Images in Cardiology



## Uncommon presentation of stress-induced (tako-tsubo) cardiomyopathy

Presentación infrecuente de miocardiopatía por estrés (tako-tsubo)

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83-year-old woman without known cardiovascular risk factors and no clinical signs of ischemia or heart failure after the implantation of a pacemaker (15 years ago); who was sent by the emergency medical services to the Hospital Universitario Puerta de Hierro, after an episode of oppressive thoracic pain, accompanied by dyspnea and anxiety, after a situation of important psychological stress. During the transfer, her symptoms abated gradually; thus, she arrived asymptomatic to the hospital. Minimum ST segment elevation was observed in the electrocardiogram, on high lateral wall leads, with minor inferior wall rectification and negative T wave in D<sub>III</sub>. The troponin I at admission was of 2.65 µg/L (maximum of 7.34) and the emergency echocardiogram (Panel A) reported a non dilated left ventricle with septal hypertrophy, akinesia of anterior, anterosep-

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Santa Clara 50100. Villa Clara, Cuba E-mail address: ebreyleon@gmail.com tal and inferoseptal wall segments, with moderately decreased systolic function (ejection fraction [EF]: 35%). Suspecting a stress-induced cardiomyopathy, she was oriented a coronary angiography, 48 hours later to the admission, where coronary arteries without angiographic stenosis or evidence of unstable plaque (Panel B) were confirmed. The ventriculography (Paneles C y D), in right anterior oblique view 30°, showed a focal akinesia of the middle segment of the anterior wall and normokinesis of the other segments (Panel E), with a calculated EF of 64%.

The stress-induced cardiomyopathy, or takotsubo, is typically manifested as apical ballooning (81.7%), in a 14.6% as a half-ventricular akinesia (anterior and inferior), in a 2.2% as basal akinesia, and only 1.5% as focal akinesia, as is the case presented herein. Considering that the echocardiogram performed two days before supported the typical manifestation, the possible explanation for this uncommon presentation may be the recovering of some of these akinetic segments while alterations persist in the mid-anterior segment for having been, supposedly, the most affected.

