LETTERS TO THE EDITOR

Normal Variant ST-Segment Morphology or Pericarditis?

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Dear Editor,

I have read with interest the article by Roukoz and Wang concerning rare normal variants of ST-segment elevation published in the recent issue of your Journal.¹

The ECG showing an example of the variant ST-segment morphology (Fig. 1B) additionally shows pronounced PR segment depression in leads I, II, aVF, and V₂–V₆, and PR segment elevation in aVR. However, this was not referred to in the paper.

I believe that the presence of such a significant PR segment depression raises several important issues: (1) What was the frequency of this ECG feature among the 101 reported ST-T-variant cases? (2) How can this pattern be differentiated from acute pericarditis, and how did the authors determine that the identified ST-T-variant patients were not pericarditis cases? Were consecutive ECGs (at least few weeks apart) analyzed with regard to the presence of ST-T evolution?

The authors seemed to underplay this problem by stating, "In pericarditis the ST segment is

more diffused, the PR segment depression is more distinct and T waves are usually not inverted when ST segments are elevated." However, having seen a fair number of pericarditis cases, I am convinced that PR depression in pericarditis is often similar or even less pronounced in comparison to the ST-variant ECG shown in Figure 1B, and that ST-segment elevation is often not more widespread, and that T waves might invert while the ST segment is still markedly elevated.² It seems, therefore, that this ST variant cannot be differentiated from pericarditis unless serial ECGs over a longer time span are available to exclude ST-T evolution.

REFERENCES

1. Roukoz H, Wang K. ST elevation and inverted T wave as another normal variant mimicking acute myocardial infarction: The prevalence, age, gender, and racial distribution. *Ann Noninvasive Electrocardiol* 2011;16:64–69.
2. Jastrzebski M. Pericarditis or myocardial ischaemia or both? *Kardiol Pol* 2007;65:1115–1117.