

Revista Portuguesa de Cardiologia Portuguese Journal of Cardiology www.revportcardiol.org



### IMAGE IN CARDIOLOGY

# A rare case of dyspnea



## Check for updates

# Dimitrios Afendoulis<sup>a,\*</sup>, Maria Moutafi<sup>a</sup>, Petros Voutas<sup>a</sup>, Nikolaos Papagiannis<sup>a</sup>, Nikolaos Smyrnioudis<sup>a</sup>, Konstantinos Toutouzas<sup>b</sup>, Athanasios Kartalis<sup>a</sup>

<sup>a</sup> Cardiology Department, General Hospital of Chios''Skylitseio'', Greece

<sup>b</sup> 1st Department of Cardiology, Hippokration Hospital, School of Medicine, National and Kapodistrian University of Athens, Athens, Greece

Received 27 April 2022; accepted 11 July 2022 Available online 22 February 2023

A 70-year-old woman, who had a history of dyslipidemia and coronary artery disease, was referred to our cardiology clinic for dyspnea that had deteriorated over the last two months. Her vital signs were normal with no significant findings in clinical examinations and laboratory tests. The initial transthoracic heart echocardiogram showed an echolucent mass at the site of pericardium from a parasternal long axis view (Figure 1). The patient underwent a chest X-ray, which confirmed the presence of a giant mass of the middle mediastinum (Figure 2). An urgent thorax and abdomen contrast computed tomography was performed during the diagnostic work-up. The mass turned out to be an enormous pericardial cyst (6.6 cm  $\times$ 14.7 cm) located at the right cardiophrenic angle, causing atelectasis of the right middle and lower lung lobe (Figure 3, video). The patient was referred to a cardiac surgeon for thoracoscopic resection of the cyst.

Pericardial cysts are uncommon benign, usually asymptomatic, middle-mediastinal masses. Most of them are found incidentally during chest X-ray or echocardiography. The size varies from 2 to 28 cm<sup>2</sup>. A watchful waiting approach is recommended. Intervention is indicated when they cause symptoms (chest pain, dyspnea, recurrent cough, tamponade or ventricular outflow tract). Thoracoscopic resection is the treatment of choice, with percutaneous aspiration being an alternative when there is a high associated surgical risk. In our case, it is quite impressive that such a large

\* Corresponding author.

E-mail address: dimitrisafendoulis@yahoo.com (D. Afendoulis).

https://doi.org/10.1016/j.repc.2022.07.015

<sup>0870-2551/© 2023</sup> Sociedade Portuguesa de Cardiologia. Published by Elsevier España, S.L.U. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

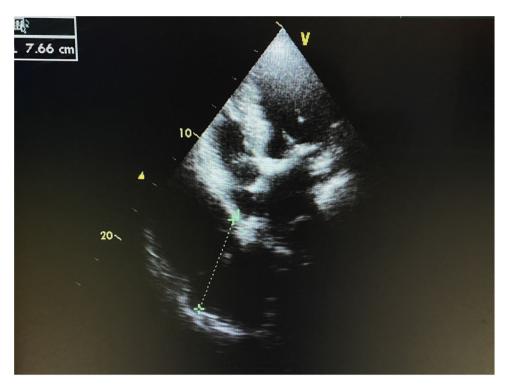


Figure 1 First transthoracic heart echocardiogram (parasternal long axis view) depicting an echolucent mass at the site of pericardium.



Figure 2 Chest X-ray depicting a giant mass of the middle mediastinum.

pericardial cyst (97  $cm^2$ ), one of the largest cysts described in the literature, took so long to become symptomatic.

### **Conflicts of interest**

The authors have no conflicts of interest to declare.

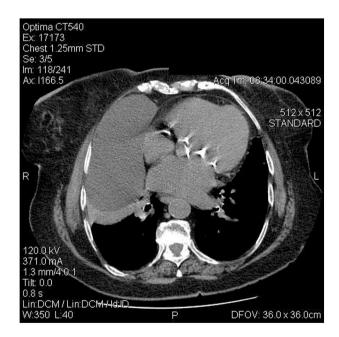


Figure 3 Urgent thorax and abdomen contrast CT-scan depicting an enormous pericardial cyst (6.6 cm $\times$ 14.7 cm) located at the right cardiophrenic angle, causing atelectasis of the right middle and lower lung lobe.

#### Appendix A. Supplementary data

Supplementary material associated with this article can be found in the online version at doi:10.1016/j.repc.2022.07.015.