Transoesophageal echocardiography: an unusual trigger to Takotsubo cardiomyopathy

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We report an interesting case of a 65-year-old woman referred to our echocardiography department for transoesophageal echocardiography (TEE) to rule out an infective endocarditis because of a persistent unexplained inflammatory syndrome. Her medical history included an aortic and mitral valve replacement for rheumatic disease in 1994, a permanent atrial fibrillation. Transthoracic echocardiography (TTE) showed normal left ventricular (LV) wall motion (except a post-operative dyskinetic septum) and normal LV ejection fraction (LVEF). TEE showed no argument for infective endocarditis. The examination lasted 10 min and occurred optimally with excellent tolerance. A few minutes after TEE, she complained of dizziness and nausea, without any chest pain. Clinical examination was normal. Electrocardiogram showed ST-segment elevation in D1-aVL leads, with an inferior mirror. Acute myocardial infarction was suspected and a coronary angiography was performed in emergency, normal. She was admitted in the intensive care unit. TTE showed the typical pattern of Takotsubo cardiomyopathy (TC) with severe LV dysfunction (LVEF 20%), apical ballooning, akinesis of distal LV segments and apex, and hyperkinesis of the base (Supplementary data online, Videos S1 and S2). Subsequent peak troponin-T increased to 2.76 μg/L. She received β-blockers and angiotensin-converting enzyme inhibitor. Complete normalization of LVEF was observed at Day 3 (Supplementary data online, Videos S1 and S2).

This is the first case of TC described after a TEE exam. This emphasizes that TC can be triggered by explorations which are routinely performed. Moreover, clinical presentation may be atypical. Consequently, TC incidence is probably underestimated and should be considered if unusual symptoms appear after stressful medical examination.

Supplementary data are available at European Heart Journal – Cardiovascular Imaging online.

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