

FREE FLOATING LEFT ATRIAL THROMBUS DISAPPEARING DURING ECHOCARDIOGRAPHY

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An 82-year-old woman with a history of previous cerebral infarction and atrial fibrillation was hospitalized with aphagia. Brain magnetic resonance imaging showed a dot-like high signal intensity in the left occipital subcortex. With a working diagnosis of acute cerebral infarction due to cardiac emboli, trans-thoracic echocardiography (TTE) was performed. The TTE showed an oval shaped, mobile thrombus, approximately

1.9×1.5 cm in size within the left atrial appendage. For further evaluation of mobile thrombus in the left atrial appendage, a trans-esophageal echocardiography (TEE) was done. The TEE showed an oval shaped, mobile thrombus in the left atrial appendage (Fig. 1A). Subsequently, during follow-up TTE, the thrombus was found to be freely floating in the left atrial cavity during each cardiac cycle (Fig. 1B-F and Supple-

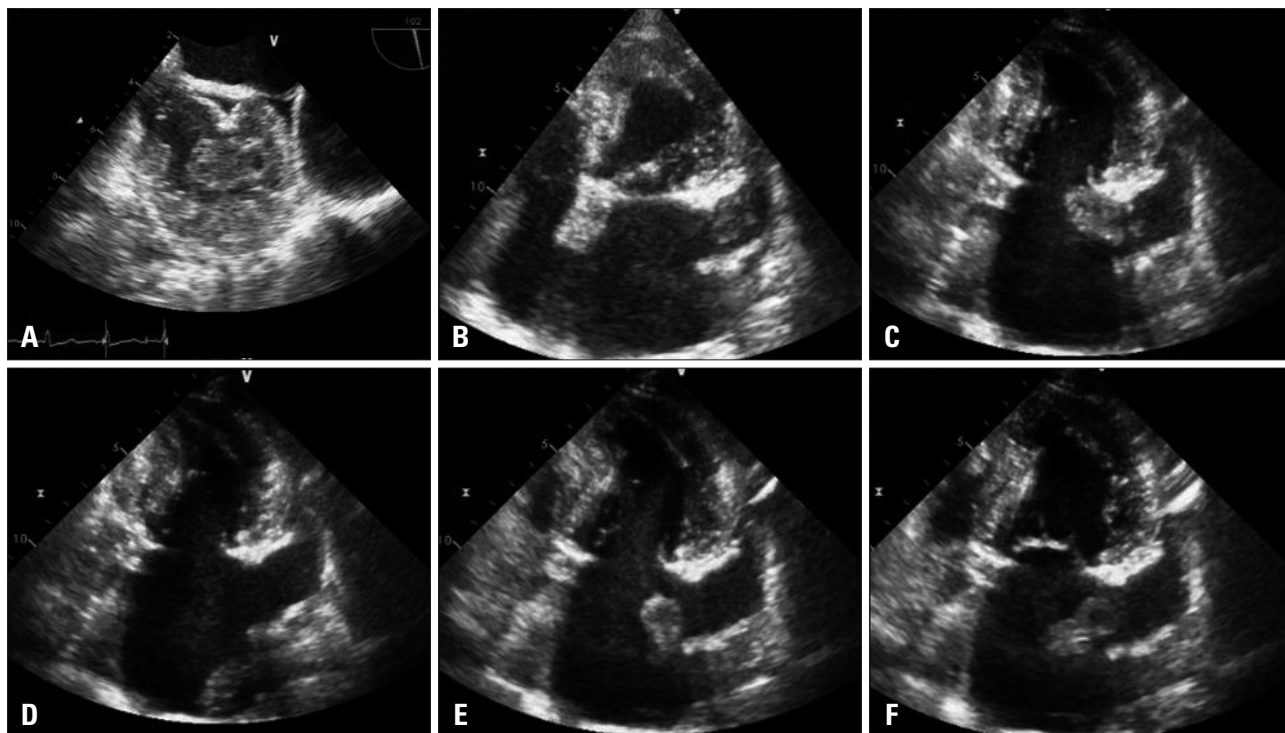


Fig. 1. Trans-esophageal echocardiography showed a free floating thrombus in the left atrial appendage (A). Trans-thoracic echocardiography (TTE) showed free floating thrombus in the left atrial appendage (B). TTE showed the thrombus moving from left atrial appendage to left atrial cavity (C-F).

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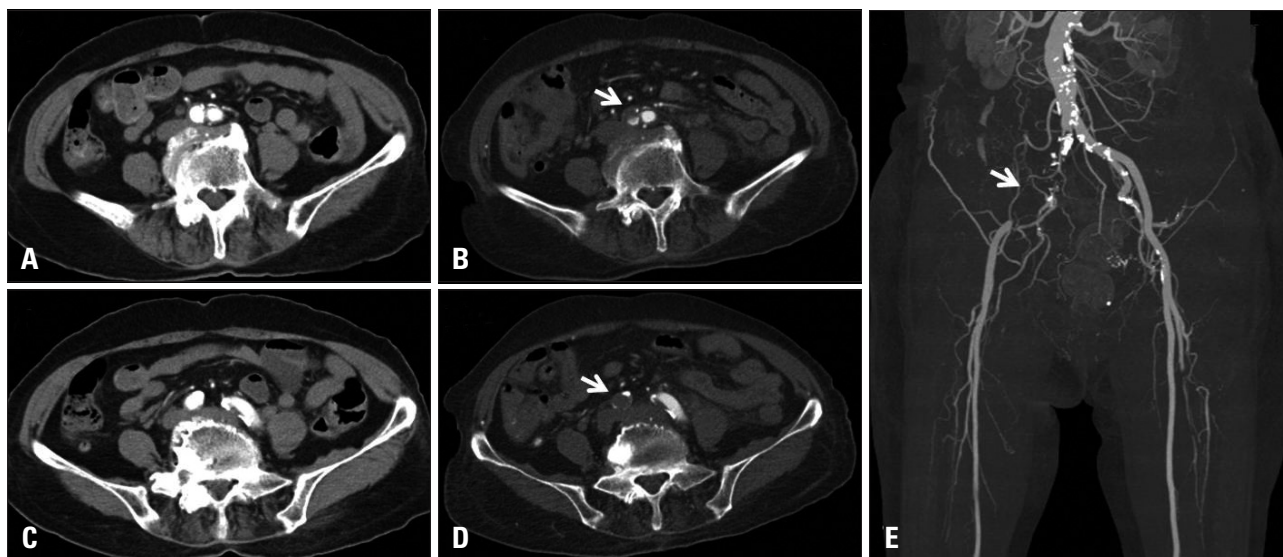


Fig. 2. Abdominal enhanced computer tomography (CT) for evaluation of fever did not show a filling defect in the right femoral artery in axial plane 2 days ago (A and C). 3-dimensional (3D) femoral CT showed a filling defect (arrow) in the right femoral artery in axial plane (B and D). 3D femoral CT showed a filling defect (arrow) in the right femoral artery in 3D reconstruction (E).

mentary movie 1). After a number of cardiac cycles, the thrombus suddenly disappeared in TTE. The patient's overall clinical condition and neurologic examination continued to appear stable for the entirety of echocardiographic examination.

After one day, the patient complained claudication in the lower right limb. In physical examination, the patient's femoral pulses were not present to prompt a pulse exam. We performed a 3-dimensional (3D) femoral computer tomography (CT) to evaluate for occlusion. The 3D femoral CT showed a new filling defect in the right femoral artery in comparison with an abdominal enhanced CT performed for evaluation of fever 2 days ago (Fig. 2). Following the examination, the patient was placed on warfarin for anticoagulation therapy. The patient was discharged from the hospital with an uneventful recovery and has been doing well without additional embolic events after discharge and maintenance anticoagulation therapy.

Left atrial free floating thrombus is infrequent but predominantly associated with mitral valve disease, atrial fibrillation, as in our case, and hypertrophic cardiomyopathy.¹⁻⁴⁾ The presence of left atrial free floating thrombus is linked to higher embolic rates and the most common presentation of left atrial thrombus is, as in our case, peripheral embolization.⁵⁾ This case is an interesting case of free-floating left atrial thrombus dis-

appearing during echocardiography.

SUPPLEMENTARY MOVIE LEGEND

Movie 1. Trans-thoracic echocardiography showed the free floating thrombus in the left atrial appendage and left atrial cavity. The thrombus moved from left atrial appendage to left atrial cavity where it was free floating during each cardiac cycle.

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