Country cardiograms case 35: Answer

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The previous electrocardiogram (ECG) (Fig. 2 on page 161), other than displaying left axis deviation, is essentially within normal limits. It forms a useful baseline for comparison with the current tracing (Fig. 1 on page 160), taken while the patient's chest pain was present.

The current ECG shows normal sinus rhythm, left axis deviation, and normal QRS complex and T wave morphology that is unchanged from before. However, there are subtle differences in the ST segments in leads V2 to V5. The normal, slightly upsloping ST contour shown in Figure 2 is distinct from the slightly depressed (0.5–1.0 mm) horizontal ST segments shown in Figure 1.

Without the previous ECG for comparison, these changes are subtle enough that they might prompt merely a comment of "nonspecific anterior ST segment changes with minimal depression." Taken in conjunction with the previous ECG, however, they suggest an ischemic pattern in the anterior leads. Coupled with the elevated troponin T level, a diagnosis of non–ST elevation myocardial infarction is suggested.

MANAGEMENT PLAN

In our remote diagnostic and treatment centre, without inpatient admission capability, we aim (despite an undependable airport) for direct transfer when possible to a tertiary care facility capable of revascularization, rather than interim admission to regional hospitals. Lengthening, prioritized wait lists for coronary angiography and revascularization are a regrettable reality, and we are aware of 2 fatal outcomes in the past 3 years of our myocardial infarction patients while they were waiting for such care. Paradoxically, our isolated, remote location, without hospital beds, may be a factor in our ability to achieve timely direct admission, compared with regional hospitals with small ICUs.

Appropriate treatment would include acetylsalicylic acid, analgesia, nitroglycerine, enoxaparin, atorvastatin and clopidogrel. The patient was flown to a tertiary care facility where he was successfully treated with angioplasty and stenting.

For the question, see page 160.

"Country cardiograms" is a regular feature of *CJRM*. We present an electrocardiogram and discuss the case in a rural context. Please submit cases to Suzanne Kingsmill, *CJRM*, P.O. Box 4, Station R, Toronto ON M4G 3Z3.