

# Letters

## COMMENT & RESPONSE

**In Reply** We would like to express our gratitude to Dr Wu and colleagues for recognizing Spodick sign on the results of a post-percutaneous coronary intervention (PCI) electrocardiogram (ECG) in our case report.<sup>1</sup> Spodick sign is characterized as a downsloping TP segment that is most clearly identified in lead II and the lateral precordial leads. Although Spodick sign can distinguish pericarditis from ST elevation myocardial infarction (STEMI), it should be noted that there are no absolute pathognomonic signs to differentiate STEMI or pericarditis. One sign might be found concurrent to another disorder, albeit with a lower probability.<sup>2</sup> Makaryus and colleagues<sup>3</sup> and Chaubey and Chhabra<sup>4</sup> reported that Spodick sign was found in 80% of cases of pericarditis, but the latest report by Witting and colleagues<sup>2</sup> showed that the frequency of Spodick sign was 29% in pericarditis and 5% in STEMI. These authors also reported that the median number of leads showing downsloping TP segment was 4 (range, 1-6) in patients with pericarditis and 3 (range, 1-6) in patients with STEMI.<sup>2</sup> Furthermore, Spodick sign criteria are only met when more than 1 lead shows the downsloping of the TP segment.

In this patient case,<sup>1</sup> it is unclear whether Spodick sign was present before the PCI ECG. Downsloping of the TP segment in leads V<sub>5</sub> and V<sub>6</sub> or lead II can be caused by either pericarditis or STEMI. In circumstances when pericarditis and STEMI coexist, overestimating Spodick sign before the PCI ECG to indicate pericarditis rather than STEMI may further disguise the STEMI-derived need for reperfusion. However, Spodick sign becomes more apparent once reperfusion has been achieved. Apart from the rapid heart rate and long PR interval, the masking of Spodick sign before the PCI ECG may have been caused by the subtotal occlusion of the left circumflex artery.

We agree that the presence of Spodick sign can be used to distinguish pericarditis from STEMI or to confirm the presence of pericarditis after PCI, as in this case where Spodick sign

avored the presence of pericarditis after reperfusion.<sup>1</sup> However, when pericarditis and STEMI coexist, the presence of Spodick sign may be a poor discriminator, as demonstrated in the studies by Witting and colleagues<sup>2</sup> and Spodick.<sup>5</sup> These authors found the sign of downsloping in the TP segment only in uncomplicated acute pericarditis or when evidence of myocardial infarction or acute coronary syndrome was excluded.<sup>2,5</sup>

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