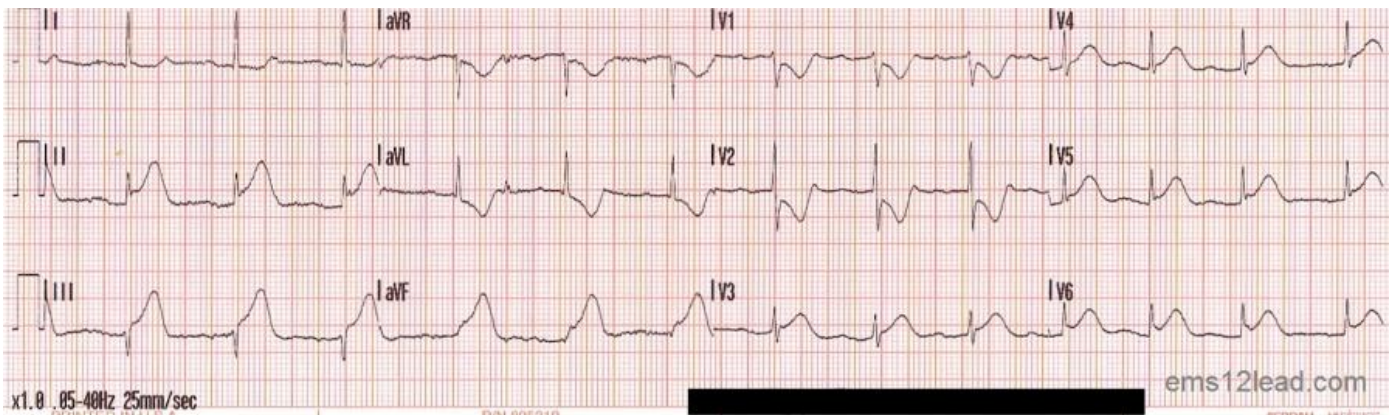


Cardiology, IHD, lysis vs PCI, pericarditis and myocarditis - QUESTIONS

SAQ 1

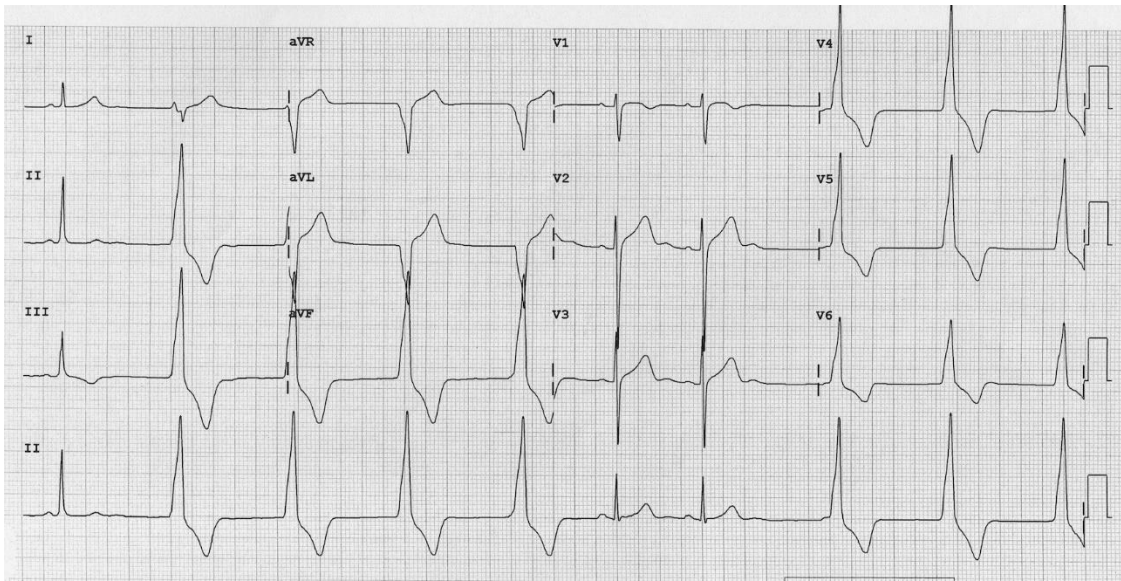
A 64 year old male presents to your rural ED with 30 minutes of right arm pain. He is a smoker, has HTN and DM, but denies high cholesterol. His ECG is shown.



- List two abnormalities on the ECG and give your diagnosis. (3 marks)
- In which coronary artery is the culprit lesion? (1 mark)
- You decide to thrombolysse. State the drug, dose, route, and rate of administration. (3 marks)
- List 6 absolute contraindications to thrombolysis. (6 marks)
- Ninety minutes after thrombolysis, the patient is still in 8/10 pain with persistent ST elevation on his ECG. What is your next step? Justify your choice. (2 marks)

SAQ 2 (follows on from SAQ 1)

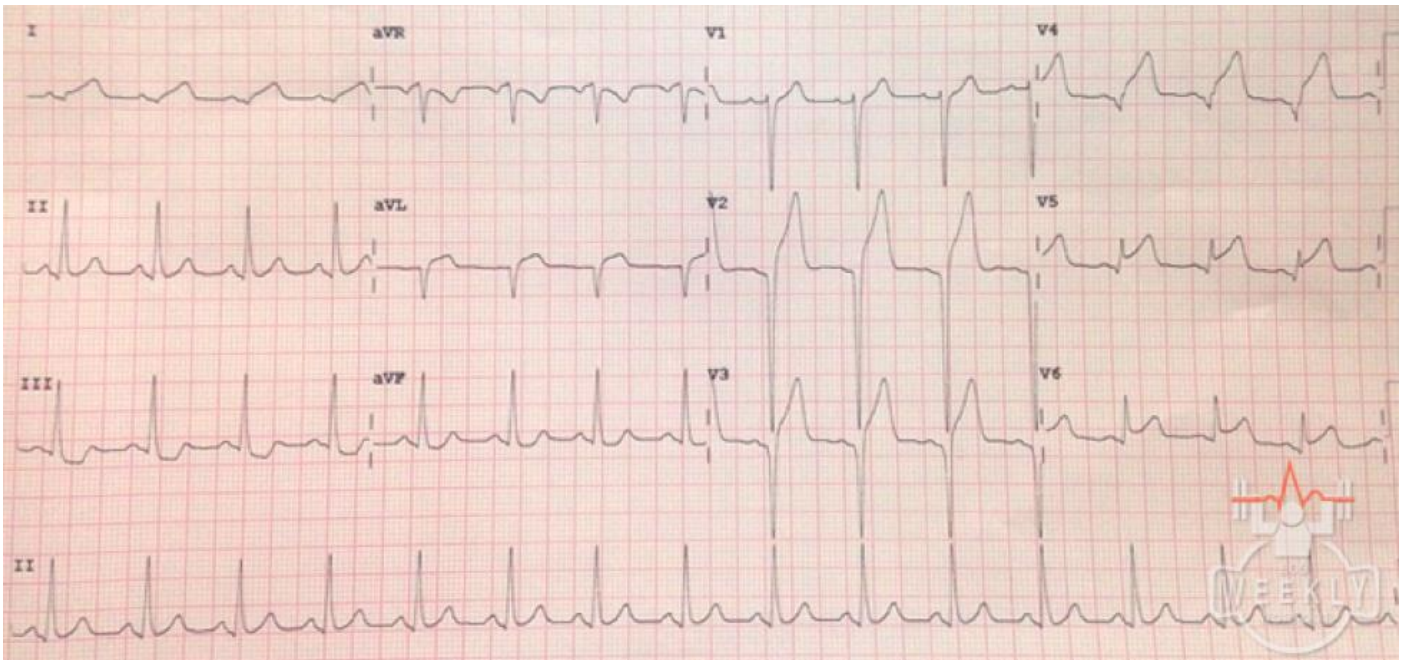
Whilst preparing the patient for transfer, the nurse repeats the ECG (shown).



- What is the rhythm shown? (1 mark)
- The patient remains haemodynamically stable. What actions do you take given the ECG changes? Justify your answer. (2 marks)
- Two years after being treated for his MI, the patient presents with three angina attacks at rest over the past 24 hours. He is now on aspirin, metoprolol, and a statin. His ECG and troponin are normal. What is his TIMI score? (2 marks)
- States his disposition and justify your reasoning. (2 marks)

SAQ 3

A 46 year old female presents to ED with chest pain for 24 hours. She is a smoker and has hypothyroidism. The pain is described as sharp chest pain, radiating to the left arm and neck, and is associated with dyspnoea. Her sats are 94% on RA. Her ECG is shown.



- a. State the likely diagnosis, giving two features of the ECG that support your diagnosis. (3 marks)

- b. List four likely causes of this diagnosis in THIS patient. (4 marks)

- c. How can the ST/T ratio be used to differentiate between pericarditis and benign early repolarisation?

- d. The patient remains in pain despite analgesia. Her troponin is 46. A CXR is ordered (shown). What is the likely diagnosis, and how does this change disposition? (2 marks)



SAQ 4

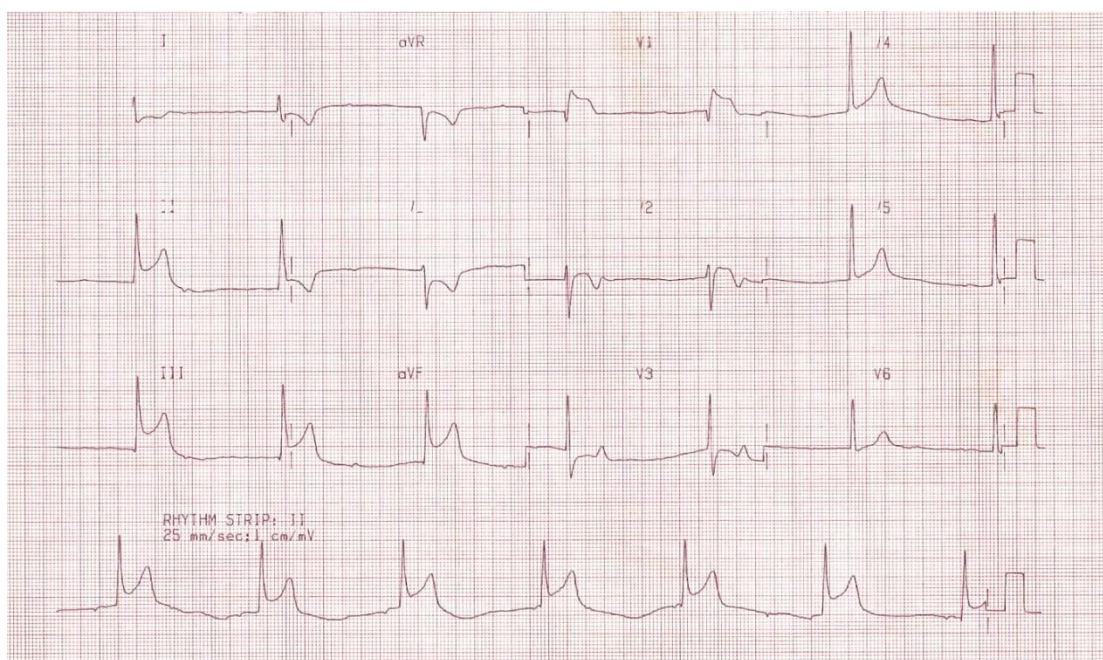
- a. Based on current guidelines, what is the recommended timeframe for each of the following interventions? (3 marks)
- Time to first ECG in suspected STEMI
 - Time from patient arrival to PCI
 - Time to thrombolysis
- b. For each of the following patients, indicate whether PCI, thrombolysis, or both are appropriate if said patient presents with an acute STEMI. Use a tick to indicate appropriate, a cross to indicate not appropriate. (9 marks)

	PCI	Thrombolysis
Postpartum 2/52 after LSCS		
BP 160/90		
On warfarin, INR 2.5		
36/40 pregnant		
Under CPR for <10 mins		
Previous thrombolysis with streptokinase		
Dressler's syndrome		
THR 2/52 ago		
86 year old with GORD		

- c. For a patient with acute STEMI and no heart failure or contraindications, list five medications that are given acutely with a brief description of their mechanism of action. (5 marks)

SAQ 5

A 56 year old male presents with right arm pain for two hours. He complains of nausea and dizziness. His BP is 100/60 and his pulse rate 40bpm. His ECG is shown.



- a. State two abnormalities on his ECG and give the likely diagnosis. (2 marks)

- b. State two possible causes of his bradycardia. (2 marks)

- c. List a pharmacological and a non-pharmacological treatment for his bradycardia. Give doses where appropriate. (2 marks)

- d. The medication for bradycardia fails to have a meaningful result. Briefly outline how you would perform pacing in this patient. (6 marks)