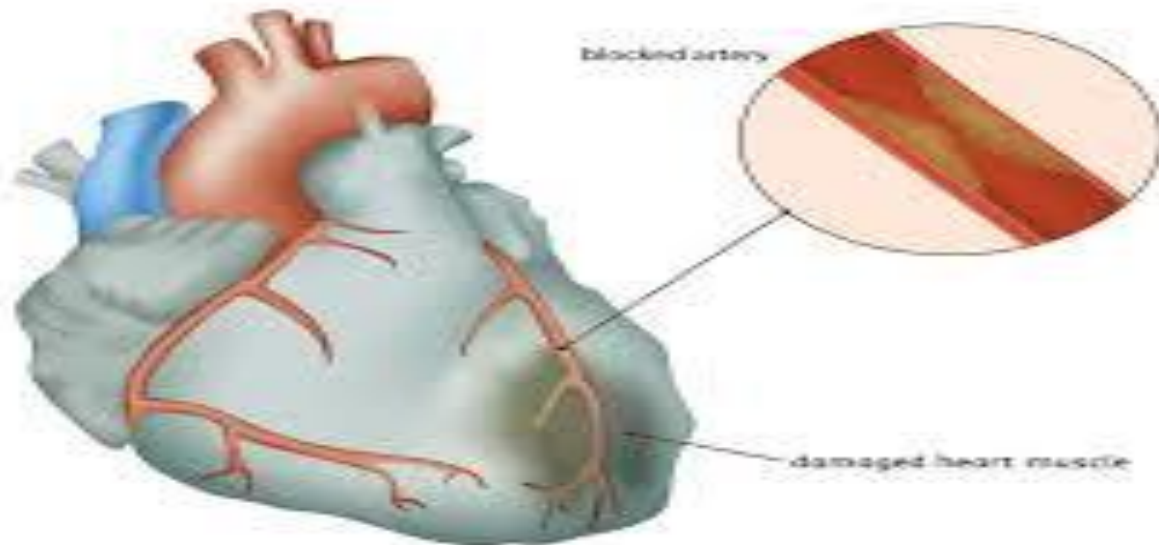
- ▶ **Monitor vital signs and cardiac rhythm**
  - ▶ **Administer supplemental oxygen as needed**
  - ▶ **Place patient at complete rest**
  - ▶ **Elevate head of bed if patient is short of breath**
  - ▶ **Maintain quiet, comfortable environment**
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# Myocardial infraction

Also known as a heart attack, occurs when blood flow decreases or stops to a part of the heart, causing damage to the heart muscle.

## Myocardial infarction



## Sign and Symptoms :

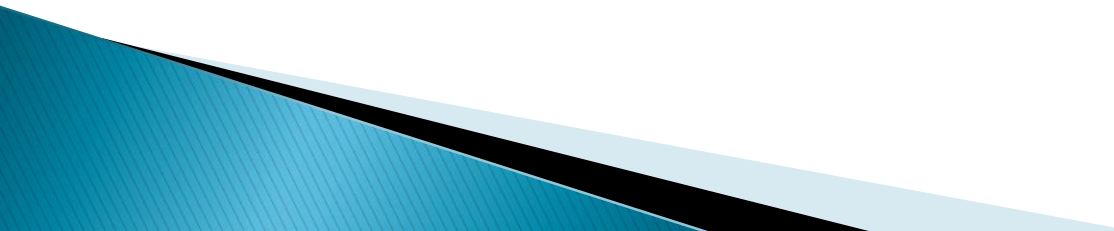
- ▶ Chest pain that is unrelieved by rest or nitroglycerin
- ▶ Pain that radiates to arms, jaw, back and/or neck
- ▶ *Shortness of breath*
- ▶ Nausea/ Vomiting
- ▶ Anxiety
- ▶ Cough
- ▶ Dizziness
- ▶ Fast heart rate
- ▶ Sweating
- ▶ Fatigue

# **Risk Factors for Coronary Artery Disease:**

## **Non modifiable Risk Factors**

- 1. Increasing age**
- 2. Gender**
- 3. Family history of CAD**
- 4. Race**

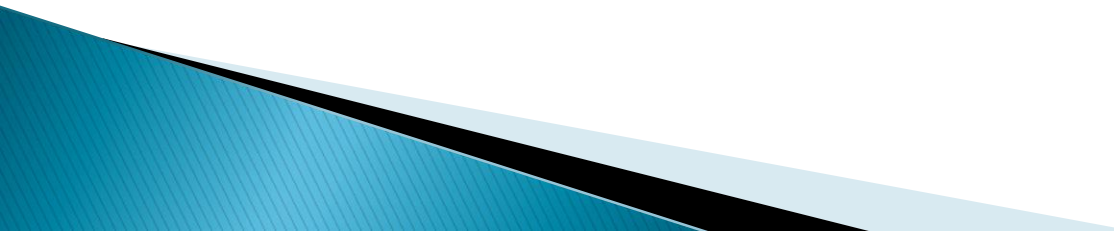
## **Modifiable Risk Factors**

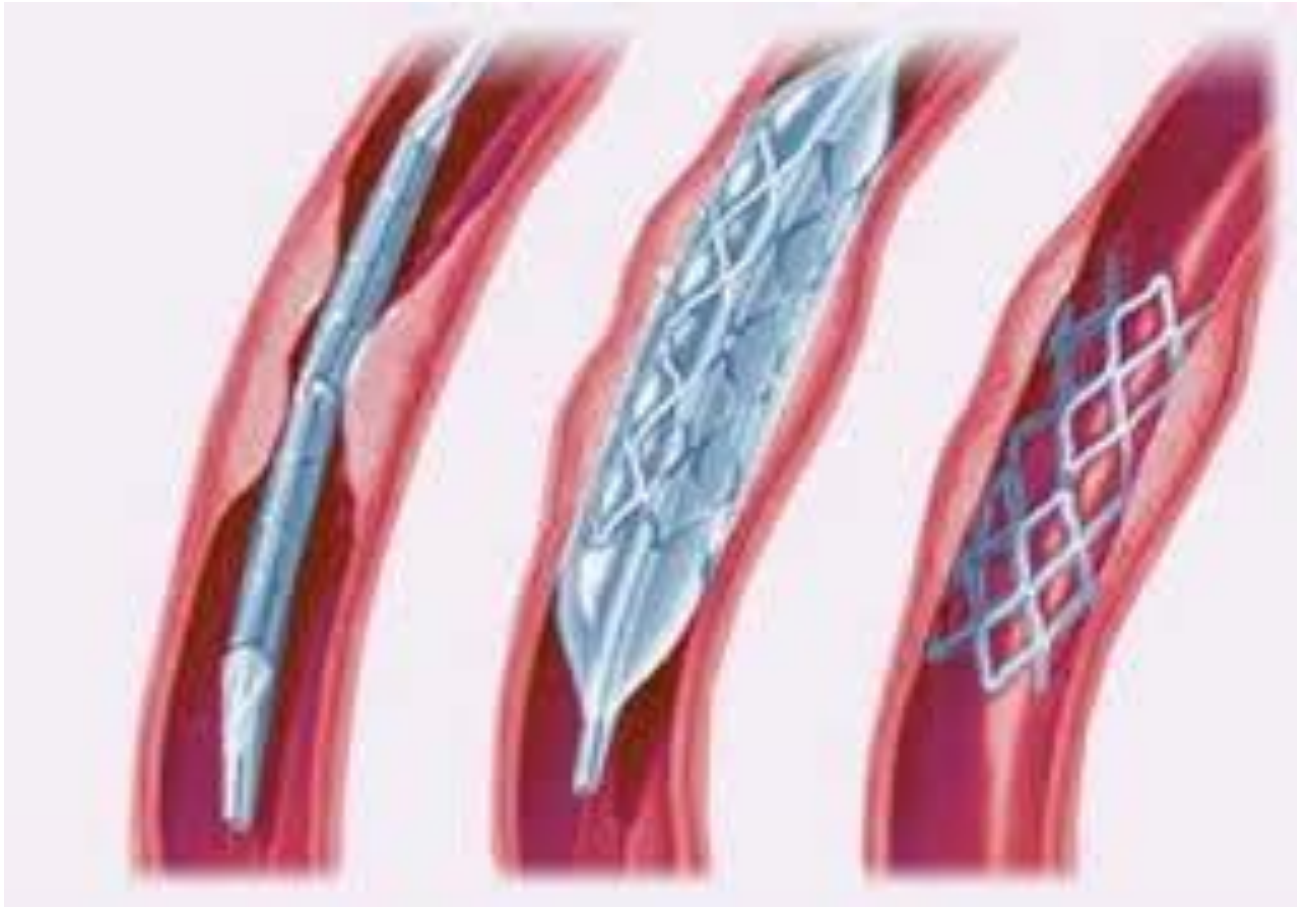
- 1. Hyperlipidemia**
  - 2. Hypertension**
  - 3. Cigarette smoking**
  - 4. Diabetes mellitus**
  - 5. Metabolic syndrome**
  - 6. Physical inactivity**
- 

# Complications:

- ❑ Arrhythmias
- ❑ Heart failure
- ❑ Heart attacks can also affect your heart valves and cause leaks.

# Diagnostic test:

- ▶ **Electrocardiogram (ECG)**
  - ▶ **Echocardiogram**
  - ▶ **Coronary angiogram**
  - ▶ **Chest radiograph**
  - ▶ **Blood tests**
- 



**Treatment:**  
**(MONA)**

- ▶ **Morphine**
- ▶ **Oxygen**
- ▶ **Nitroglycerin**
- ▶ **Aspirin**

## **Nursing care**

- ▶ Monitor vital signs every 15 min until stable, then every hour, respiration, pulse, BP, ECG.
- ▶ Administer supplemental oxygen by means of nasal cannula or face mask, as indicated.
- ▶ Administer medications as indicated
- ▶ Monitor intake, note changes in urine output.
- ▶ Monitor laboratory data: ABGs, BUN, creatinine, electrolytes, coagulation studies
- ▶ Monitor for pallor, cyanosis, mottling, cool and clammy skin. Note strength of peripheral pulses.
- ▶ Teach patient about, Smoking cessation, Limit activities, Stress reduction, Diet changes.



## Angina

- **Precipitated by exertion or stress**
- **Relieved by rest or nitroglycerine**
- **Pain last less than 15min**

## Myocardial infarction

- **Occur without cause, often in the morning after rest**
- **Relieved only by opioids**
- **Pain last less than 30 min**