

Multiple, left ventricular cystic thrombi disappeared in 14 days

A 50-year-old-man was admitted to our clinic with worsening dyspnea. Echocardiography revealed a dilated left ventricle (LV) with severely compromised systolic function and multiple mobile cystic masses (Video 1, Figs. 1a to 1c). These cystic masses were clearly observed with two-dimensional (2D) and three-dimensional (3D) transthoracic echocardiography (Video 2). A hydatid cyst was excluded with laboratory investigations. The treatment for acute heart failure was initiated based on guidelines. Weight-adjusted enoxaparin and warfarin were initiated. Thrombi started to resolve on the 5th day and completely disappeared by the 14th day of anticoagulation therapy (Fig. 1d). The patient was anticoagulated with warfarin (target international normalized ratio 2.5) for at least 3 months. During the follow-up, no embolic or hemorrhagic complications were observed.

Various examples of intracardiac cystic thrombi have been reported in the literature (1, 2). In one of the studies, LV cystic thrombus was reported to have disappeared on the 7th day of treatment with warfarin and unfractionated heparin, similar to our case (2). With the widespread use of direct oral anticoagulants (DOAC) in clinical practice, examples of intracardiac thrombi resolution with

DOACs have been reported. For instance, intracardiac thrombus was resolved on the 13th day with rivaroxaban (15 mg/day) (3), on the 16th day with apixaban (2x5 mg/day) (4), and on the 27th day with dabigatran (220 mg/day) (5). Surgery may be considered, particularly for a large, protruding, and mobile thrombus. Differential diagnosis for blood cysts, hydatid cyst, and myxoma with central necrosis should be kept in mind. However, in our patient, the clinical course and response to anticoagulation confirmed the diagnosis of a thrombus with cystic appearance.

Informed consent: Written informed consent to publication was obtained from the patient.

Video 1. The apical four chamber view revealed three cystic thrombi in the left ventricle by 2D echocardiography

Video 2. The 3D transthoracic echocardiography revealed three cystic thrombi in the left ventricle

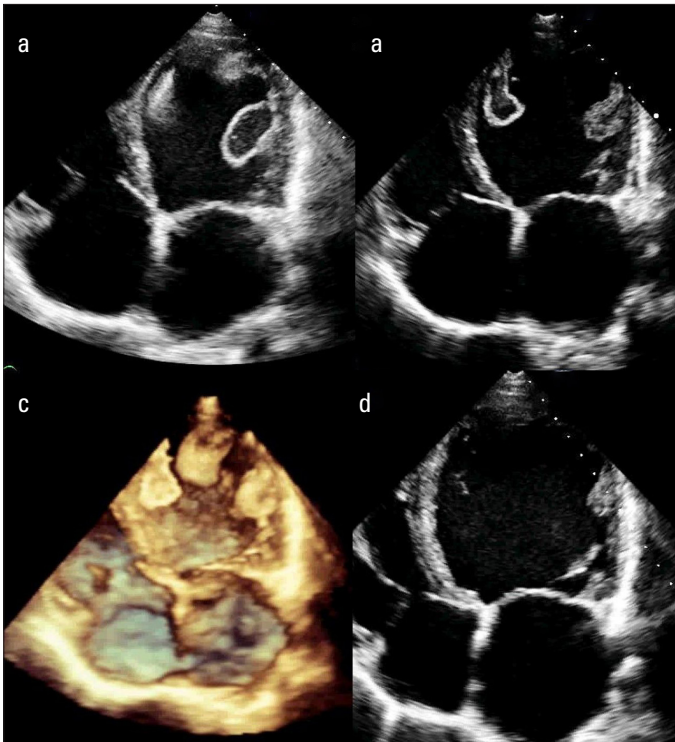


Figure 1. (a to c) There were three cystic thrombi in the left ventricle clearly seen with 2D and 3D transthoracic echocardiography. (d) Thrombi started to resolve on the 5th day and completely disappeared by the 2nd week of anticoagulation therapy

References

- Ozlu MF, Ozcan F, Tüfekçioğlu O. Left ventricular apical cystic thrombus mimicking a hydatid cyst. *Can J Cardiol* 2009; 25: e266. [\[Crossref\]](#)
- Bozkurt A, Cayli M, Acartürk E. Cyst-like thrombi in the left ventricle. *Anatol J Cardiol* 2001; 1: 114.
- Nakasuka K, Ito S, Noda T, Hasuo T, Sekimoto S, Ohmori H, et al. Resolution of left ventricular thrombus secondary to tachycardia-induced heart failure with rivaroxaban. *Case Rep Med* 2014; 2014: 814524. [\[Crossref\]](#)
- Kawakami T, Kobayakawa H, Ohno H, Tanaka N, Ishihara H. Resolution of left atrial appendage thrombus with apixaban. *Thromb J* 2013; 11: 26. [\[Crossref\]](#)
- Nagamoto Y, Shiomi T, Matsuura T, Okahara A, Takegami K, Mine D, et al. Resolution of a left ventricular thrombus by the thrombolytic action of dabigatran. *Heart Vessels* 2014; 29: 560-2. [\[Crossref\]](#)

Lale Dinç Asarcıklı , Haluk Furkan Şahan¹ ,

Hilal Erken Pamukcu¹ , Hamza Sunman¹ 

Department of Cardiology, Dr. Siyami Ersek Cardiovascular and Thoracic Surgery Training and Research Hospital; İstanbul-Turkey

¹Department of Cardiology, Ministry of Health Dışkapı Yıldırım Beyazıt Training and Research Hospital; Ankara-Turkey

Address for Correspondence: Dr. Lale Dinç Asarcıklı, İstanbul Dr. Siyami Ersek Göğüs ve Kalp Damar Cerrahisi Eğitim ve Araştırma Hastanesi, Kardiyoloji Kliniği, İstanbul-Türkiye
Phone: +90 216 542 44 44

E-mail: mdlaledinc@gmail.com

©Copyright 2021 by Turkish Society of Cardiology -

Available online at

www.anatoljcardiol.com

DOI:10.5152/AnatolJCardiol.2021.26796

