A 62-year-old woman was admitted to our emergency room with acute onset of typical chest pain that started during an emotionally stressful psychotherapeutic treatment. The patient’s history revealed no cardiovascular risk factors and the initial ECG was unspecific. Blood tests performed concomitantly revealed mild elevation of cardiac troponin T and creatinine kinase levels. Consequently, the patient was referred to our catheter laboratory for treatment of a suspected acute coronary syndrome. Coronary angiography showed normal coronary arteries; however, a ventriculography revealed a strictly midventricular akinesia with preserved basal and apical contractile function. Because 3 coronary territories were affected simultaneously, thrombosis was excluded as the reason for the abnormal wall motion pattern, which led to the differential diagnosis of myocardial inflammation. For further functional and tissue characterization, a cardiac magnetic resonance imaging examination was performed. Cine short-axis and 2-chamber views showed a moderately impaired left ventricle with circular midventricular akinesia (Movies I and II), myocardial thinning, and absence of edema on T2-weighted images. Visualization of myocardial necrosis using gadolinium diethylenetriamine pentaacetic acid as the contrast agent was negative (Figure, A and B). Therefore, our patient was diagnosed with Tako-Tsubo cardiomyopathy with midventricular ballooning. The Tako-Tsubo syndrome is usually a transient left ventricular apical ballooning, which has been widely described in Japan as a cardiomyopathy that resembles acute myocardial infarction on presentation but is characterized by a normal coronary tree and a favorable outcome. Our patient improved clinically continuously over the next several days. Four weeks later, the patient was readmitted for follow-up magnetic resonance imaging and showed normal left ventricular function and myocardial thickening (Movies III and IV). This is an unusual and rare case of nonapical but midventricular Tako-Tsubo disease induced by emotional stress, with characteristics similar to those of the apical form showing restitutio ad integrum within weeks.

Disclosures

None.
A Rare Form of Midventricular Tako-Tsubo After Emotional Stress Followed up With Magnetic Resonance Imaging
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