Country cardiograms case 54

A 37-year-old man presented to his local emergency department with 3 days of progressive shortness of breath. On the day he presented he reported an inability to get out of bed, without feeling short of breath. He also reported concurrent near syncope on standing. He had no similar episodes previous to this. His medical history was significant only for regular cigar smoking. He took nutritional supplements but was not taking any regular medications. He denied excessive alcohol or illicit drug use.

On physical examination, the patient was in no distress at rest. Vital signs included a heart rate of 31 beats/min and a blood pressure reading of 129/62 mm Hg, equal in both arms. He had a large-volume pulse and cannon a waves on assessment of his jugular venous pressure. The remainder of the examination was unremarkable. Initial routine laboratory investigations were unremarkable, including a negative troponin test. The patient’s initial electrocardiogram (ECG) is shown in Figure 1. What findings on the ECG explain the patient’s symptoms? What might the underlying etiology be in a young, previously well individual?

For the answer, see page 103.

Competing interests: None declared.