

ECG #27

A 49-year-old woman attends the emergency department 1 hour after the onset of central crushing chest pain, radiating to both upper limbs, and associated with nausea, diaphoresis, and dizziness.

Describe and interpret her initial 12-lead electrocardiogram:



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INTERPRETATION:

- Ventricular rate 67 bpm
- Sinus rhythm
- PR interval 200 ms
- QRS axis (-21°)
- QRS duration 92 ms
- R wave amplitude in aVL > 11 mm
- Q waves V1-2
- Poor R wave progression
- ST elevation in leads V1-3
- ST depression in lead V6
- T wave inversion/flattening I, aVL
- QTc 494 ms

DIAGNOSIS:

Acute anterior ST-segment elevation myocardial infarction (STEMI) due to occlusion of the left anterior descending coronary artery (LAD).

[← Previous ECG](#)

30 minutes later...



[Next ECG →](#)

[← Previous ECG](#)

2 hours later...



[Next ECG →](#)

[← Previous ECG](#)

2 hours later still...



An anterior STEMI was eventually diagnosed and the patient was taken for percutaneous coronary intervention where she was found to have a mid-vessel total occlusion of her left anterior descending coronary artery. A stent was placed successfully following thrombus aspiration.