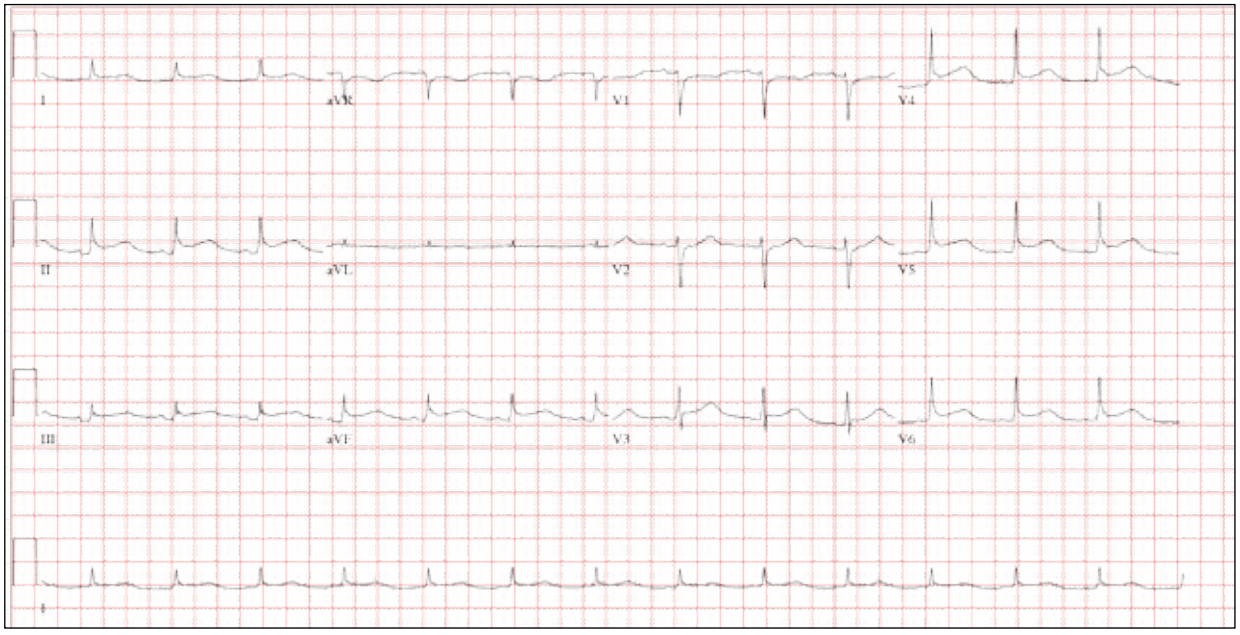
Cold and Fever Followed by Chest Discomfort



A 47-year-old man presents with a five-day history of chest discomfort that he describes as vague and achy but not painful. The discomfort does not radiate to his arm or neck and is not affected by activity.

About six weeks ago, the patient says, he developed a severe viral cold that had him bedridden for several days. During his illness, his temperature reached 102°F for three or four days, and he developed a rash that subsided around the time his fever did. He had shortness of breath then, but not now. He adds, however, that if he takes a deep breath, coughs, or sneezes, he feels a shooting pain beneath his sternum.

Medical history is remarkable for hypertension, type 2 diabetes, and Wolff-Parkinson-White syndrome. Surgical history includes a left inguinal hernia repair at age 6, an appendectomy for acute appendicitis at age 13, and a successful catheter ablation at age 24.

The patient, a long-haul trucker, is on the road five days a week and home on weekends. He is married and has four teenage children. He does not smoke or use recreational drugs; the company he works for performs weekly drug checks and offers financial incentives to employees who do not smoke.

Family history reveals that his father died at age 68 of complications of diabetes. His 64-year-old mother is alive and well and has no health issues of which he is aware. His grandparents are deceased, and he has no information on their medical history.

His medication list includes metoprolol, glyburide, and metformin. He has no known drug allergies.

Review of systems reveals that he has recently developed an abscess on his left buttock that he says he needs to get fixed. He wears glasses and has several teeth with dental caries. He denies any symptoms suggestive of diabetic neuropathy. The remainder of the review is normal.

Physical exam reveals that he weighs 228 lb and stands 76 in tall. Vital signs include a blood pressure of 138/84 mm Hg; pulse, 80 beats/min and regular; respiratory rate, 14 breaths/min^{-1}; tem-

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perature, 99°F; and O_2 saturation, 97% on room air.

Pertinent physical findings include clear lungs bilaterally and a friction rub over the entire precordium. The abdomen is soft and nontender. There is a 1-cm abscess located 2 cm left of the sacrum that is fluctuant and tender to palpation. There is no peripheral edema. All pulses are present and strong bilaterally, and there are no focal neurologic findings.

Laboratory tests reveal a normal blood chemistry panel. The complete blood count is remarkable for a white blood cell count of 12,000 cells/μL.

In light of the friction rub, an ECG is obtained. It shows a ventricular rate of 82 beats/min; PR interval, 130 ms; QRS duration, 90 ms; QT/QTc interval, 442/516 ms; P axis, 78°; R axis, 59°; and T axis, 73°. What is your interpretation of this ECG?

ANSWER

This ECG demonstrates normal sinus rhythm and diffuse ST elevations consistent with a diagnosis of pericarditis.

Although the QTc interval is long, it is due to the ST changes of pericarditis. Comparison with previous ECGs documented normal QTc intervals.

The patient's pericarditis is most likely related to his recent viral illness. Following treatment with indomethacin, his symptoms resolved and his ECG normalized. Also, his abscess was managed by the surgical service and has since resolved. **CR**