

Case Report

Corresponding author
Srinivasan Sattiraju, MD
 Division of Cardiology
 Carle Heart and Vascular Institute
 Carle Hospital
 611 West Park Street
 Urbana, IL 61802, USA
 Tel: 217 904 7000
 Fax: 217 904 7742
 E-mail: srinivasan.sattiraju@carle.com

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Forgotten, but Not Gone

Srinivasan Sattiraju¹, Furqan A Rajput², Sanjay Mehta¹ and Emil Missov³

¹*Division of Cardiology, Carle Heart and Vascular Institute, Carle Hospital, Urbana, IL, USA*

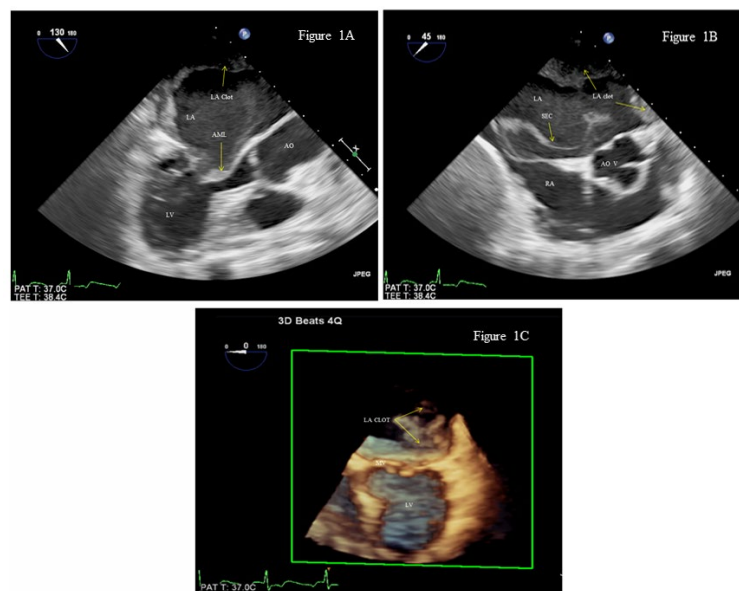
²*Department of Medicine, University of Illinois at Urbana-Champaign, Urbana, IL, USA*

³*Division of Cardiology, University of Minnesota Medical School, Minneapolis, MN, USA*

KEY WORDS: Mitral stenosis; Left atrial thrombus; Coumadin; Rheumatic valve disease

A 65 year old woman, an Asian immigrant to USA, with the history of surgical mitral valvuloplasty through left thoracotomy performed 30 years ago in India for severe rheumatic mitral stenosis, history of embolic occlusion of right femoral artery and surgical embolectomy (3 years ago), chronic atrial fibrillation, presented with dyspnea on exertion. Patient was on Coumadin therapy with therapeutic INR (2-3). Her work up revealed severe mitral stenosis with marked left atrial enlargement. There was massive clot burden in the left atrium. Despite massive left atrial clot, patient had no history of stroke/TIA. She then successfully underwent left atrial thrombectomy with mitral valve replacement. Intra operative findings were very small orifice of mitral valve with fused commissures and chordae tendinae, consistent with severe rheumatic mitral stenosis. Post-operative recovery was uneventful. Patient continues on Coumadin with target INR of 2.5-3.5 with post-operative echocardiograms showing no left atrial clot.

Although rheumatic heart disease is rare in USA, it is estimated there is prevalence of 15 million cases of rheumatic heart disease worldwide, with annual incidence of 282,000 cases, and annual mortality of 233,000.¹ We present an exceptional finding of massive left atrial clot burden with severe rheumatic mitral stenosis. This case underscores the findings of atrial fibrillation, markedly enlarged left atrium, spontaneous echocardiographic contrast and advanced age, all implicated in high risk of left atrial clot burden in patients with rheumatic mitral stenosis.² The rheumatic pathology is well appreciated on 2D Trans Esophageal Echocardiographic (TEE) images (Videos 1 and 2, Figures 1A and 1B) while the 3D TEE brings a new spatial perspective in appreciating the left atrial clot burden and its relationship to mitral valve (Video 3, Figure 1C).



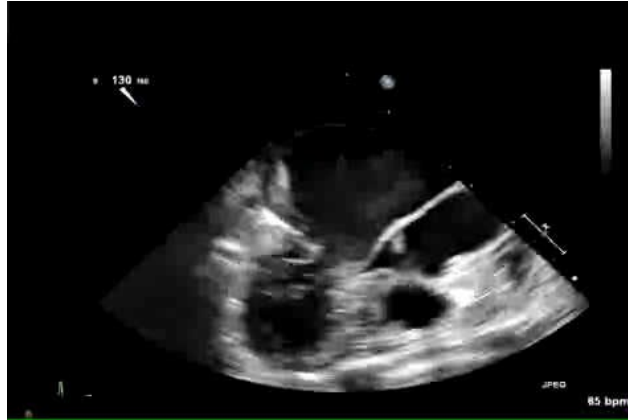


Figure 1A, Video 1: TEE. AML=Anterior mitral leaflet with its classic hockey stick appearance in rheumatic mitral stenosis due to commissural fusion. LA=Left Atrium, LV=Left Ventricle, AO=Aorta. The circumferential LA clot is indicated by arrow.



Figure 1B, Video 2: TEE. SEC=Spontaneous Echocardiographic Contrast, a marker of high risk of clot formation. The dense SEC swirling in the left atrium is well visualized on video. LA=Left Atrium, RA=Right Atrium, AOV=Aortic Valve



Figure 1C, Video 3: 3D TEE. The extensive left atrial clot and its relationship to left atrium, underlying mitral valve is remarkably appreciated on the 3D TEE images.

Note: To best view

1. Kindly open the pdf file in Adobe Reader XI version.
2. Please save the pdf file in your local computer.
3. To watch the video kindly install the latest adobe flash player. Click here to download: <http://get.adobe.com/flashplayer/otherversions/>

Rheumatic heart disease is forgotten in developed countries, it will be encountered largely due to immigrant population. Our patient despite being on warfarin with therapeutic INR developed left atrial clot. This raises questions regarding INR goals in such patients, and also the role, if any, of novel oral anticoagulants.

CONFLICTS OF INTEREST: None.

CONSENT

No consent is required to our article publication/The patient has provided written permission for publication of the case detail.

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