

Takotsubo cardiomyopathy associated with hypereosinophilic syndrome

Ena Kurtić*
 Stjepan Kranjčević
 Darko Počanić
 Darko Vujanić
 Tomislav Letilović
 Mario Stipinović
 Helena Jerkić

Clinical Hospital Merkur,
 Zagreb, Croatia

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ORCID: Ena Kurtić, <http://orcid.org/0000-0001-6673-6510> • Stjepan Kranjčević, <http://orcid.org/0000-0002-1575-1902> • Darko Počanić, <http://orcid.org/0000-0003-3257-110X> • Darko Vujanić, <http://orcid.org/0000-0003-0585-5887> • Tomislav Letilović, <http://orcid.org/0000-0003-1229-7983> • Mario Stipinović, <http://orcid.org/0000-0002-1582-1552> • Helena Jerkić, <http://orcid.org/0000-0002-1650-4735>

***ADDRESS FOR CORRESPONDENCE:** Ena Kurtić, Klinička bolnica Merkur, Zajčeva 19, HR-10000 Zagreb, Croatia.
 Phone: +385-91-1666-116. E-mail: ena.kurtic88@gmail.com

A 65-year-old woman was hospitalized because of the sudden onset of angina-like chest pain and dyspnea. Deep negative T waves were seen on ECG in the anterolateral leads. The cardiac enzyme levels were mildly elevated. The patient was admitted with a diagnosis of acute non-ST-segment-elevation myocardial infarction. Laboratory findings also revealed leucocytosis with eosinophyllia (6.71 g/L). An echocardiogram showed mildly reduced ejection fraction (45-50%) due to anteroapical ballooning in systole. Cardiac catheterization disclosed no obstructive coronary artery disease. Four weeks later, the ECG showed complete resolution of the T waves inversion and no Q-wave formation. Echocardiography revealed improvement of the wall motion abnormality and normalization of the ejection fraction. It was concluded that acute emotional stress after the death of her brother had precipitated the initial symptoms. Patient's medical history revealed similar event 3 years ago, also precipitated with emotional stress. The number of eosinophils in peripheral blood also recovered without specific hematologic therapy.

Takotsubo cardiomyopathy is a syndrome that mimics acute coronary incident, while the angiographic examination shows no coronary lesions. Intense stress and high adrenergic stimulation are the triggers of Takotsubo cardiomyopathy.¹ In most cases (95 %) there is a complete recovery of cardiac function, but in the acute phase ventricular arrhythmias, heart failure with pulmonary edema and cardiogenic shock, and very rarely rupture of the heart muscle, are possible. Mortality ranges from 1 to 3.2 %.¹

Hypereosinophilic syndrome, a disorder of excessive eosinophilic production, may cause cardiovascular complications that are commonly manifested as a heart failure.² Myocardial infarction is a rare complication in hypereosinophilic syndrome, and it is result of embolic events. In the literature, there is no associated case of Takotsubo cardiomyopathy and hypereosinophilic syndrome.

Although the prognosis of Takotsubo cardiomyopathy is very good, continuous cardiac care is necessary because the pathophysiological mechanism, treatment, long-term prognosis and natural course of the disease are not clearly defined. The therapy recommendation is long-term treatment with beta-blocker and stress control.

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LITERATURE

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