

## Owner of a broken heart?

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A 37-year-old man presented to the emergency department at 2 am after being awakened by chest pain. The pain was sharp, left-sided, constant and radiated to the left extremity. There was no associated shortness of breath, nausea or diaphoresis. The patient reported a general feeling of malaise over the past week but no fever, chills or cough.

There was no previous history of chest pain or chest trauma. The patient was a nonsmoker and had no known risk factors for heart disease. He did not consume alcohol or use illicit drugs. His medical history consisted of migraines; he was not taking medication for any chronic illnesses. An ECG was performed (see Fig. 1).

Physical examination revealed a healthy-looking man with the following vital signs: temperature 36.4°C, blood pressure 119/85 mm Hg, heart rate 70 beats/min, respira-

tory rate 14 breaths/min, and oxygen saturation 99% on room air. Findings on respiratory, cardiac, peripheral vascular and neurologic examinations were unremarkable. Routine laboratory investigations and chest x-ray were normal.

A blood sample drawn at 7 am for a quantitative estimate of troponin yielded a value of 2.41 µg/L.

Your diagnosis is:

- A. pericarditis
- B. myocardial infarction
- C. unstable angina
- D. Prinzmetal's angina
- E. costochondritis

For the Answer to this Challenge, see page 139.

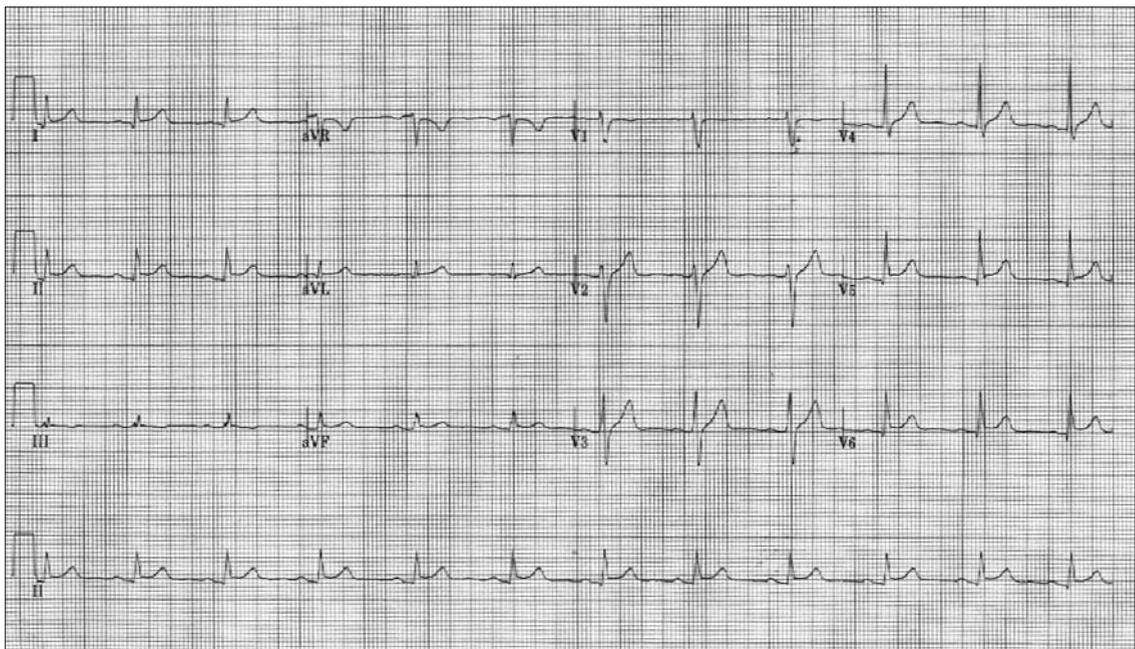


Fig. 1. Results of ECG performed on patient at time of presentation.

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