

ECG #29

A 59-year-old woman presents to the emergency department complaining of right-sided chest pain occurring at rest.

Describe and interpret her initial 12-lead electrocardiogram:



[Show solution](#)

DESCRIPTION:

- Ventricular rate variable/irregular (100 – 150 bpm)
- Sinus rhythm/tachycardia with frequent salvos of premature ventricular contractions
- PR interval 114 ms
- Normal QRS axis (61°)
- QRS duration 74 ms
- Normal ST segments
- Hyperacute T waves in the inferior leads (II, III, aVF)
- Inverted T waves aVL
- No pathological Q waves
- QTc 496 ms

CASE PROGRESSION & INTERPRETATION:

The patient was admitted under Cardiology. Coronary angiography demonstrated Coronary angiogram a normal LMCA, moderate (40-50%) mid-LAD disease with a degree of spasm, mild proximal high OM disease, moderate (40-50%) ostial RCA disease with a *significant* degree of spasm.

High-sensitivity troponin I was 84 ng/L, 5-6 hours after onset of pain (not repeated).

A transthoracic echocardiogram was performed the following day

revealing normal left ventricular cavity size with low-normal systolic function in the presence of frequent right ventricular outflow tract (RVOT) ectopy, no definite regional wall motion abnormalities, normal right ventricular size with normal systolic function, mild left atrial dilatation, mildly thickened mitral valve with mild-to-moderate functional mitral regurgitation, and normal pulmonary artery systolic pressure.

Patient was commenced on oral metoprolol and discharged with outpatient cardiology follow-up.