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【 PICTURES IN CLINICAL MEDICINE 】

# Syncope with Left Atrial Floating Thrombus During Anticoagulation

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**Key words:** syncope, left atrium, thrombus, atrial fibrillation, mitral stenosis

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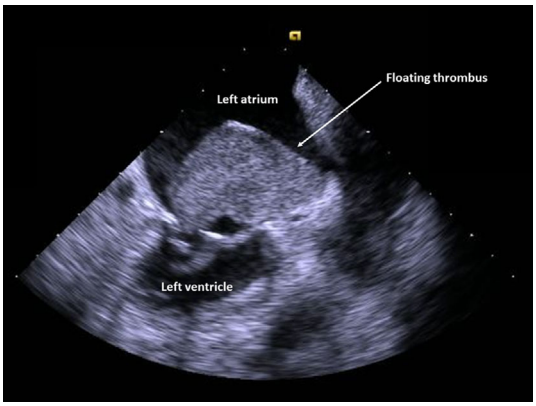
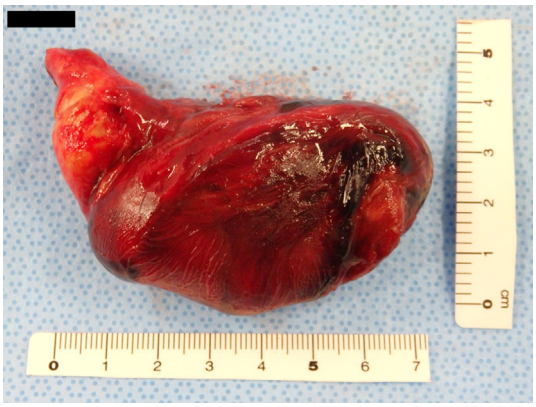



**Picture 1.**



**Picture 2.**

An 84-year-old woman presented with recurrent non-exertional syncope. Her condition had been controlled with effective anticoagulation using warfarin due to chronic atrial fibrillation and mitral valve stenosis. Her prothrombin time/international normalized ratio (PT-INR) was 2.15, with values in the therapeutic range 100% of the time (target PT-INR: 1.6-2.6) in the past year. Transesophageal echocardiography revealed a huge free-floating mass in the left atrium frequently impinging on the stenotic mitral valve orifice (Picture 1). Emergency surgical removal was performed to prevent a catastrophic complication, such as "hole-in-one" sudden death (1). The removed mass was 65×43×30 mm (Picture 2) and histologically confirmed to be an organized thrombus with fibrin and hematomas. Coagulation activity is increased in the left atrium with mitral stenosis even during anticoagulation (2), which might contribute to thrombus formation. In addition to an effective anticoagulant, frequent echocardiographic follow-up is recommended to detect left atrial thrombi in patients with atrial fibrillation and mitral stenosis.

**The authors state that they have no Conflict of Interest (COI).**

## References

1. Lie JT, Entman ML. 'Hole-in-one' sudden death: mitral stenosis and left atrial ball thrombus. Am Heart J **91**: 798-804, 1976.
2. Yamamoto K, Ikeda U, Seino Y, et al. Coagulation activity is increased in the left atrium of patients with mitral stenosis. J Am Coll Cardiol **25**: 107-112, 1995.



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