

Inflammation as a procoagulant state for thrombus manifestation in a patient with secondary dilated cardiomyopathy

Andreja Čleković-Kovačić*,
Renata Ivanac Janković,
Ivana Petrović Juren,
Vlasta Soukup Podravec,
Sandra Prša,
Kristina Milevoj Križić,
Iva Ladić,
Gabrijela Bašković

Bjelovar General Hospital,
Bjelovar, Croatia

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***ADDRESS FOR CORRESPONDENCE:** Andreja Čleković-Kovačić, Opća bolnica Bjelovar, A. Mihanovića 8, HR-43000 Bjelovar, Croatia. / Phone: 385-43-279-181 / E-mail: kovacicandreja1@gmail.com

ORCID: Andreja Čleković-Kovačić, <https://orcid.org/0000-0002-4532-3597>

Renata Ivanac Janković, <https://orcid.org/0000-0003-4949-3953> • Ivana Petrović Juren, <https://orcid.org/0000-0002-2793-3455>
Sandra Prša, <https://orcid.org/0000-0001-9639-3918> • Vlasta Soukup Podravec, <https://orcid.org/0000-0002-4605-0068>
Kristina Milevoj Križić, <https://orcid.org/0000-0003-2115-3076> • Iva Ladić, <https://orcid.org/0000-0003-0124-5256>
Gabrijela Bašković, <https://orcid.org/0000-0002-5413-873X>

Introduction: Inflammation is the dynamic process of defense made of chronological changes which are repercussions of the body on injury or infection. It is made of complex biological and biochemical reactions which includes crucial cells of the immune system and many lots of biological mediators stimulated with mechanical injuries, toxins, infections and reaction hypersensitivity. Because of the disorders of the homeostatic system it is bigger probability of appearing thromboembolic incidence especially in patients with some disorders. Dilated cardiomyopathy is disease with structural and functional changes of heart muscle.¹⁻⁶ In the following case report the 43-year-old male with earlier known secondary dilated cardiomyopathy who presented with a pneumonia and thrombus in left and right ventricle.

Case report: 44-year-old male patient with earlier known secondary dilated cardiomyopathy (post myocardial; from 2014) was hospitalized because of right pneumonia and heart failure. He was presented with dyspnea and chest pain and with elevated inflammation markers, D-dimer, and NT-proBNP. Because of chest pain we did the CT pulmonary angiography and we exclude pulmonary embolism. Echocardiography showed the dilatated (EDD 75 mm) left ventricle (LV) with reduced EF 25-28%. In akinetic apical part of the LV we noticed the thrombus (7x6 mm) (**Figure 1**). The right ventricle (RV) was dilatated (40 mm) with reduced contractility: TAPSE 13 mm, and RVEF around 30%. In the RV we noticed thrombus (32x22 mm) (**Figure 2**). With the TEE we confirm the formation of the thrombus (20x30 mm) in the apical part of the LV. With the antibiotic therapy (piperacillin with tazobactam and then with azithromycin and tetracycline and with the other medicaments) we achieve regression of pneumonia and resolution of symptoms of heart failure. In the further processing (in the tertial institution) with the cardiac magnetic resonance we prove that the formation in the left and the right heart was thrombus. The patient was prepared for heart transplantation.

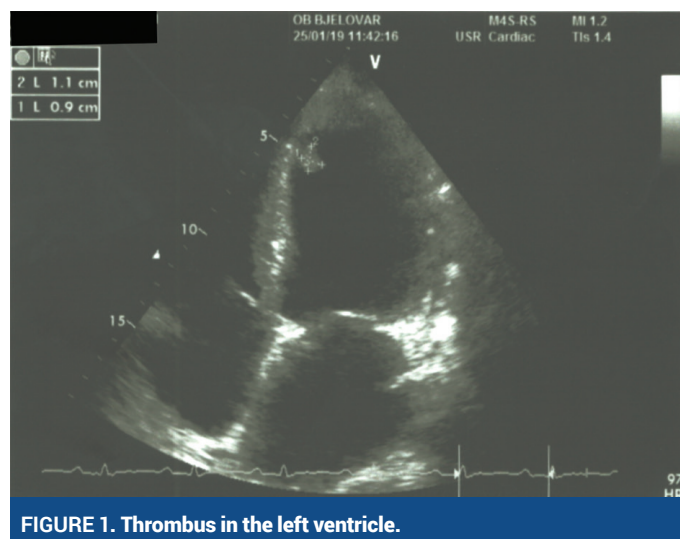


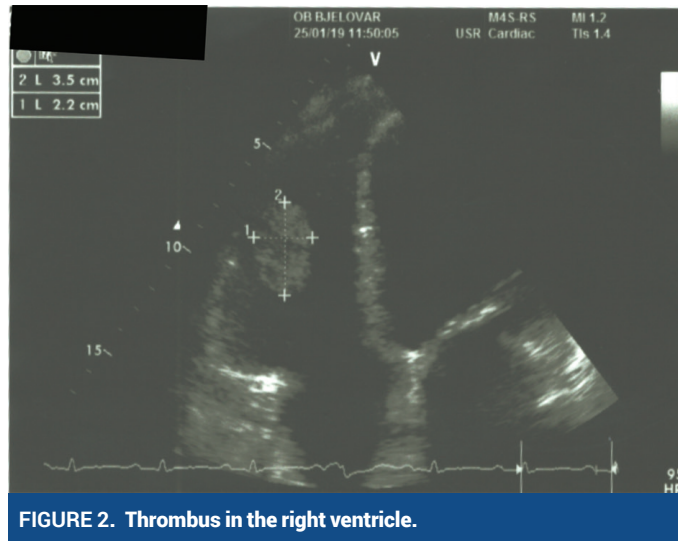
FIGURE 1. Thrombus in the left ventricle.

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Conclusion: Every additional disease can complicate the earlier known heart disease especially with inflammation which has the procoagulant activity that encourages appearing thrombus. We must be more careful in the patient with some of the heart disease so that we do not predict it.

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