
Images in cardiovascular medicine

A case of free-floating left atrial thrombus in mitral valve stenosis

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Left atrial thrombus represents a common finding on echocardiography in patients with atrial fibrillation and mitral valve disease and it is usually attached to the atrial wall¹. Free-floating left atrial ball thrombus has rarely been reported². Transesophageal echocardiography is usually recommended as the best choice for identifying the presence of left atrial thrombus and for guiding further therapy designed to reduce the high thromboembolic risk.

We report the case of a free-floating left atrial ball thrombus detected with transthoracic echocardiography. A 69-year-old woman with a history of mitral valve disease, chronic atrial fibrillation and recent cerebral embolism was admitted to our clinic for severe dyspnea and peripheral edema. The patient was treated with digitalis, diuretics, and dicumarole; on admission, her international normalized ratio was 2.5. Results of physical examination, chest radiography, and electrocardiography were consistent with the underlying mitral valve stenosis.

Routine transthoracic echocardiography revealed a severe mitral valve stenosis with a dilated left atrium and a large (4 x 4 cm), free-floating left atrial ball thrombus (Fig. 1); the variation in position of the atrial mass was not coincident with the cardiac cycle, and the motion of the thrombus was unpre-

dictable. Due to the high risk of stroke and acute obstruction of the mitral valve (Fig. 2), after a 48-hour unsuccessful anticoagulant treatment with heparin³, cardiac surgery was performed. Surgery, which consisted of removing the free-floating thrombus and replacing the mitral valve with a mechanical prosthesis, was uneventful. The histologic examination of the mass proved that it was a thrombus.

The postoperative outcome was event-free and the patient is currently undergoing a physical rehabilitation program and medical treatment with diuretics, digitalis, verapamil and warfarin.

References

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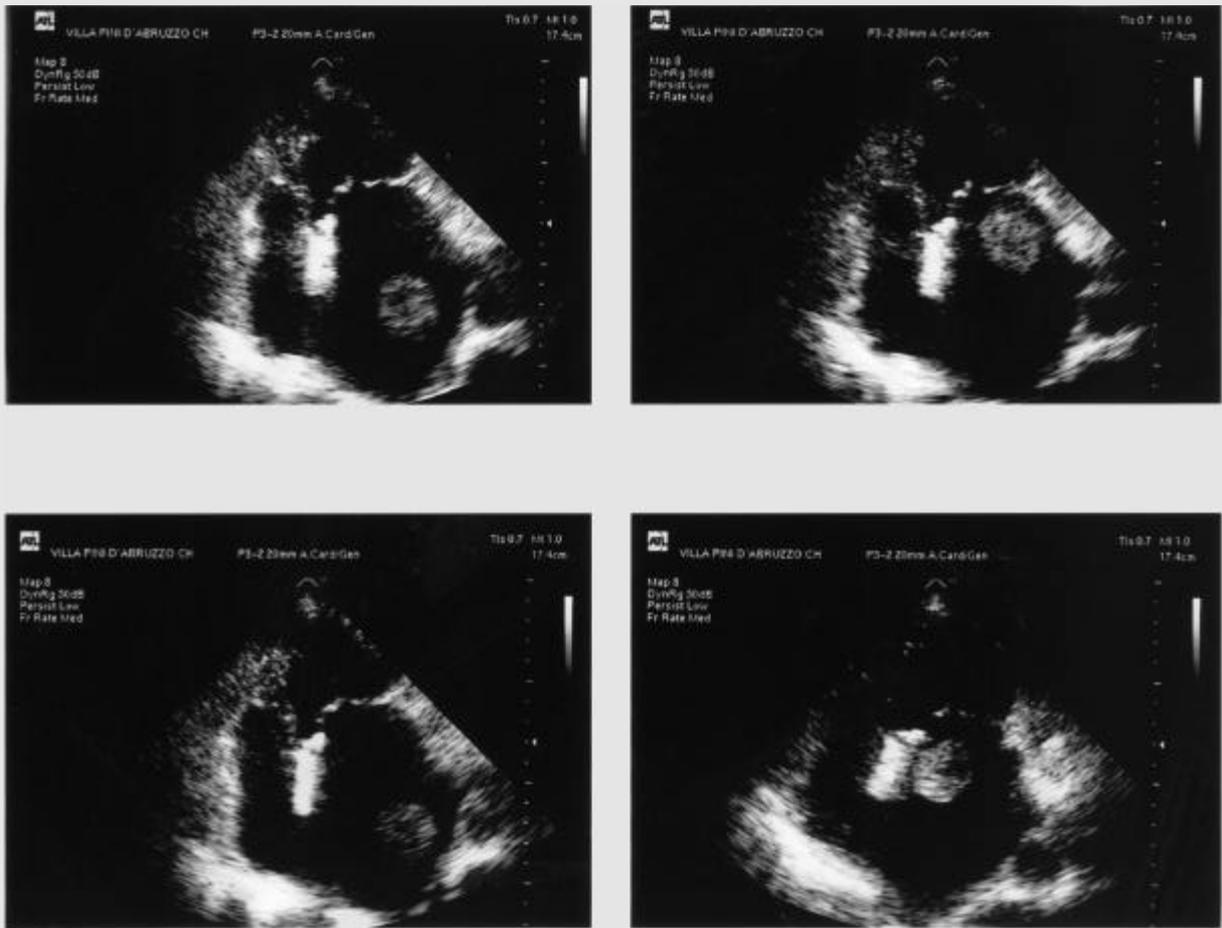


Figure 1. B-mode echocardiographic findings showing the floating left atrial thrombus during the cardiac cycle.

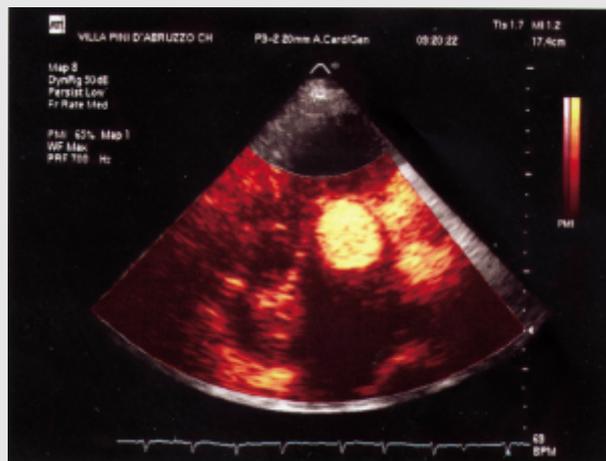


Figure 2. Detail of partial obstruction of the mitral valve due to the floating thrombus.