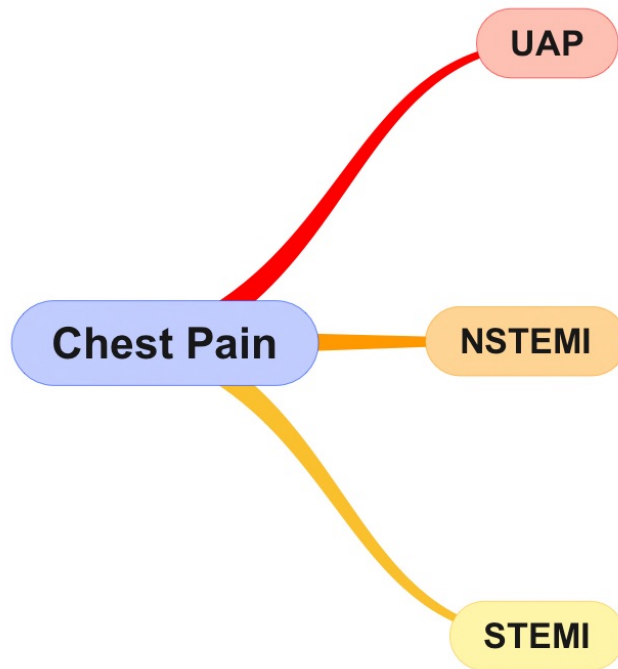
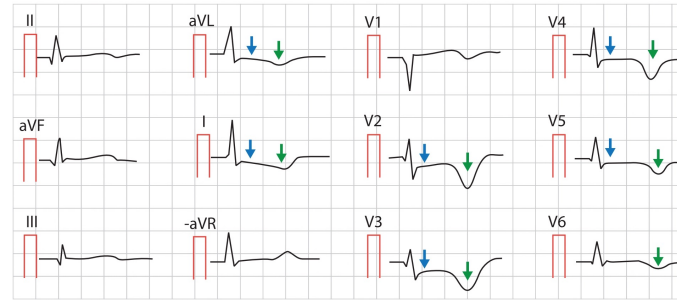




Kelas Lolos TKH

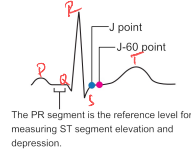


NSTEMI

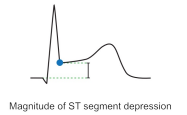


→ ST segment depression
→ T-wave inversion

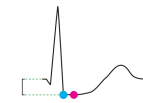
A Measurements



B ST segment elevation

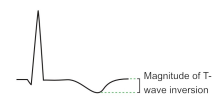


C ST segment depression

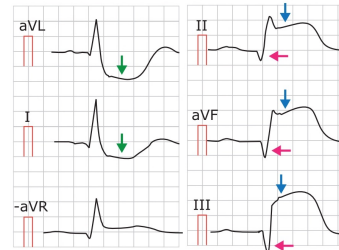


The magnitude of ST segment depression is mostly measured in the J point. The J-60 point is used during exercise stress testing. If the ST segment is horizontal, there is no difference between the J and J-60 points.

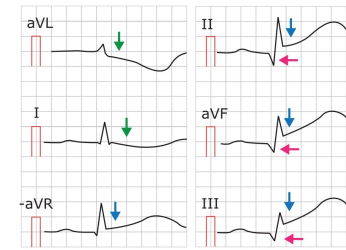
D T-wave inversion



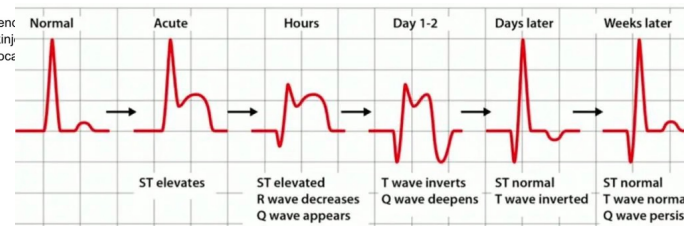
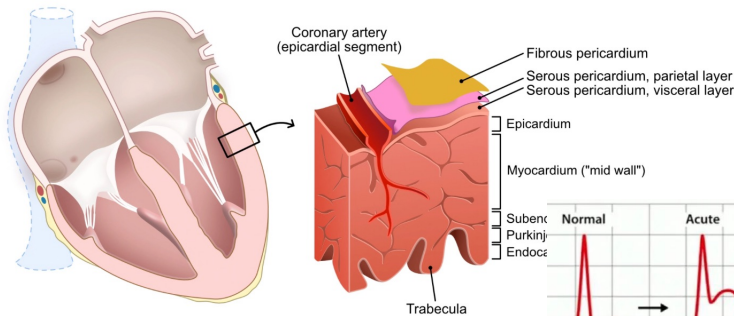
A STEMI (STE-ACS) example 1



B STEMI (STE-ACS) example 2

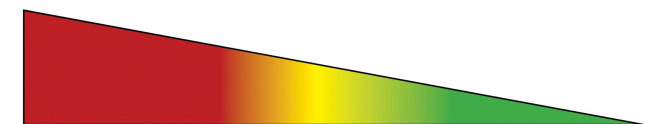


→ ST segment elevation
→ Pathological Q wave
→ ST segment depression



NSTEMI & UAP

1. ST depres > 0.5mm
2. T invers min 1 mm
3. min 2 Lead



- Central
- Pressure
- Squeezing
- Gripping
- Heaviness
- Tightness
- Exertional/stress-related
- Retrosternal
- Left-sided
- Dull
- Aching
- Stabbing
- Right-sided
- Tearing
- Ripping
- Burning
- Sharp
- Fleeting
- Shifting
- Pleuritic
- Positional

High ← Probability of Ischemia → Low

NSTE-ACS: Definite or Likely

Ischemia-Guided Strategy

Initiate DAPT and Anticoagulant Therapy

1. ASA (Class I; LOE: A)
2. P2Y₁₂ inhibitor (in addition to ASA)(Class I; LOE: B):
 - Clopidogrel or
 - Ticagrelor
3. Anticoagulant
 - UFH (Class I; LOE: B) or
 - Enoxaparin (Class I; LOE: A) or
 - Fondaparinux¹ (Class I; LOE: B)

Early Invasive Strategy

Initiate DAPT and Anticoagulant Therapy

1. ASA (Class I; LOE: A)
2. P2Y₁₂ inhibitor (in addition to ASA)(Class I; LOE: B):
 - Clopidogrel or
 - Ticagrelor
3. Anticoagulant
 - UFH (Class I; LOE: B) or
 - Enoxaparin (Class I; LOE: A) or
 - Fondaparinux¹ (Class I; LOE: B) or
 - Bivalirudin (Class I; LOE: B)

Can consider GPI in addition to ASA and P2Y₁₂ inhibitor in high-risk (e.g., troponin positive) patients (Class Ib; LOW: B)

- Eptifibatide
- Tirofiban

Medical therapy chosen based on cath findings

Therapy effective

Therapy ineffective

PCI with Stenting

Initiate / continue antiplatelet and anticoagulant therapy

1. ASA (Class I; LOE: A)
2. P2Y₁₂ inhibitor (in addition to ASA):
 - Clopidogrel (Class I; LOE: B) or
 - Prasugrel (Class I; LOE: B) or
 - Ticagrelor (Class I; LOE: B)
3. GPI (if not treated with bivalirudin at time of PCI)
 - High-risk feature, not adequately pretreated with clopidogrel (Class I; LOE: A)
 - High-risk feature adequately pretreated with clopidogrel (Class IIa; LOE: B)
4. Anticoagulant
 - Enoxaparin (Class I; LOE: A) or
 - Bivalirudin (Class I; LOE: B) or
 - Fondaparinux¹ as the sole anticoagulant (Class III: Harm; LOE: B) or
 - UFH (Class I; LOE: B)

CABG

Initiate / continue ASA therapy and discontinue P2Y₁₂ and/or GPI therapy

1. ASA (Class I; LOE: A)
2. Discontinue clopidogrel/ticagrelor 5 days before, and prasugrel at least 7 days before elective CABG
3. Discontinue clopidogrel/ticagrelor up to 24 h before urgent CABG (Class I; LOE: B) May perform urgent CABG < 5 d after clopidogrel/ticagrelor and < 7 d after prasugrel discontinued
4. Discontinue eptifibatide/tirofiban at least 24 h before, and abxiximab ≥12h before CABG (Class I; LOE: B)

Late Hospital / Posthospital Care

1. ASA indefinitely (Class I; LOE: A)
2. P2Y₁₂ inhibitor (clopidogrel or ticagrelor), in addition to ASA, up to 12 mo if medically treated (Class I; LOE: B)
3. P2Y₁₂ inhibitor (clopidogrel, prasugrel, or ticagrelor), in addition to ASA, at least 12 mo if treated with coronary stenting (Class I; LOE: B)

Keyword:

1. Risk factor +
2. Typical Chestpain
3. Typical ECG

DECIDE:

1. UAP
2. NSTEMI
3. STEMI

Initial Terapy

1. Oksigenasi
2. ISDN SL
3. ASA 300mg
4. CPQ 300 mg

Risk Control

1. ACE I/CCB/ARB
2. Statin
3. Insulin/ ADA
4. Fibrate

Chest Pain evaluation - SOCRATES

S	Site	central (retrosternal) location
O	Onset	sudden or acute onset
C	Character	heavy or burning sensation with
R	Radiation	radiation to the arm or jaw
A	Association	associated dyspnoea, nausea or sweating
T	Time	duration >15 minutes
E	Exacerbating/relieving factor	relief of symptoms by nitrates
S	Severity	worsening of symptoms by activity

	Low Likelihood	High Likelihood
1. Presentation		
2. ECG		
3. Troponin	-	+
4. Diagnosis	Non-cardiac	UA, Other Cardiac, NSTEMI, STEMI

STEMI = ST-elevation myocardial infarction; NSTEMI = non-ST-elevation myocardial infarction; UA = unstable angina.

Tabel Menentukan Lokasi Infark Miokard

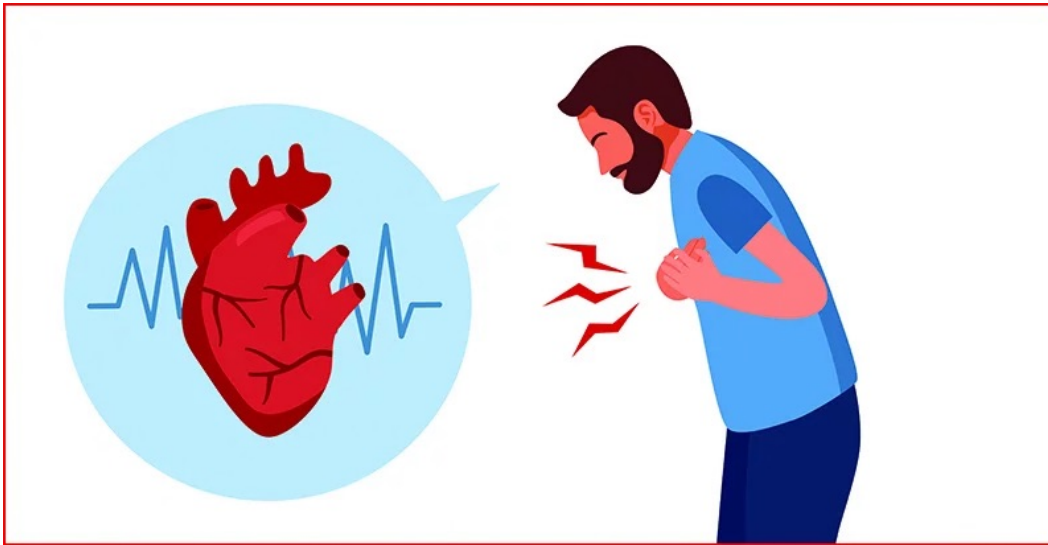
Lokasi Anatomis	Leads Yang Positif	Prediksi Arteri Koroner yang Tertentu
Inferior	II, III, AvF	RCA
Anteroseptal	V1-V2	LAD
Anteroapical	V3-V4	LAD (distal)
Anterolateral	V5-V6, I, AvL	CFX
Posterior	V7-V9	RCA

Keterangan

CFX = Arteri Circumflex kiri

LAD = Arteri Left Anterior Descending

RCA = Arteri Koroner Kanan

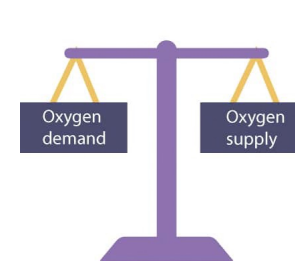


Settings

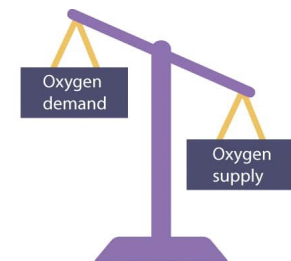
1. **di Mina** - Kontak EMT/Ambulan Muassasah - Rujuk RS Mina Al Wadi
2. **di Arafah** - Kontak EMT Arafah - Rujuk RS East Arafat
3. **Di Makkah** - Kontak EMT Sektor - Konsul KKH Makkah - Rujuk KKH/RSAS Makkah
4. **Di Madinah** - Kontak EMT Madinah - Konsul KKH Madinah - Rujuk KKH/RSAS Madinah

- ✓ Evakuasi
- ✓ Primary Survey

1. Oksigenasi
2. Cek TTV
3. Pasang IV line
4. pasang EKG
5. Cek RPD + Faktor Resiko
6. Tentukan Stabile/unstable
7. Stabilkan ABC
8. Terapi Chestpain
9. persiapan Rujukan
10. Reasses TTV



Normal metabolism
Requires oxygen supply



Myocardial ischemia
Insufficient oxygen supply

1. Calm the patient
2. Bed rest