



FIGURE 1. Is this a possible cardiac event?

CASE

A 74-year-old woman presented with a 5-day history of chills, head congestion, sinus tenderness, sore throat, and a productive cough with yellow-colored sputum. She stated that for the past 3 days she also had been experiencing intermittent chest tightness that worsened when she coughed and occasionally radiated down her left arm. She noted mild shortness of breath associated with exertion only. She denied diaphoresis, palpitations, nausea, vomiting, and dizziness. Before the onset of this recent illness she had been well.

History The patient had not had a medical examination in years and to the best of her knowledge had no hypertension, diabetes mellitus, or elevated cholesterol levels. She denied smoking tobacco or using alcohol.

Physical examination The patient was not in acute distress. Vital signs were BP, 128/72 mm Hg; pulse, 86 beats per minute; respirations, 16 breaths per minute; and temperature, 99.0°F. Mild pharyngeal erythema and slight tonsillar enlargement without exudates was seen. The neck was supple with no lymphadenopathy. The patient had scattered rhonchi bilaterally without wheezes or rales. No chest wall tenderness was found on palpation. Auscultation of the heart revealed a regular rate and rhythm with no mur-

murs, gallops, or rubs. The remainder of the physical examination was unremarkable. Based on the patient's age and chest tightness, the decision was made to obtain an ECG (see Figure 1).

WHAT IS YOUR DIAGNOSIS?

- Acute bronchitis
- Pleurisy
- Acute coronary syndrome
- Pulmonary embolism

DISCUSSION

The ECG demonstrated normal sinus rhythm with T wave inversions in lead I, aVL, and V₂ though V₅ and no ST changes. Presuming the patient's symptoms might be associated with underlying coronary disease, she was given aspirin and sent to the local emergency department for further evaluation. Results of three sets of cardiac enzyme tests taken during the hospital visit were normal. Two-dimensional echocardiography revealed anterolateral hypokinesis, and a nuclear stress test confirmed anterolateral wall hypoperfusion. The patient's condition was diagnosed as acute coronary syndrome (ACS).

Treatment The next morning she underwent cardiac catheterization, which revealed a proximal 90% narrowing of the left main coronary artery. During the catheterization, she began to experience chest pain and was

immediately transferred to a larger hospital for percutaneous revascularization. A drug-eluting TAXUS 3.5-mm stent was placed in the left anterior descending coronary artery.

Comment ACS is an umbrella term used to describe a wide range of symptoms caused by varying degrees of myocardial ischemia.¹ Our patient presented with an atypical presentation of new-onset angina cloaked within the symptoms of acute bronchitis. New-onset angina is generally considered unstable angina and carries a high risk of subsequent MI.

Typical classic manifestations of acute MI include substernal chest pain, neck or throat discomfort, jaw pain, shoulder or arm pain, and diaphoresis.² However, one study found that up to 17% of patients aged 70 years and older were more likely to have dizziness, faintness, fatigue, dyspnea, and complaints of indigestion. Other atypical indicators include giddiness, syncope, altered sensorium, and abdominal pain.³ Palpable chest wall tenderness is a misleading finding and should not be relied upon to reach a diagnosis.

Elderly patients often have comorbid conditions that may mask the typical manifestations of ACS. Therefore, clinicians must be cognizant of the atypical presentation of acute MI in elderly patients. **JAAPA**

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