

# **SNS COLLEGE OF PHARMACY AND HEALTH SCIENCES**



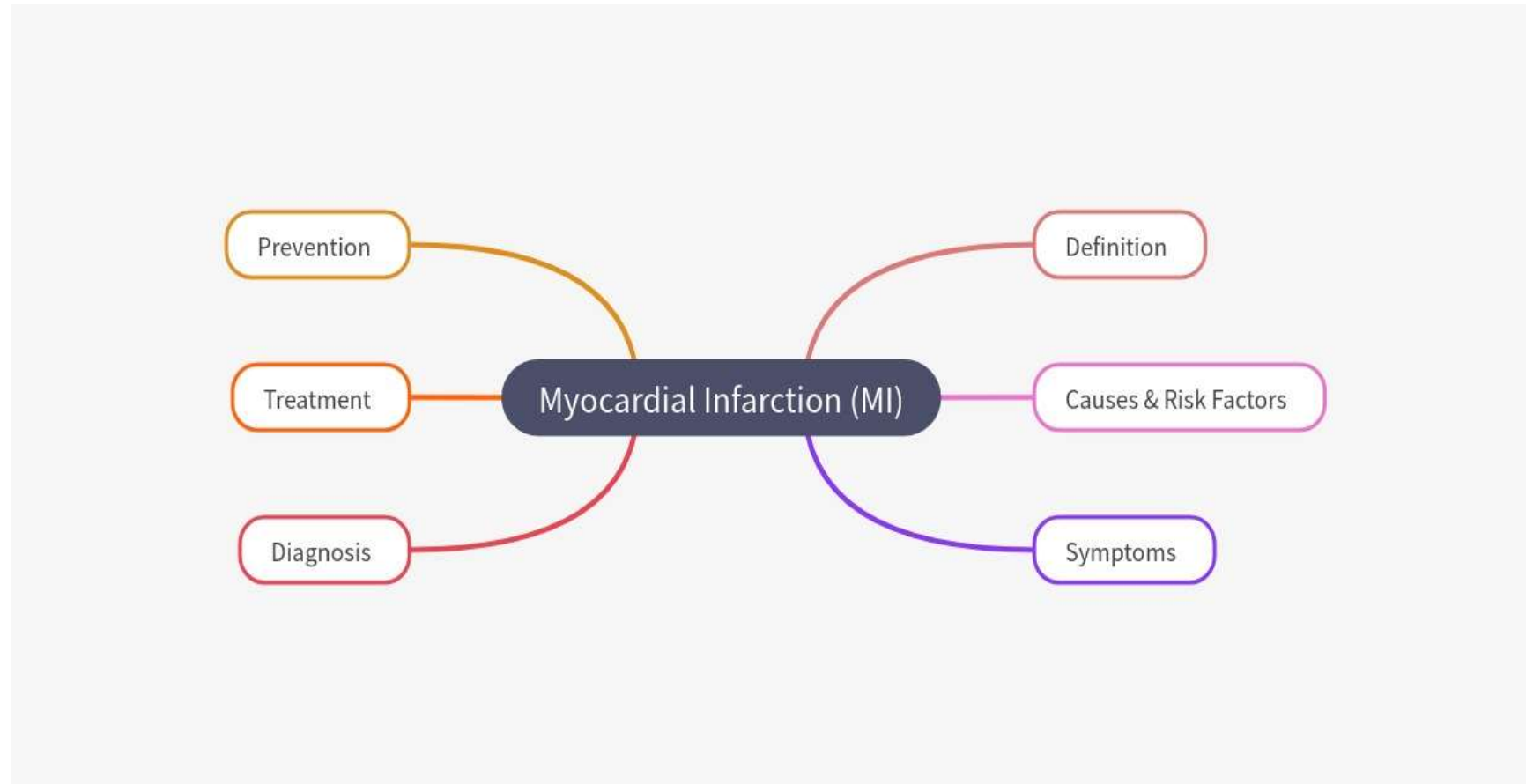
*Affiliated To The Tamil Nadu Dr. MGR Medical University, Chennai*  
*Approved by Pharmacy Council of India, New Delhi.*  
**Coimbatore -641035**

**COURSE NAME : PHARMACOTHERAPEUTICS (ER20-24T)**

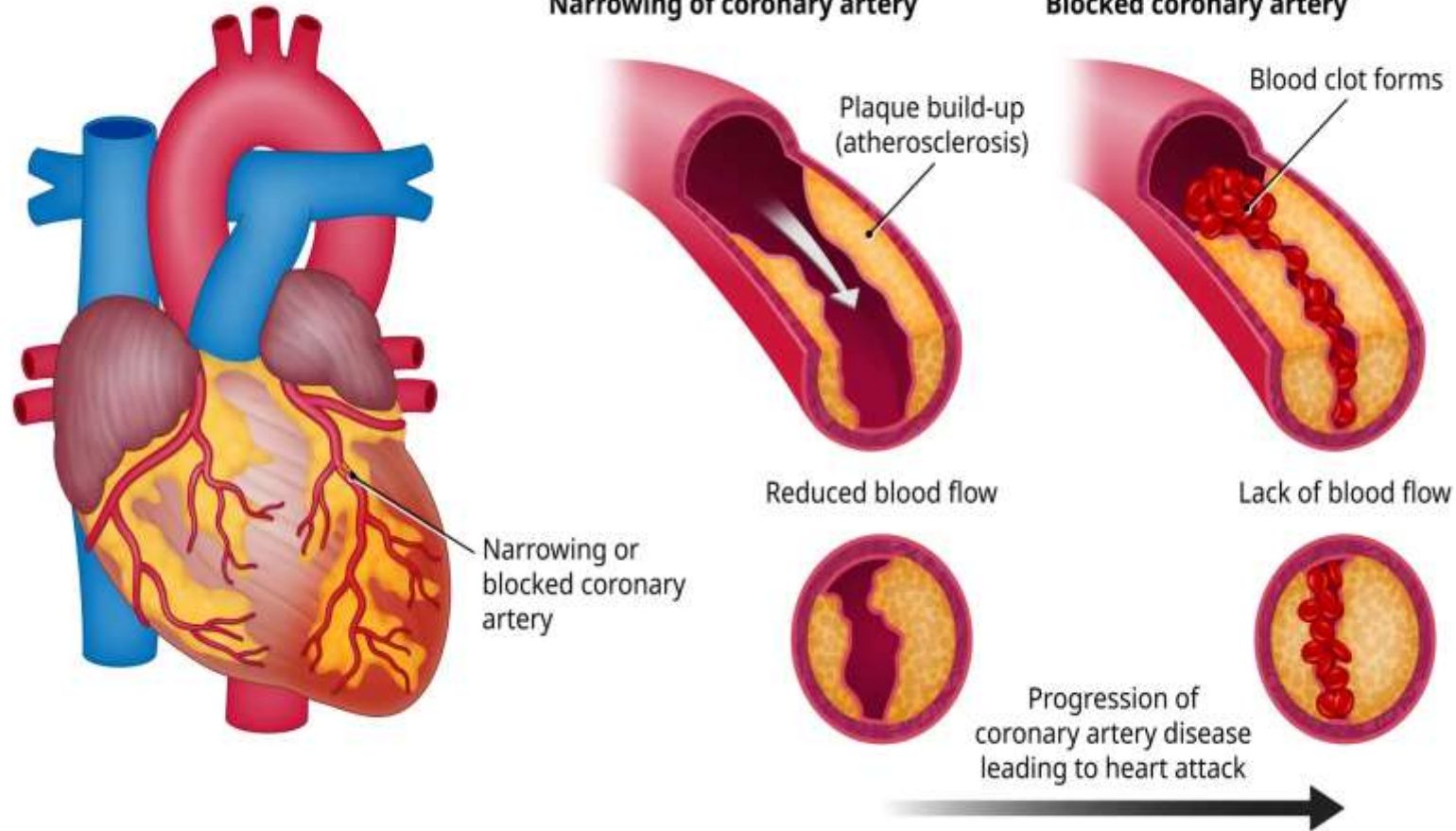
**D. PHARM II YEAR**

**TOPIC : MYOCARDIAL INFARCTION**

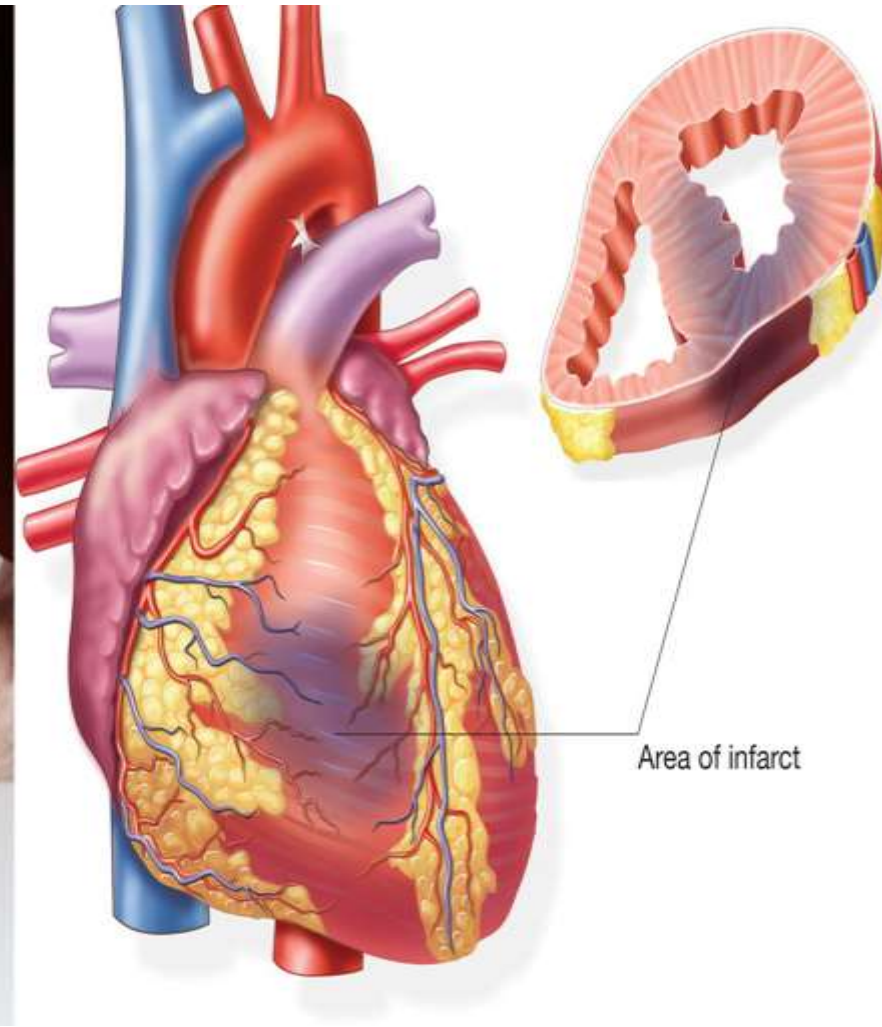
# MINDMAP

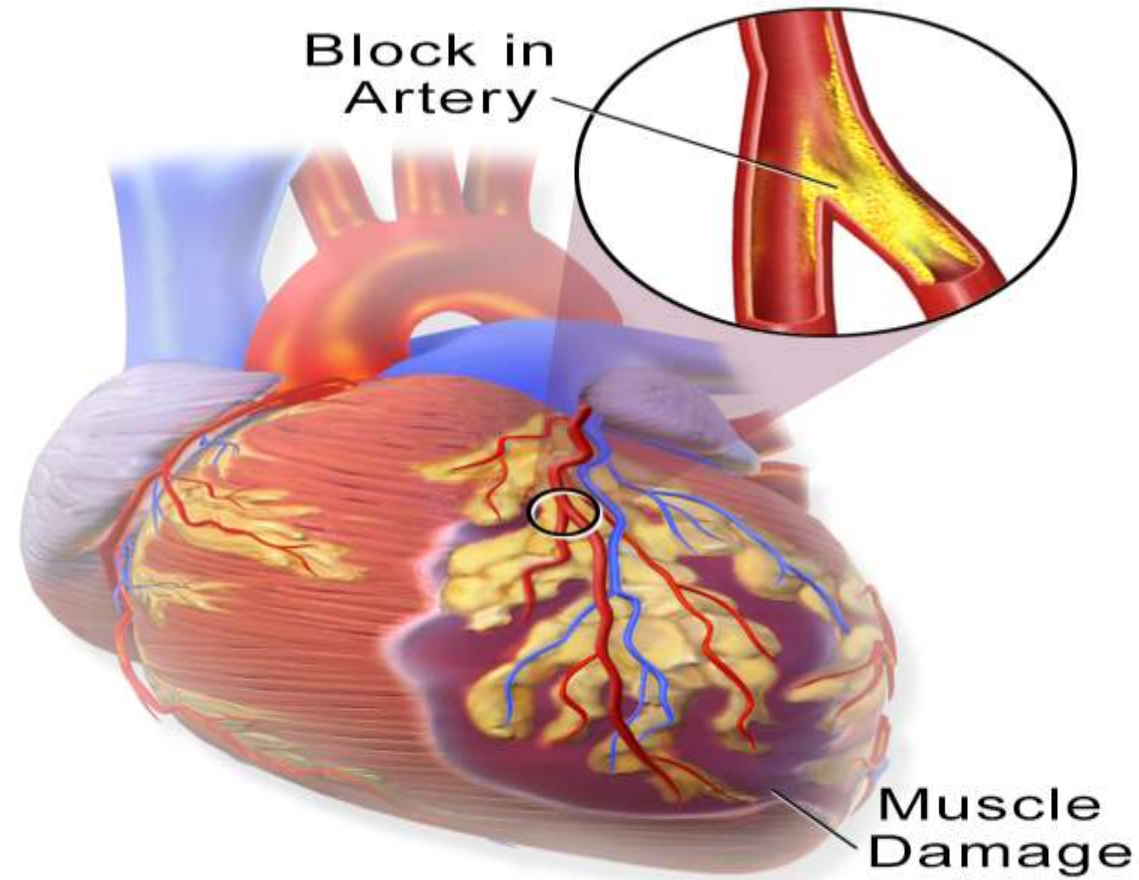


# Myocardial Infarction



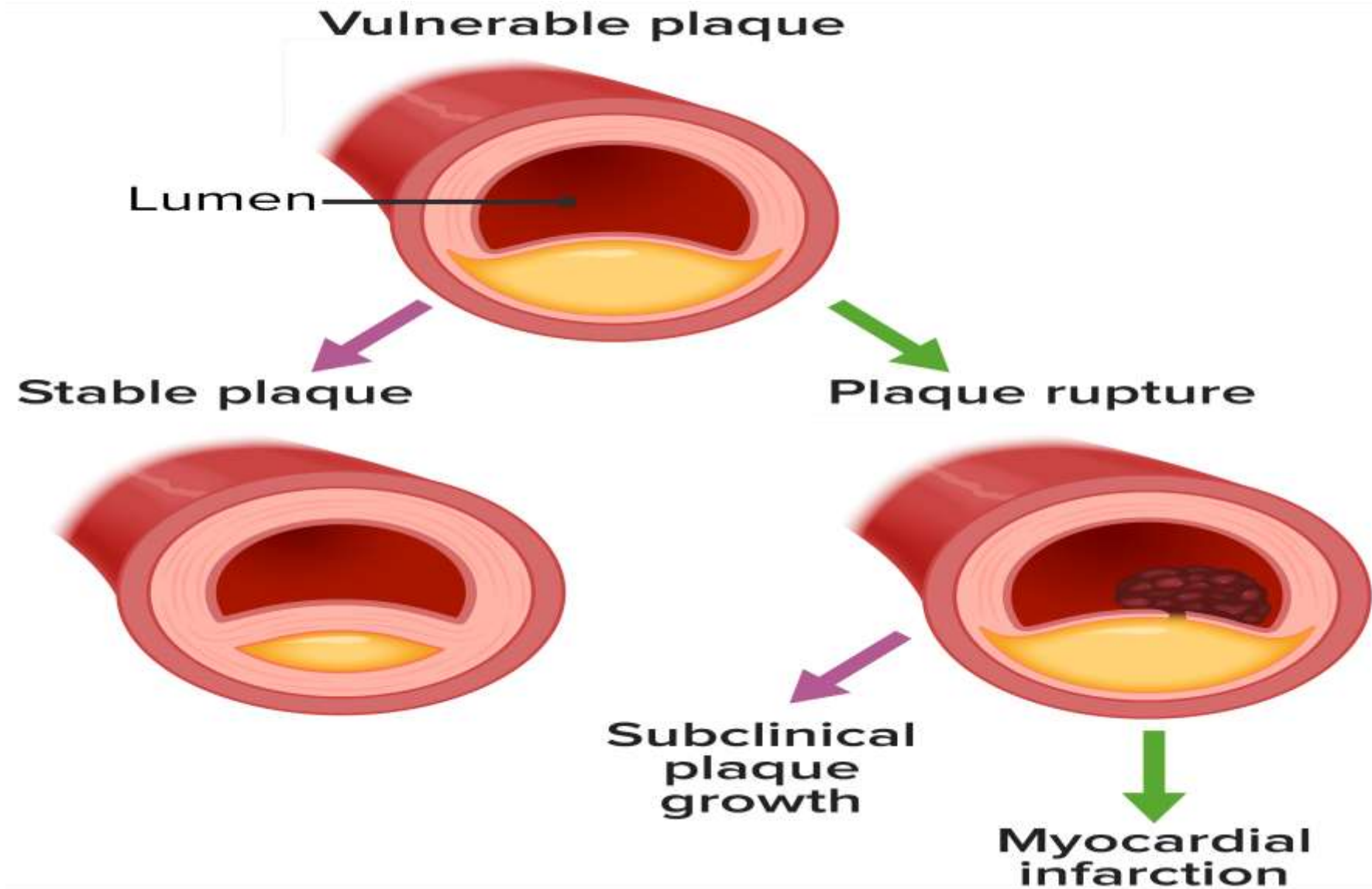
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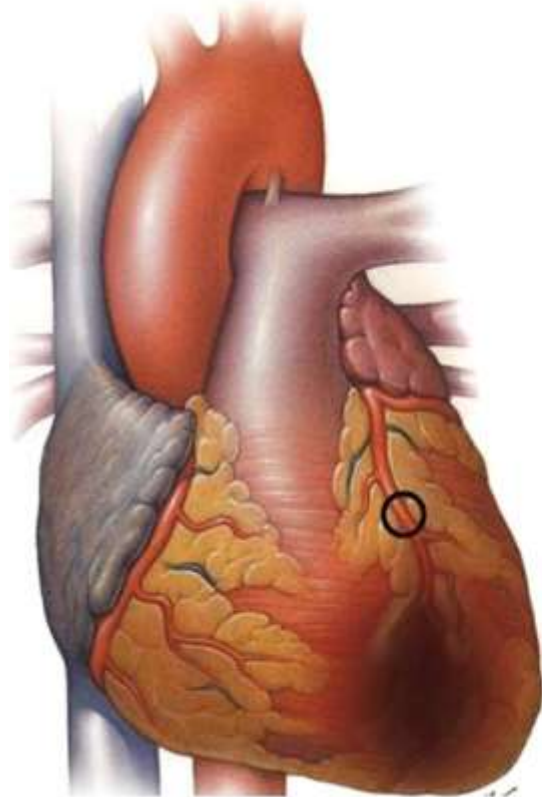




## Heart Attack







Plaque rupture with thrombus



MI Type 1

Vasospasm or endothelial dysfunction



MI Type 2

Fixed atherosclerosis and supply-demand imbalance

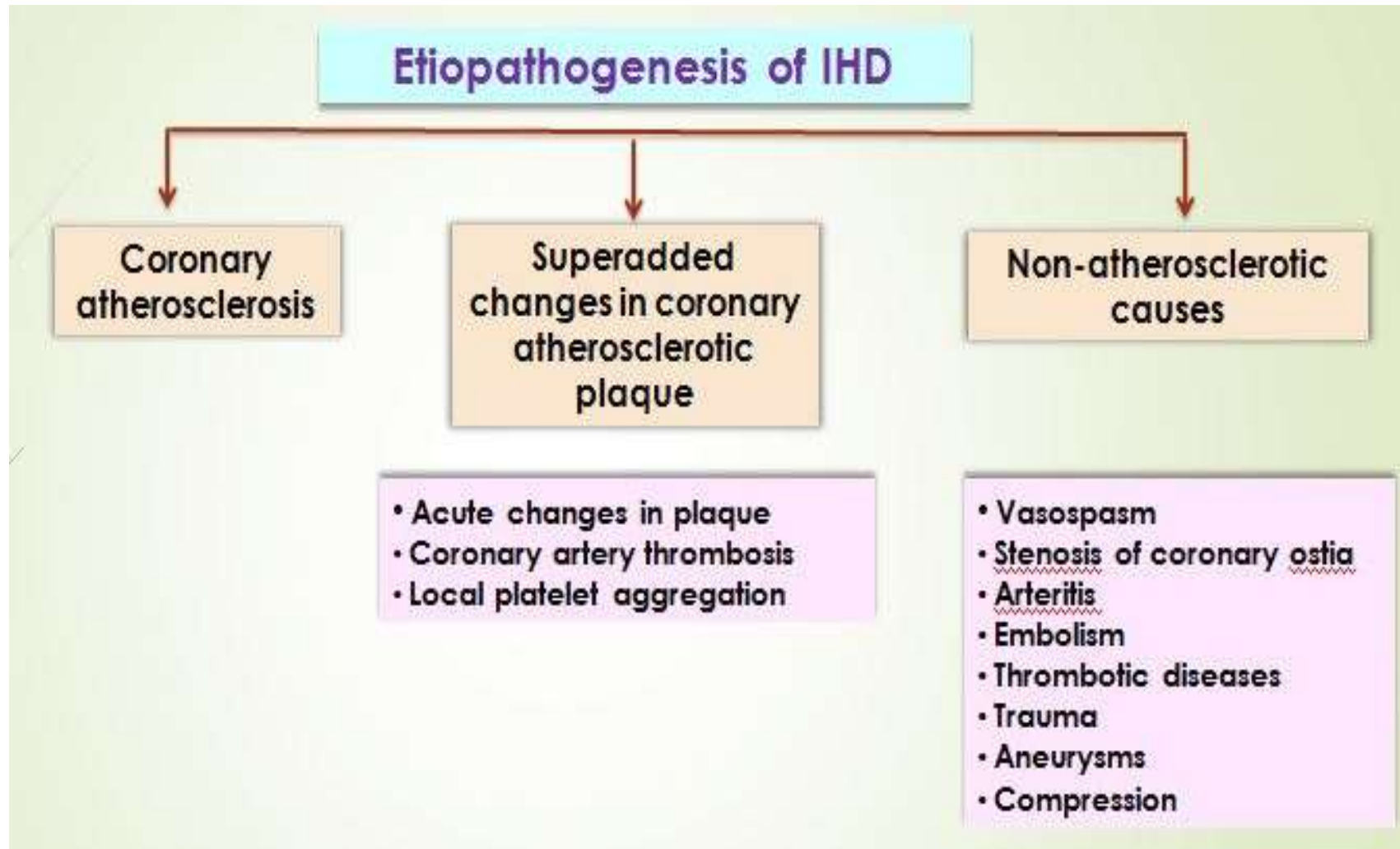


MI Type 2

Supply-demand imbalance alone



MI Type 2





## Myocardial Infarction: Risk, Diagnosis, Treatments

### *MI Symptoms*

**SYMPTOMS VARY BY SEX & ETHNICITY.  
ABSENCE OF CHEST PAIN AND/OR YOUNG AGE LEAD TO  
DELAYED DIAGNOSIS AND WORSE OUTCOMES**

#### *Angina*

Neck/Jaw  
Shoulder/Arm  
Chest

Tightness  
Stabbing  
Dull  
Sharp  
Squeezing  
Pressure



*Dizziness/  
Headache*

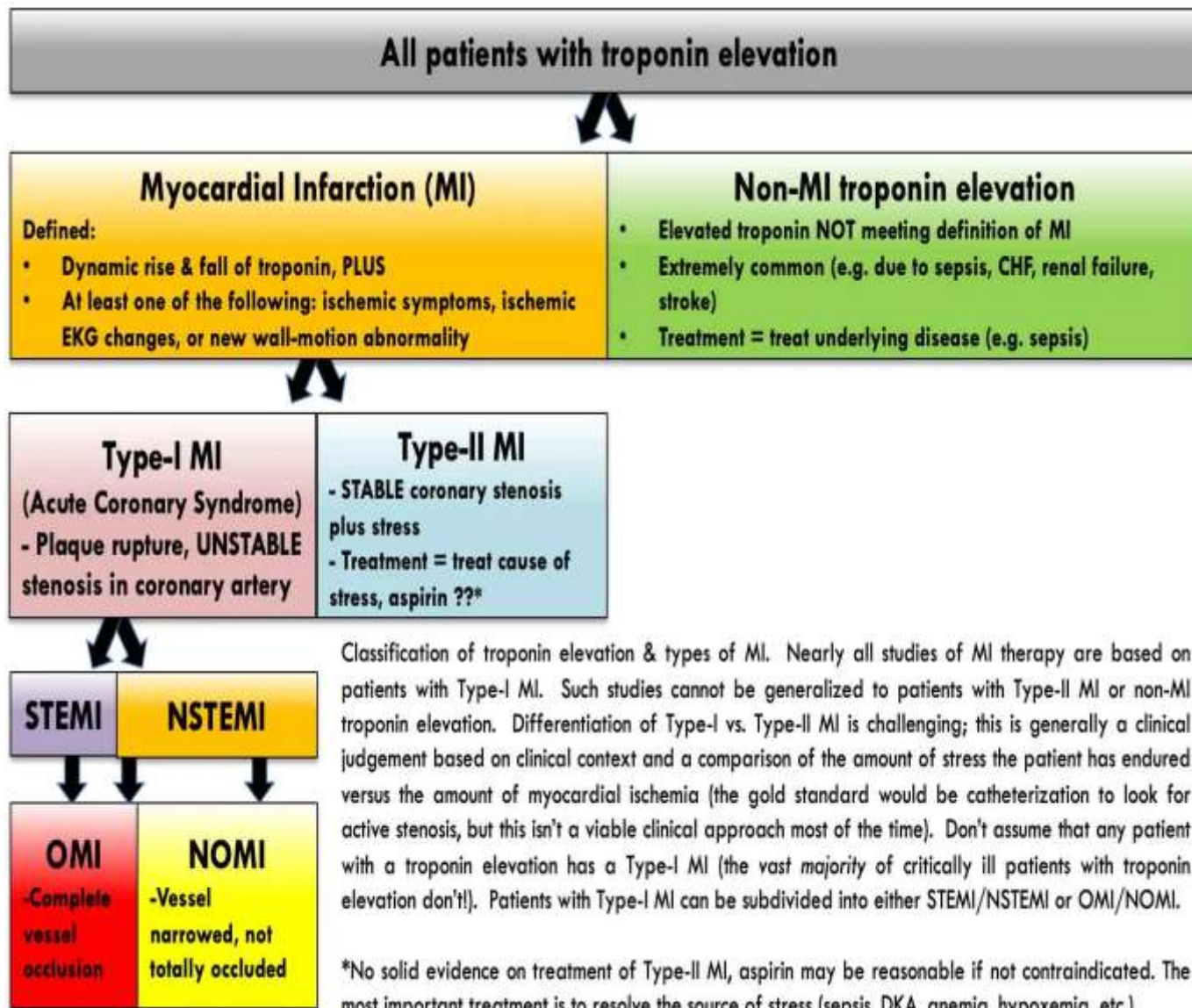
*Fatigue*

*Dyspnea*

*Abd. pain*

*Anxiety/  
Feelings  
of doom*





-The Internet Book of Critical Care

# Myocardial Infarction

## Definition

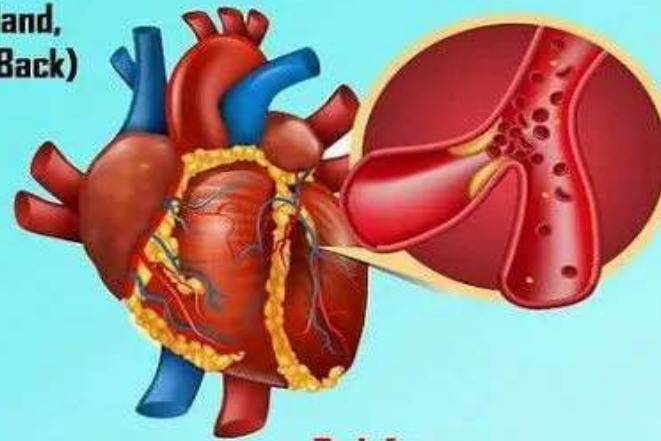
irreversible death (necrosis) of heart muscle secondary to prolonged lack of oxygen supply (ischemia)

## Presentation

- Chest pain
- Referred pain (Lt Hand, jaw, throat, Teeth, Back)
- Sweating
- SOB
- Nausea/Vomiting

## Types

- STEMI
- NSTEMI



## Management

- ASA
- Clopedogrel
- Statin
- Morphin
- Nitrates
- BBs , ACEi
- O2

## Workup

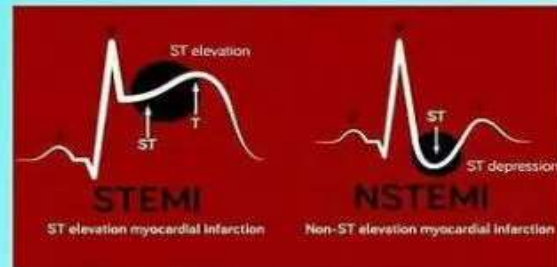
- ECG
- Troponin I,T

## Risk factors

- Hypertension
- Smoking
- Diabetes
- Obesity
- High cholesterol level

## Treatment

- PCI or Fibrinolytics





# MYOCARDIAL INFARCTION PREVENTION

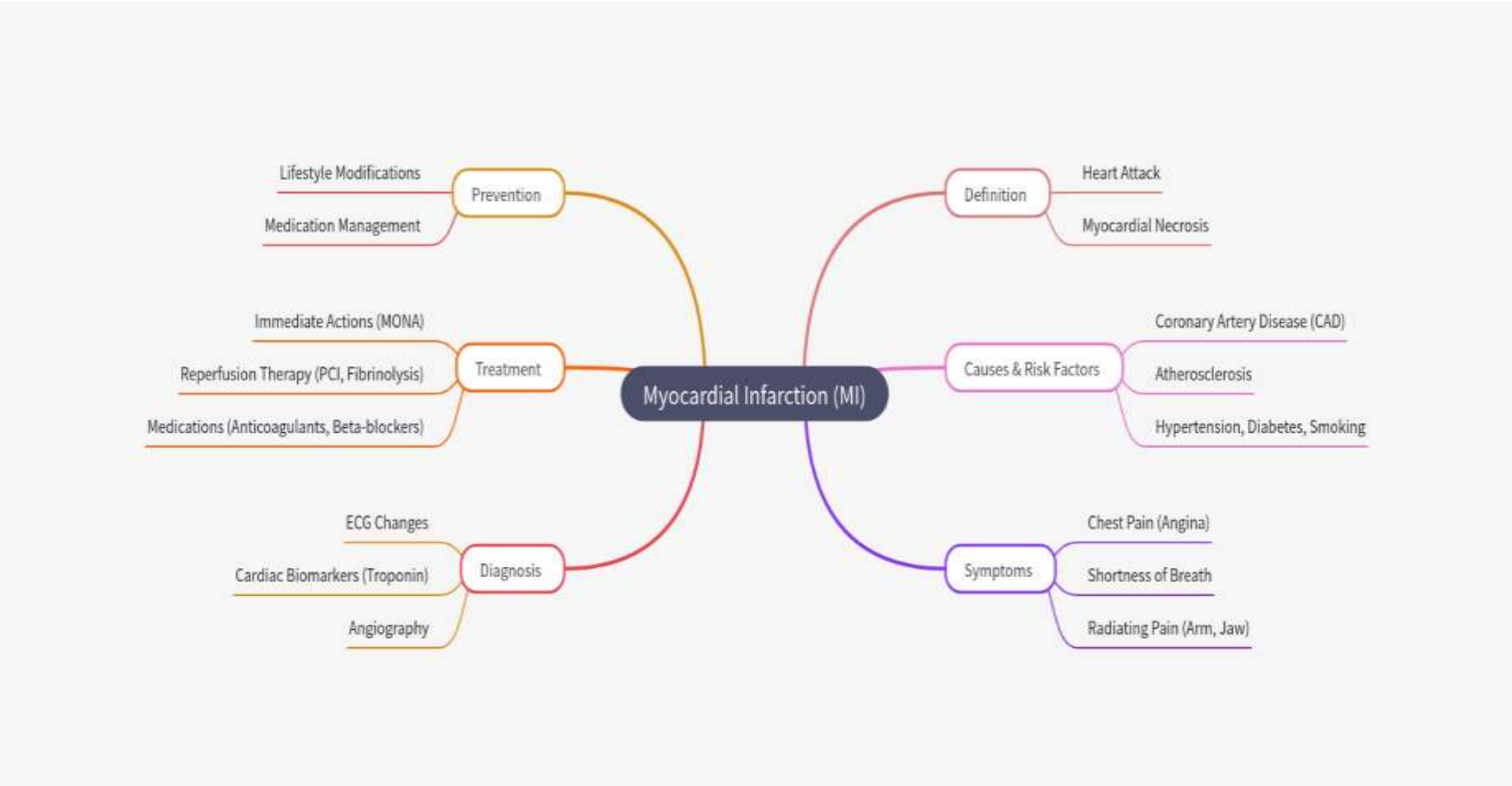


# DRUG THERAPY IN MYOCARDIAL INFARCTION

1	<b>Pain, anxiety and apprehension</b>	•GTN, Morphine, Diazepam
2	<b>Oxygenation</b>	
3	<b>Maintenance of blood volume</b>	•Slow IV infusion of saline/dextrose
4	<b>Correction of acidosis</b>	•Due to lactic acid production •IV Sodium bicarbonate infusion
5	<b>Prevention and treatment of arrhythmias</b>	Beta blockers, Lidocaine • <b>Arrhythmias</b> - Prophylactic Metoprolol (IV/Oral) & continued for few days ↓ incidence of arrhythmias, mortality & infarct size • <b>Tachyarrhythmias</b> - IV Lidocaine/Procainamide/Amiodarone • <b>Bradycardia/Heart block</b> - Atropine/Electrical Pacing



# SUMMARY

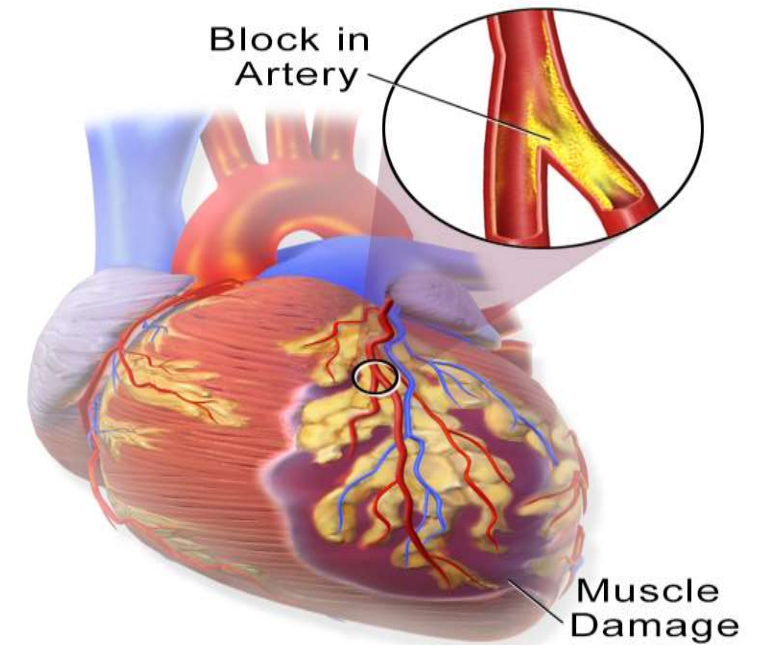


# ASSESSMENTS



1. On the evening shift, the triage nurse evaluates several clients who were brought to the emergency department. Which of the following clients should receive highest priority?

- a) An elderly woman complaining of a loss of appetite and fatigue for the past week
- b) A football player limping and complaining of pain and swelling in the right ankle
- c) A 50-year-old man, diaphoretic and complaining of severe chest pain radiating to his jaw
- d) A mother with a 5-year-old boy who says her son has been complaining of nausea and vomited once since noon

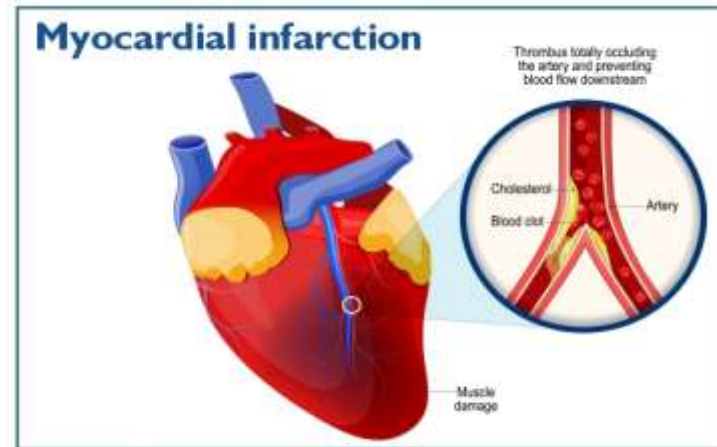


**Heart Attack**

2. Which of the following is the most common symptom of myocardial infarction?



- a) Chest pain
- b) Dyspnea
- c) Edema
- d) Palpitations







3. An early finding in the EKG of a client with an infarcted myocardium would be:

- a) Disappearance of Q waves
- b) Elevated ST segments
- c) Absence of P wave
- d) Flattened T waves



**Pericarditis**



**BER**



**LBBB**

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