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Attenuation of ECG QRS complexes in a patient with takotsubo syndrome due to paraganglioma

Comment on

Shan P, Yu L, Hong X, Huang W (2014) Cardiogenic shock with takotsubo-like cardiomyopathy in functional retroperitoneal paraganglioma. Herz. doi:10.1007/s00059-014-4055-8

To the editor

The interesting report by Shan et al. [1] about a patient with takotsubo syndrome (TTS) due to a functional paraganglioma emphasizes the importance of autonomous tumors like pheochromocytomas and paragangliomas in the causation of the TTS phenotype. Currently, there is a paucity of diagnostic modalities that would enable clinicians to differentiate TTS from acute coronary syndrome (ACS), with which TTS shares many disease symptoms/signs, and laboratory attributes, including the electrocardiogram (ECG). Early diagnostic differentiation between TTS and ACS is important, and if a test specific for TTS were available, it would probably obviate cardiac catheterization and coronary arteriography to evaluate for the presence/absence of coronary artery stenoses and coronary plaques, with unstable incrimination for ACS features. Recent ECG insights have just been published [2], which advocate evaluation of the admission ECG for evidence of low QRS voltage in the limb and/or precordial ECG leads, and for attenuation of the QRS amplitudes (ATTQRS) when one compares subsequent ECGs with the admission ECG. Comparison of the two ECGs, the first from admission and the second after coronary arteriog-

raphy in the article by Shen et al. [1], reveals ATTQRS in all limb ECG leads that had developed in the interim. I wonder whether subsequent ECGs showed further ATTQRS; what the course of such ATTQRS was; when—during hospitalization—the ECGs of the patient returned to the baseline obtained at admission; and whether the admission ECG had already shown ATTQRS in comparison with previous ECGs of the patient, if they were available. ECGs of patients with TTS may have diagnostic value, and since this has not yet been established, ECGs deserve our scrutiny.

Compliance with ethical guidelines

Conflict of interest. J.E. Madias states that there are no conflicts of interest.

Reply

The authors of the original case report have acknowledged the valuable comment on the attenuation of QRS voltage in the follow-up of their patient. Additional ECGs were not available to further elaborate on this issue.

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