

Pericardial diseases

1. Pericarditis
2. Pericardial effusion
3. Cardiac tamponade
4. Constrictive pericarditis

MCQs

- A 36 year old female has been unwell for several days with a viral illness . she then developed chest pain and shortness of breath . on examination she is hypotensive and tachycardic . there is bilateral crackles . an ECG reveals non specific ST-T changes and bloods revealed raised inflammatory markers and a raised troponin I . echo reveals dilated and hypokinetic chambers . what is the most likely diagnosis ?

a- Myocarditis

b- Pericarditis

c- Infective endocarditis

d- STEMI

e- Acute mitral regurgitation

- one of the following is not cause of pericarditis ?

a- TB

b- SLE

c- Lymphoma

d- COPD

e- Uremia

- In pericarditis the characteristic EKG changes ;

A: T wave inversion*

B; ST segment depression

C; Atrial fibrillation

D; ST segment elevation convex upwards

E; ST segment elevation with concave downwards ?

ECG: initially diffuse elevated ST segments ± depressed PR segment, the elevation in the ST segment is concave upwards → 2-5 days later ST isoelectric with T wave flattening and inversion

- Stage 1, seen in the first hours to days, is characterized by diffuse ST elevation (typically concave up) with reciprocal ST depression in leads aVR and V1 ([figure 1](#)). There is also an atrial current of injury, reflected by elevation of the PR segment in lead aVR and depression of the PR segment in other limb leads and in the left

- 30 year old male patient, presented with chest pain one week after an URTI, most likely diagnosis:

a. Pericarditis ?

b. Tension pneumothorax

- In pericarditis, one is false:

a. T inversion occurs after the J point returns to isoelectric line

b. Elevated troponins imply worse prognosis ?

- Raised JVP in SLE patient : **constrictive pericarditis**

- In pericarditis, all are true, except:

- A. Chest pain increase by deep breathing\

- b. usually follow URI\

- C. on EKG, ST segment elevation is convex upwards**

- D. pericardial rub can confirm diagnosis\

- E. treated with NSAID or aspirin

- Specific EKG changes of acute pericarditis one is true:

- a-presence of Q wave

- b-atrial fibrillation

- c-sinus bradycardia

- d-sinus tachycardia

- e- elevation of ST segment is concave upwards**

- Pulsus paradoxus can be described by which of the following statements?

- a. Pulsus paradoxus can be seen in patients with acute asthma exacerbations in which the negative intrathoracic pressure decreases afterload of the heart with a resultant increase in systolic pressure during inspiration.

- b. Pulsus paradoxus has not been described in patients with superior vena cava syndrome.

- c. Pulsus paradoxus describes the finding of diminished pulses during inspiration, when the peripheral pulse is normally augmented

- durin. inspiration.

- d. A drop in systolic pressure during inspiration of more than 5 mmHg indicates the presence of pulsus paradoxus.

- e. Pulsus paradoxus occurs during cardiac tamponade when there is an exaggeration of the normal decrease in the systolic blood pressure**

- 8. cardiac tamponade : **increase in JVP**

- Pulsus paradoxus pulse is felt in ONE of the following.

- a- aortic regurgitation

- b- aortic stenosis

- c- mitral stenosis

- d- VSD

- e. Cardiac tamponade**

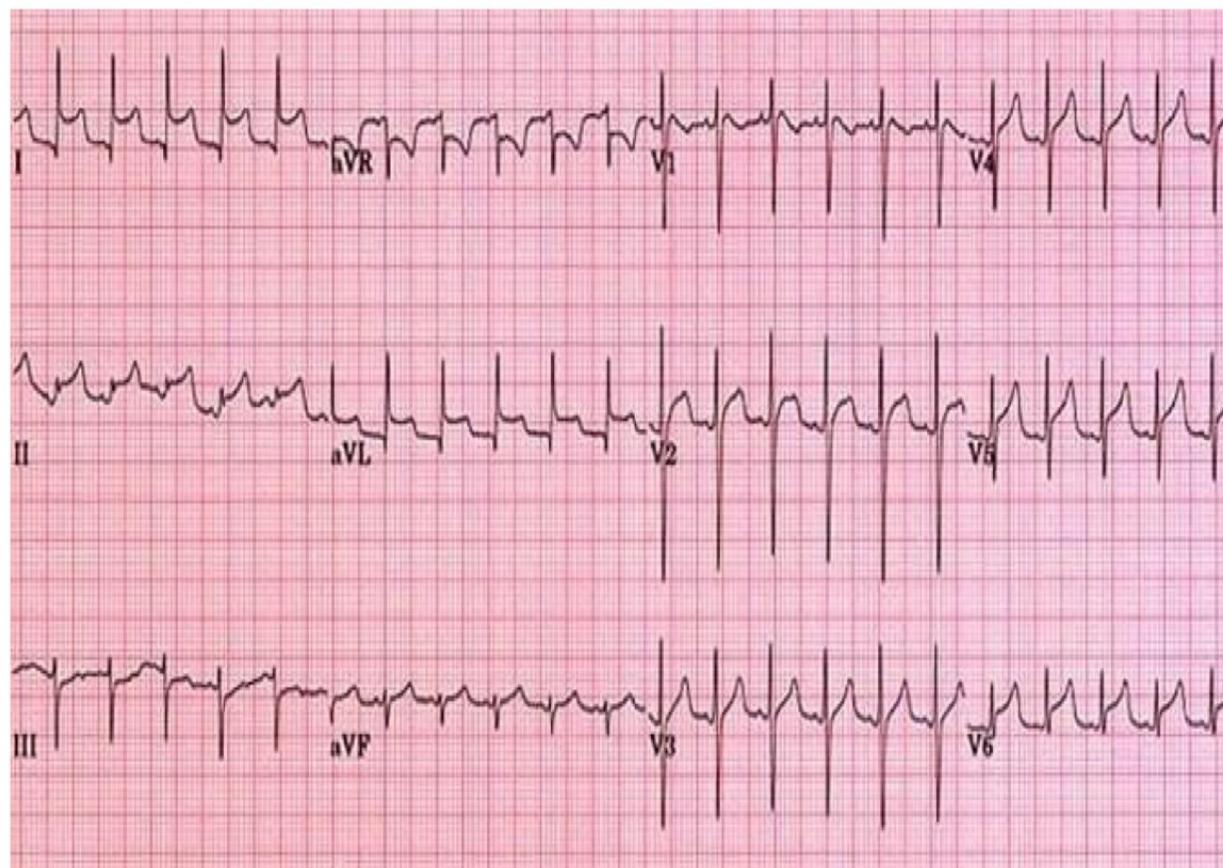
- All the following may occur in cardiac tamponade Except.
 - a- raised jugular venous pressure with sharp rise and y descent.
 - b- Kussmaul's sign (rise JVP/ increased neck vein distension during inspiration)
 - c- pulsus paradoxus
 - d- visible apex beat.**
 - e- reduced cardiac output.

Mini-OSCE

Q7 : the cause of this ECG ?

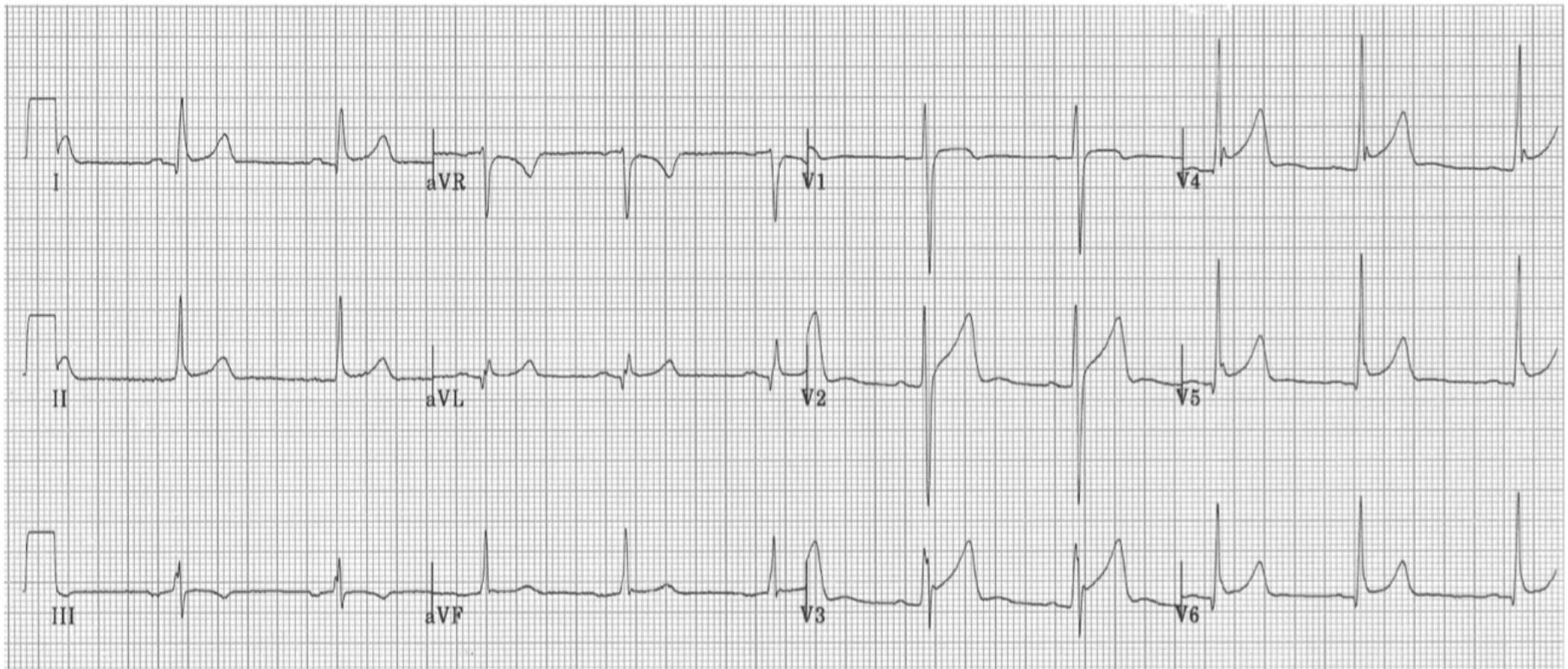
- Atherosclerosis
- Coronary occlusion
- Viral infection

- **NOTE :**
(you must know the ECG is for **pericarditis**)



Q1: patient came with chest pain and flu-like symptoms. What is the most likely diagnosis:

- Inferior MI
- **Pericarditis**
- Atrial fibrillation



Station 1

1) What is your diagnosis?

Acute pericarditis

1) List three causes for this condition?

Idiopathic – infectious – acute MI

1) Investigation to confirm your diagnosis?

ECG ,Echocardiogram

1) What is the treatment?

NSAIDs –glucocorticoids-colchicine – treat underlying cause

