A 24-year-old man in congestive heart failure was admitted to the hospital. He had worsening exertional dyspnea and palpitations for the past 2 months and was in New York Heart Association functional class IV. There was no history of fever, joint pains, or weight loss. Examination revealed a heart rate of 118 beats per minute, blood pressure of 90/70 mm Hg, and severe mitral regurgitation. Chest radiography showed a cardiothoracic ratio of 0.65% and bilateral pleural effusions. The echocardiogram showed a mass involving the posterior mitral leaflet and adjacent left ventricle (Figure 1 and Movie I). The posterior mitral leaflet was thickened and prolapsing into the left atrium. Severe mitral regurgitation was present, but the left ventricular systolic function was normal (Movie II). The estimated pulmonary artery pressure from the tricuspid regurgitation jet was 60 mm Hg. A contrast-enhanced magnetic resonance image (MRI) substantiated the findings (Figure 2). The mass had a well-defined outline in the luminal aspect but was inseparable from the posterolateral wall. The mass was isointense relative to the myocardium on the T1-weighted images and minimally hyperintense on the T2-weighted images. The mass showed homogenous enhancement after intravenous injection of gadolinium. On the basis of the MRI features, a benign mass, possibly of chronic inflammatory origin, was suspected. Because of severe mitral regurgitation and the ventricular mass, an operation was performed. A 5 × 6 × 4-cm fixed mass of rubbery consistency involving the posterior mitral valve leaflet and extending into the adjacent chordae, posterobasal segment of left ventricular wall, and anterolateral papillary muscle was seen. The anterolateral commissure was involved; however, the anterior mitral leaflet and posteromedial commissure were normal (Figure 3). Severe mitral regurgitation with no mitral stenosis was present. On histopathologic examination, intense myocarditis involving the posterior mitral leaflet and the papillary muscle was found. Aschoff bodies were present, indicating rheumatic carditis (Figure 4). The antistreptolysin O titer sent after receiving the histopathology report was 900 U, and the C-reactive protein level was 18.6 mg/L. The patient was treated with a short course of steroids for 6 weeks and recovered completely. Subsequently, he received 3 weekly prophylactic penicillin therapy. Inflammatory intracardiac mass lesions have been described with infections such as tuberculosis and actinomycosis and in conditions such as sarcoidosis, Wegener granulomatosis, and cardiac pseudotumor. The rare possibility of rheumatic myocarditis causing a ventricular mass lesion should be kept in mind, especially when the valve leaflets are also involved.

Disclosures

None.
Figure 3. Left ventricular growth involving left ventricular (LV) wall, anterolateral papillary muscle, and posterior mitral leaflet (PML) with normal anterior leaflet. AML indicates anterior mitral leaflet.

Figure 4. A section from the papillary muscle shows the presence of an Aschoff nodule (cellular phase) in a perivascular location (hematoxylin and eosin, magnification ×240).
Rheumatic Myocarditis Masquerading as Left Ventricle Tumor
Shyam S. Kothari, Akshay K. Bisoi, Sandeep Singh, Gurpreet Gulati, Saurabh Varshney and Ruma Ray

Circulation. 2006;114:e487-e488
doi: 10.1161/CIRCULATIONAHA.105.602300
Circulation is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2006 American Heart Association, Inc. All rights reserved.
Print ISSN: 0009-7322. Online ISSN: 1524-4539

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://circ.ahajournals.org/content/114/11/e487

Data Supplement (unedited) at:
http://circ.ahajournals.org/content/suppl/2006/09/06/114.11.e487.DC1

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published in Circulation can be obtained via RightsLink, a service of the Copyright Clearance Center, not the Editorial Office. Once the online version of the published article for which permission is being requested is located, click Request Permissions in the middle column of the Web page under Services. Further information about this process is available in the Permissions and Rights Question and Answer document.

Reprints: Information about reprints can be found online at:
http://www.lww.com/reprints

Subscriptions: Information about subscribing to Circulation is online at:
http://circ.ahajournals.org/subscriptions/