

## Inquiries about a patient with a “snail-like” takotsubo syndrome variant. Authors’ reply

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This article is accompanied  
by the editorial on page 897

We appreciate John E. Madias’ interest and comments on our case report recently published in the *Cardiology Journal*, which generated great interest [1]. We would like to dispel any doubts about the course of the disease and the echocardiography and electrocardiography (ECG) findings in our patient with the “snail-like” takotsubo variant. Unfortunately, Images in Cardiovascular Medicine have a restrictive word limit; however, herein, we can kindly provide further details on our case.

The patient suffered from recurrent chest pain for 2 days, provoked by stress and released after nitroglycerin intake. The troponin level was the highest on admission to the hospital (3.4 ng/mL), then it decreased. The maximum marked B-type natriuretic peptide concentration (120 pg/mL) occurred the day after hospital admission when the patient reported no symptoms. A discharge echocardiogram revealed residual akinesis of the medium segment of the anterior wall and the anterior part of an intraventricular septum. The patient was followed-up twice. The echocardiography showed a contractility improvement, but the hypokinesis was still present 3 weeks after discharge. After 5 weeks, the echo examination was without any abnormalities. The regional longitudinal strain during the 5-week follow-up improved but was still slightly worse in the hypokinetic segments (see: Bull’s Eye Plot, Fig. 1). Among the drugs taken before hospitalization were: sotalol, candesartan,

hydrochlorothiazide, lercanidipine, rosuvastatin, acenocoumarol, levothyroxine, and metformin. The QTc was slightly shortened during hospitalization, but interestingly on the 4<sup>th</sup> day of hospitalization, there was an episode of atrial fibrillation. After electrical cardioversion, the QTc interval extended to 479 ms. Certainly, QTc was shortened after a 3-week follow-up; it was 421 ms.

The ST segment elevations in leads II, III, and aVF revealed the importance of repeated examinations and appropriate interpretation. We reanalyzed the available ECGs thanks to Madias’ question and concluded that the ECG leads had been switched in the Emergency Department. The ST segment elevations in II, III, and aVF were only observed in the first ECG. The next ECGs revealed ST segment elevations in I, aVL and T waves inversions in I, aVL, and positive-negative T waves in V2–V4 (Fig. 1). At discharge, T waves were inverted in V1 and positive-negative in V2. Interestingly, in a 3-week follow-up, negative T waves in I, aVL, V2 and positive-negative T waves in V3–V5 were observed.

We presented this unique case not only because of localization but also because monitoring laboratory parameters and serial ECGs affect the overall course of the disease.

**Conflict of interest:** None declared

### References

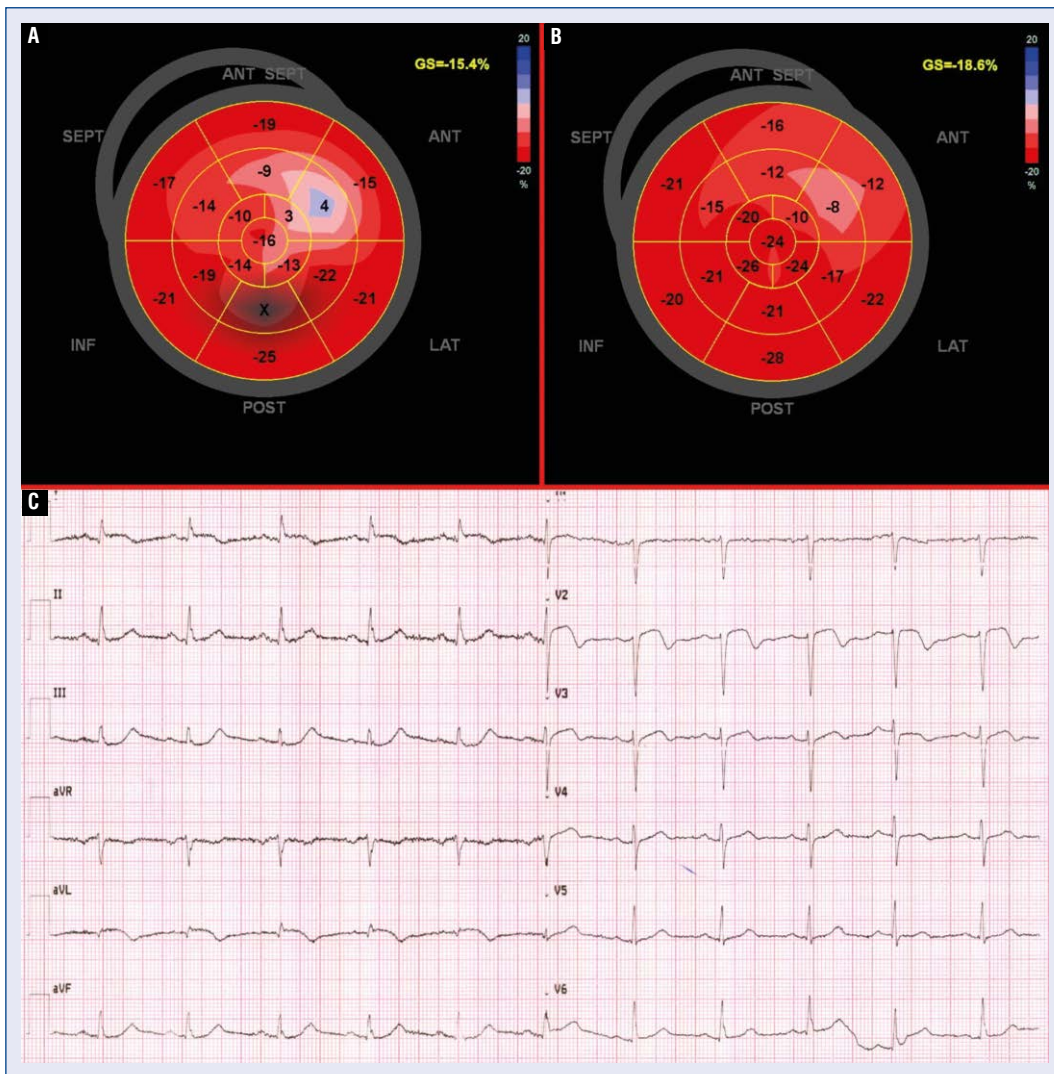
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**Figure 1. A.** Bull’s Eye Plot presenting global longitudinal strain (GLS) on the day of admission to the hospital; **B.** Bull’s Eye Plot presenting GLS after 5-week follow-up, **C.** Electrocardiogram done on the day of admission to the hospital.