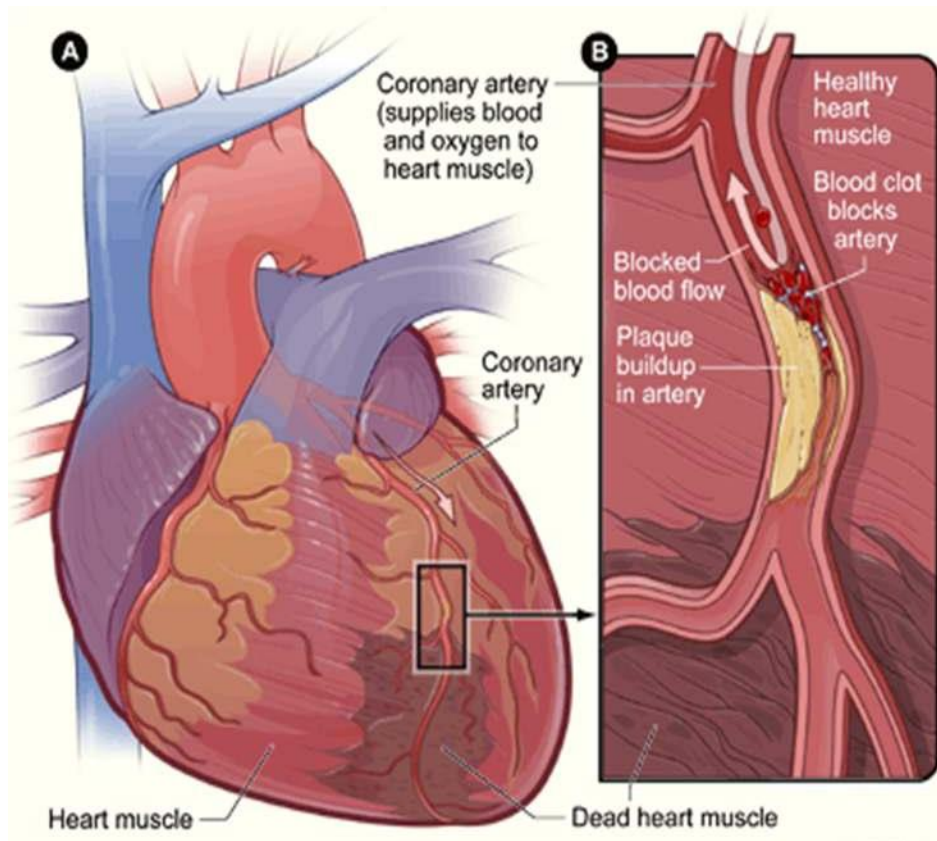


Myocardial infarction

- Myocardial infarction / Heart attack results from complete obstruction to blood flow in coronary artery
- Imbalance in supply and demand of O₂ to myocardium
- Underlining cause – coronary artery disease



Symptoms of myocardial infarction

- Severe chest pain
- Sweating
- Chest pain radiating through jaw, shoulder, arms and back
- Epigastric discomfort with or without nausea/ vomiting
- Sproathy and blood stained sputum
- Dizziness, weakness, Anxiety
- Irregular heart beat
- Heart burn & indigestion

Etio-pathogenesis of MI

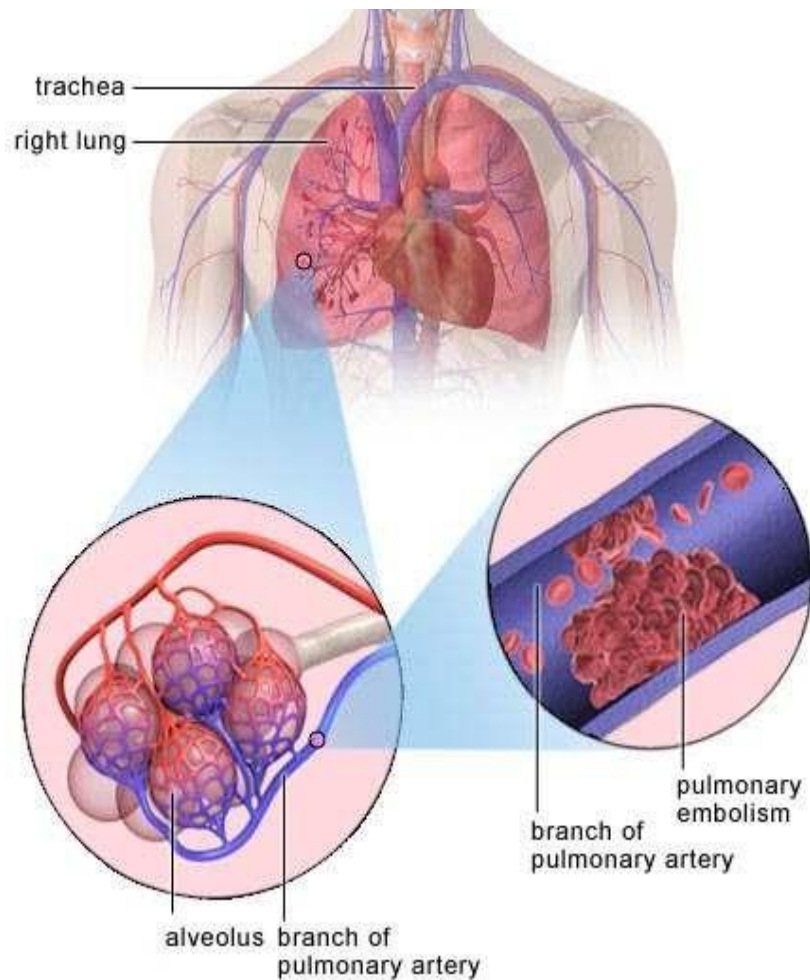
Atherosclerotic causes

- Accounts for 75% of cases
- Fatty streak deposits on the coronary artery
- Endothelium develop into an atherosclerotic plague depending on the presence of risk factors

- Risk factors – HT, DM, Smoking, Hyperlipidemia
- Plaque progression, proliferation and disruption of integrity of blood vessel
- Results in narrowing off coronary artery & MI

Non atherosclerotic causes

- Accounts for 10% of the causes of MI
- Coronary vasospasm
- Inflammation of arteries
- Coronary embolism
- Development of thrombosis
- Injury



Complications of MI

- Cardiac arrhythmia
- Congestive heart failure
- Cardiogenic shock
- Rapture of heart
- Mural thrombosis
- Thromboembolism

Summary

- Angina is the discomfort due to transient myocardial ischemia where heart muscle does not receive enough blood (nutrient & O₂) resulting in chest pain
- Myocardial infarction / Heart attack results from complete obstruction to blood flow in coronary artery
- Causes of angina and MI include Atherosclerosis of large coronary arteries, heart valve disease, thickening of heart muscles, coronary artery spasm, hypertension
- Occurs mainly due to the imbalance in supply and demand of O₂ to myocardium