Large clot splitting the left atrium into two distinct cavities: a report through mitral stenosis transoesophageal echocardiography

Padmakumar Ramachandran,¹ Sridevi Prabhu,² Jyothi Samanth,¹ M Sudhakar Rao¹

¹Department of Cardiology, KMC, Manipal, Karnataka, India

²Department of Cardiology, CVT, School of Allied Health Sciences, Manipal, Karnataka, India

Correspondence to

Dr M Sudhakar Rao, msudhakar88@gmail.com

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DESCRIPTION

A 53-year-old woman diagnosed with rheumatic mitral stenosis (at the age of 40 years) presented with worsening dyspnoea New York Heart Association class III of 1 month duration. She was on regular treatment with diuretics, β -blockers and warfarin (in view of valvular atrial fibrillation). However, 1 month prior to presentation, she was off all medications except warfarin, which she was compliant on. Blood investigations revealed the presence of subclinical hypothyroidism with an optimal international normalised ratio of 2.64. ECG showed atrial fibrillation with a fast ventricular rate. Echocardiography parameters were suggestive of severe mitral stenosis with atrial fibrillation. Transoesophageal echocardiography (TEE) showed a large clot in the left atrial (LA) appendage, attached to the LA roof and traversing towards the opposite wall (figures 1 and 2). The patient was advised mitral valve replacement with the LA clot removal, as she had a huge LA clot despite being on optimal anticoagulation.

LA clot is common in severe rheumatic mitral stenosis, with incidence of approximately 15%,¹ however, prevalence increases twofold in the presence of atrial fibrillation. In the literature, LV clots have been described with respect to different sites and also as being not attached to the LA mural endocardium.^{2 3} In the present case, the patient had severe mitral stenosis with atrial fibrillation and a large clot in the LA appendage, attached to the LA wall and forming a bridge connecting to the

Figure 2 Transesophageal echocardiogram in 65° view showing a large clot in the left atrial (LA) appendage, attached to the LA roof and traversing towards the opposite wall.

opposite wall. The clot appeared as a partition resulting in two distinct LA cavities on TEE.

Learning points

- ▶ A left atrial (LA) clot in the presence of mitral valve disease is often focal in most cases.
- ▶ The present case had a huge non-focal clot confined to a plane of the LA body, partitioning the LA into two separate cavities, the rarest of its kind.

Figure 1 Transesophageal echocardiogram in 84° view showing clot in the left atrial (LA) appendage, extending to the LA roof (red arrow).

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