Photo Clinic

Left Atrial Appendage Thrombosis Simulating Myxoma

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A 51-year-old man was admitted to the emergency department with palpitation and atypical chest pain. He had a history of percutaneous mitral valve commissurotomy 20 years previously. He did not use any drugs. Physical examination was unremarkable except for a loud S_1 on auscultation. The surface electrocardiogram (ECG) showed atrial fibrillation rhythm with rapid ventricular response and right bundle branch block. Transthoracic and transesophageal echocardiographic examinations revealed normal left ventricular size with mild systolic dysfunction, ejection fraction of 45%, and moderate rheumatic mitral stenosis with mild to moderate mitral regurgitation. Also, there was a highly mobile multilobulated mass attached to the anterior wall of the left atrial appendage with a long stalk, simulating myxoma. The patient was referred for emergent surgery, during which the mass was removed. Pathological examination demonstrated organized thrombosis. Recently, Peters and et al.[1] described a woman with significant mitral stenosis and a mass in the left atrium attached to the interatrial septum through a stalk; pathological examination showed thrombosis. In another report, a man with moderate mitral stenosis and a left atrial mass attached via a narrow stalk to the interatrial septum was described.[2] In cardiac magnetic resonance imaging, thrombus often appears as a hypointense structure after the administration of intravenous gadolinium, whereas atrial myxomas show contrast enhancement. This imaging modality, however, is far from perfect.[3]

Figure 1. Transesophageal echocardioigraphy view (146 °), showing multilobulated highly mobile thrombosis attached to the anterior wall of the left atrial appendage through a long stalk (arrow), simulating myxoma
LA, Left atrium; LAA, Left atrial appendage

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The case presented herein shows that in a left atrial appendage mass with a stalk, a differential diagnosis between thrombus and myxoma on the basis of echocardiographic features may be difficult.

To watch the following videos, please refer to the relevant URLs:

Video 1. Multilobulated highly mobile mass in the left atrial appendage of a patient with moderate mitral stenosis, simulating myxoma on transesophageal echocardiography
http://jthc.tums.ac.ir/index.php/jthc/article/view/696/449

Video 2. Mitral valve stenosis in the same patient on transesophageal echocardiography
http://jthc.tums.ac.ir/index.php/jthc/article/view/696/448

References

1. Peters F, Khandheria BK, Patel AR, Essop MR. Mitral stenosis and pedunculated left atrial thrombus: an unusual presentation. Eur Heart J Cardiovasc Imaging 2013;14:117.
2. Jang KH, Shin DH, Lee C, Jang JK, Cheong S, Yoo SY. Left atrial mass with stalk: thrombus or myxoma? J Cardiovasc Ultrasound 2010;18:154-156.
3. Pandit A, Panse PM, Aryal A, Gruden JF, Gotway M. A new intracavitary lesion at echocardiography and MR: a case of mistaken identity. Int J Cardiovasc Imaging 2013;29:1203-1205.