Images in clinical medicine

The Takotsubo cardiomyopathy caused by the family drama

Mehmed Kulić¹, Elnur Tahirović^{2*}

Cardiology clinic¹, Cardiosurgery clinic², University Clinical Center Sarajevo, Sarajevo, Bosnia and Herzegovina



A 61 year old woman was admitted to our hospital for acute anginal pain which had occurred two hours before she was admitted. The symptoms started after she experienced psychological stress, due to her daughter's divorce. Her personal anamnesis was negative for coronary artery disease. An electrocardiogram (ECG) showed sinus rhythm with ST-segment elevation of 2 mm in leads V2-V3 and negative T waves in leads DI, DII, AVL, and V2-V6 (Panel A). Her troponin I level was 1196 pg/ml (normal range <30 pg/ ml). A transthoracic echocardiogram estimated the left ventricular ejection fraction at 35%, with evidence of segmental motion abnormalities in the medioapical segments of the anterior, septal, inferior wall, with moderate mitral regurgitation. Coronary angiography was performed and we found normal coronary arteries, with left ventricular apical ballooning and hypercontraction of the basal segment (Panel B; (http://ama. ba/index.php/ama/article/view/264/264-845-1-PC.HTML2). On the basis of these findings and anamnesis, Takotsubo cardiomyopathy or broken heart syndrome (1) was diagnosed. She was treated with medical therapy (diuretics, beta blockers, anticoagulant therapy, ACE-inhibitors) and after one month her echocardiogram was without any abnormalities. Also, the ECG normalized without any sign of myocardial ischemia. Although it has unclear pathogenesis, studies have shown that this cardiomyopathy is associated with a large quantity of catecholamines produced as a response to stress (2).

Therefore, it is very important for physicians to recognize this very rare and frequently unrecognized cardiomyopathy, which can often mimic acute coronary syndrome.

Key words: Takotsubo cardiomyopathy • Acute coronary syndrome.

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*Corresponding author elnur.tahirovic@gmail.com Tel.: + 387 33 298 219 Fax.: + 387 33 268 791

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