# In The Name Of Merciful God

## Acute Coronary Syndrome ( ACS)
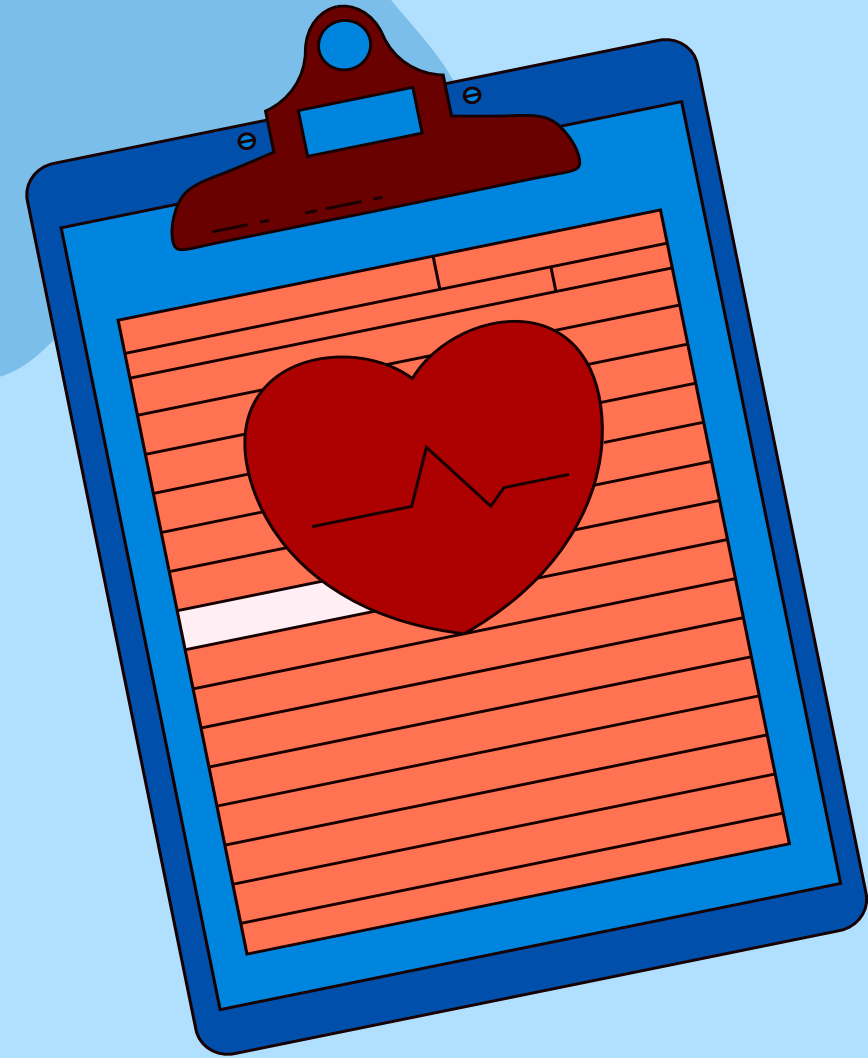
Master: Dr.Rasoul Raesi

Presenter: Erfan Poorhang

# Introduction

Acute coronary syndrome (ACS) is an emergency situation associated with the acute onset of ischemia.
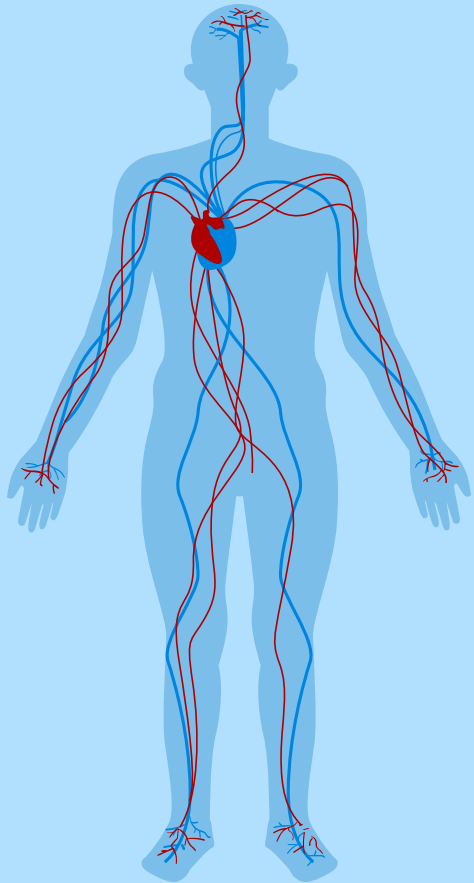In general, the spectrum of ACS is divided into three parts:
1. Unstable angina (U.S.A)
2. NSTEMI
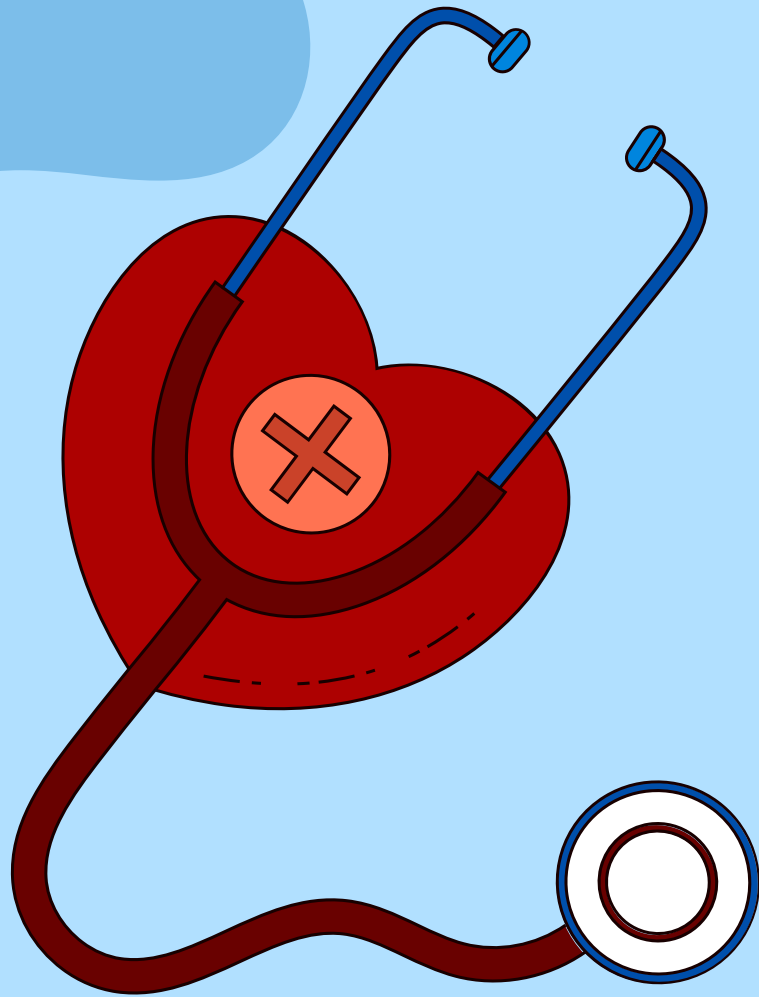3. STEMI

# Pathophysiology

# Pathophysiology

1. Atherosclerosis and platelet accumulation cause thrombosis and clogging of about 90% of arteries, which reduces myocardial tissue perfusion and tissue damage.
2. Coronary artery vasospasm.
3. Bleeding.
4. Increased oxygen demand (tachycardia, thyrotoxicosis and drug use.)

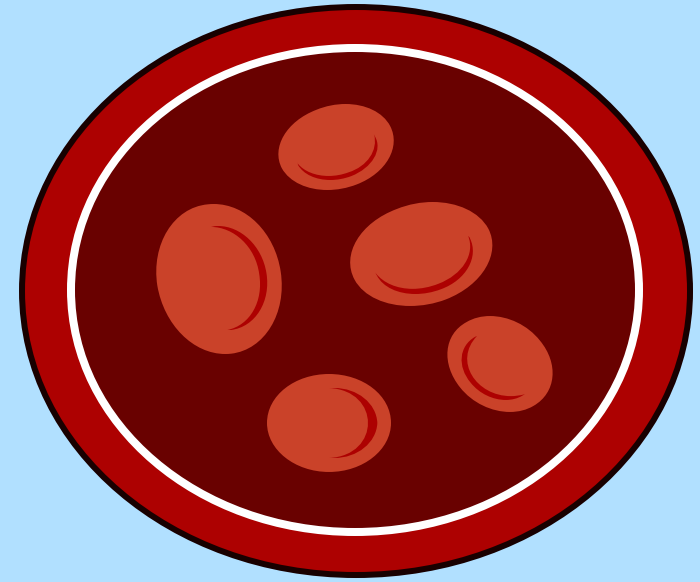The mentioned cases cause chest pain and pre-MI symptoms.

# Clinical demonstrations

- Pain
- Paleness
- Respiratory distress
- Sweating
- Nausea
- anxiety
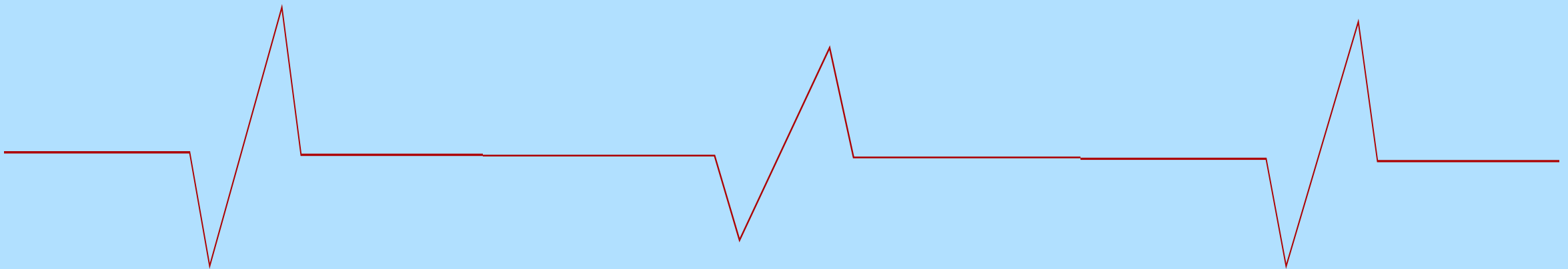
# Examination and diagnosis

1. PMH
2. ECG
3. Biomarkers
4. Eco cardiography
5. Angiography
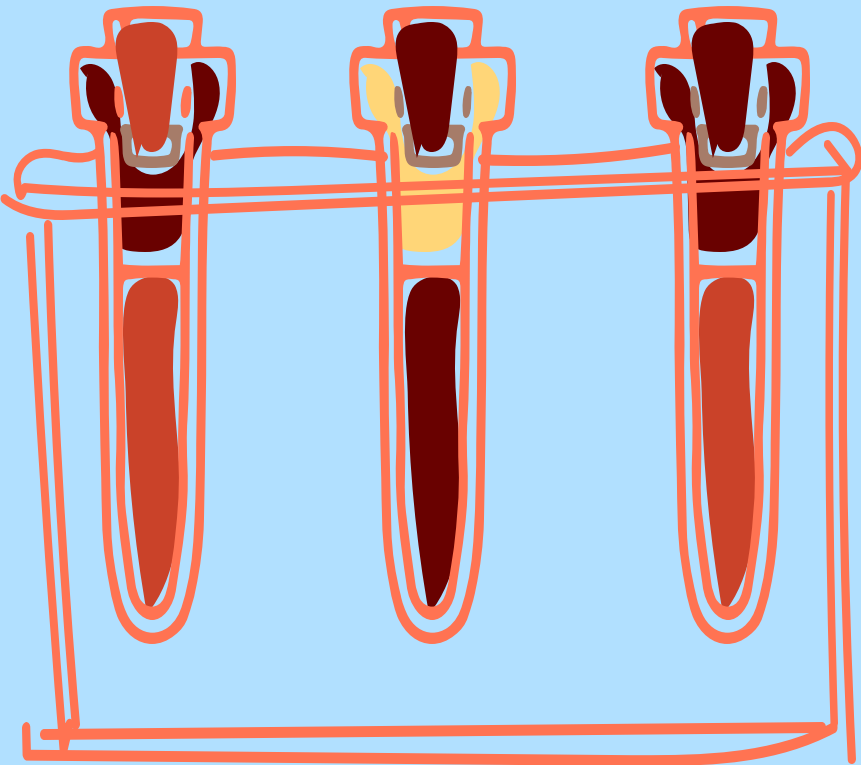
# Examination and diagnosis ECG:

- Unstable angina :Inverted T wave or ST depression
- NSTEMI:Inverted T wave or ST depression
- STEMI:ST evaluation

# Examination and diagnosis
## Biomarkers:

- U . S . A : Negative
- NSTEMI: positive
- STEMI: positive

1. Troponin (I and T) : less than 0/4 mg/ml
2. Creatine kinase (MB): compared to the total of 2.5-3
3. Myoglobin: < or =90 mcg/L

# Examination and diagnosis Echo cardiography and Angiography:

Examination of weak movement or immobility of the myocardium. Viewing the inside of the artery with a catheter and removing the blockage.

# Medical interventions

- CBR
- O2 therapy
- 300mg ASA
- 300mg Plavix
- 80 mg Atorvastatin
- Pirl TNG 3-5 minutes
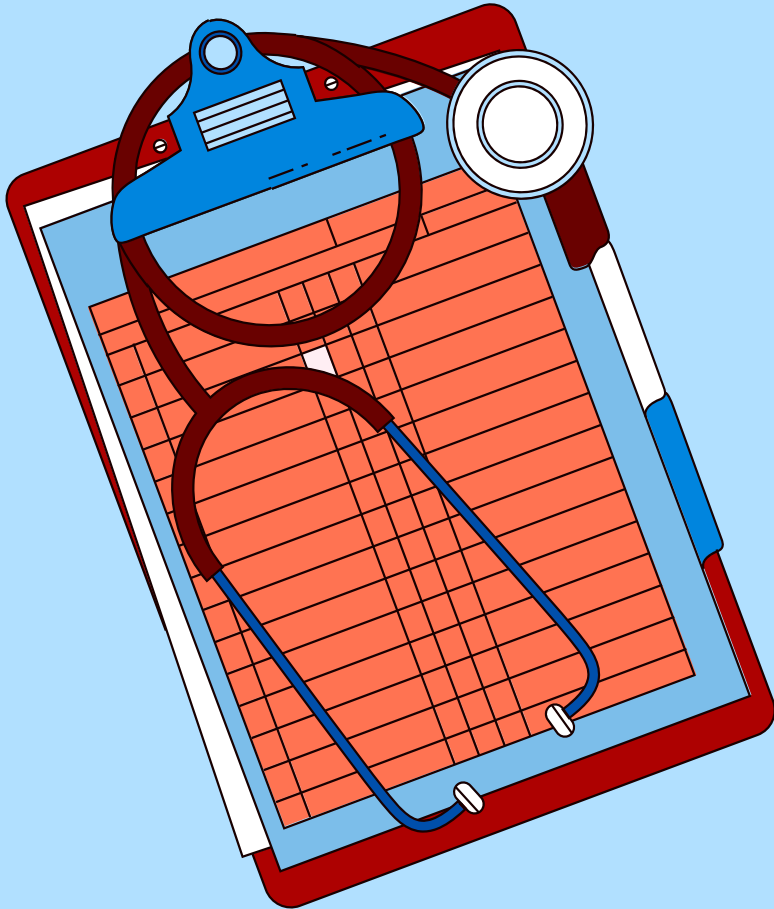- ACE Inhibitors
-  Send the patient to the Cat Lab. (PCI)

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# Nursing process
## Diagnoses:

- Acute pain related to decreased myocardial tissue perfusion.
- Risk of cardiac dysfunction related to decreased coronary artery blood flow.
- The risk of reduced tissue blood supply and occurrence of cardiogenic shock associated with reduced cardiac output.
- Anxiety caused by heart pain.

# Nursing process Interventions:

- Reducing oxygen demand and increasing oxygen supply.
- Patient positioning.
- Heart monitoring.
- Monitoring of vital signs.
- Emotional support.
- Patient education.

And if someone revives a person;  It is as if he has revived all the people.