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Speckle tracking in patients with atypical Takotsubo syndrome: seek, and ye shall find!

Accepted: 4 November 2015
Published online: 20 November 2015
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Dear Editor,
The report by Cinotti et al., published online ahead of print on 26 October 2015 [1], about the employment of serial transthoracic echocardiography (TTE)-based speckle tracking analysis (STA), aiming at detecting early systolic function impairment, in 46 patients with severe aneurysmal subarachnoid hemorrhage (SAH) is intriguing, because it brings forth again the nagging issue whether Takotsubo syndrome (TTS) in general and its atypical varieties in particular [2–5] are much more prevalent than currently clinically recognized. Using a “proactive” (seek, and ye shall find) approach in detecting the disease, consisting of carrying out STA on days 1, 3, and 7 of hospitalization in 46 patients with severe SAH and comparing the data with STA from a control group of normal subjects matched for age and gender, the authors found a severe decrease of the left ventricular (LV) global longitudinal strain in 17

(37 %) patients with SAH on day 1, while the LV ejection fraction (LVEF) was preserved, with normalization of STA by day 7, in keeping with experience with the TTS phenotype, where LVEF normalizes or reveals major improvement by the end of the first week after admission. The authors concluded that STA “could be used for sensitive detection of stress cardiomyopathy” and that “this is critical because cardiac impairment remains a major cause of morbidity and mortality after SAH” [1]. This study reminds me of the work of Korean investigators who prospectively carried out serial TTE in patients admitted to the medical intensive care unit and detected TTS in 21 % [6], and 28 % [7], of patients with critical illness. Accordingly, although the frequency of TTS, associated with depressed LVEF, in patients with SAH when diagnosed by routine clinical evaluation in retrospective studies has been described to be approximately 1 % [8], it will be found to be much higher in prospective studies employing serial TTE. Moreover the frequency may be found to be even higher if mild atypical forms of TTS are considered [4].

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