

CASE IMAGE

Left atrial thrombus after placement of watchman device

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Email: mr.isang@gmail.com**Abstract**

Atrial fibrillation is an irregular rhythm with increased risk of morbidity and mortality. Commonly due to thromboembolism at the left atrial appendage. Guideline therapy for atrial fibrillation is anticoagulation. Alternative treatment includes closure with the Watchman device. We present a case of Watchman device-related thrombus seven months after placement.

KEYWORDS

arrhythmia, atrial fibrillation, cardioversion, stroke, watchman

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A 74-year-old man with a history of chronic atrial fibrillation presents with 5 days of abdominal pain and dyspnea. Seven months prior, he underwent transcatheter insertion of a 27-mm watchman left atrial appendage occluder device due to nonadherence with apixaban (Figure 1). One-month follow-up transesophageal echocardiogram (TEE) revealed that the device was properly seated (Figure 2). TEE during hospitalization, however, revealed a large thrombus, measuring 2.9 × 1.9 cm that was seated on top of the watchman device (Figure 3). At the time of presentation, he was taking aspirin 325 mg daily. He inadvertently stopped taking aspirin and clopidogrel 2 months earlier than recommended and had a 10-day interruption of aspirin for screening colonoscopy. He was discharged on apixaban 5 mg twice daily and aspirin 325 mg daily. Follow-up TEE 4 months later revealed reduced size of thrombus, measuring 0.70 × 0.86 cm (Figure 4).

Atrial fibrillation is the most common cardiac arrhythmia that we face, affecting millions of people



FIGURE 1 Placement of watchman device. Orange Arrow: Watchman device

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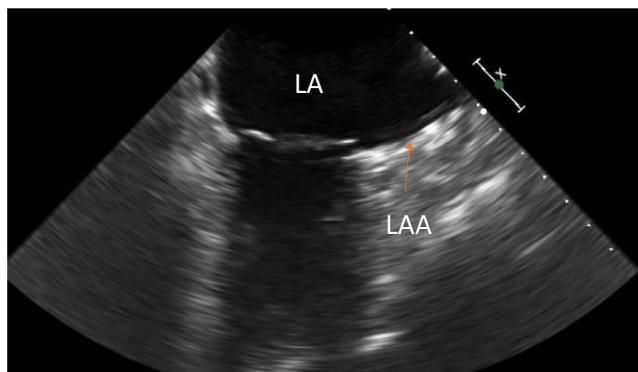


FIGURE 2 TEE 1 month after watchman device placement. LA: Left atrium, LAA: Left atrial appendage, Orange Arrow: watchman device

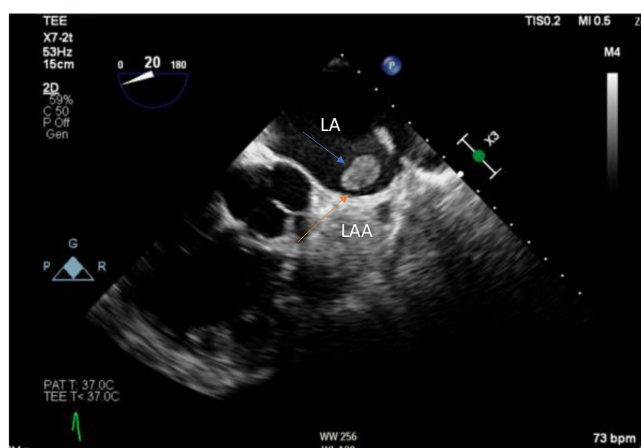


FIGURE 3 Figure 2: Transesophageal echocardiogram (TEE) showing large thrombus (blue arrow), sitting on top of the watchman device.

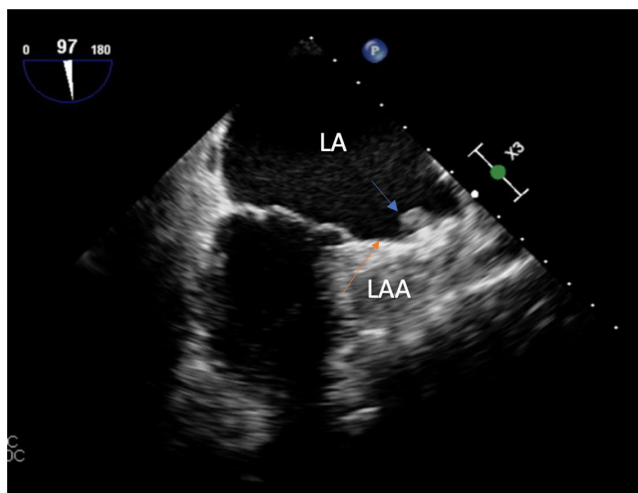


FIGURE 4 Follow-up TEE 4 months later showing reduction in size of the thrombus (blue arrow).

worldwide. It carries the risk of stroke, especially in those with elevated CHA₂DS₂-VASc score, necessitating use of anticoagulation. In those who risk of bleeding outweighs the benefit, left atrial appendage closure device, such as the watchman, is a great alternative and has been shown to be noninferior in the PROTECT AF study.¹ It, however, does carry its own risk such as device-related thrombus.²

AUTHOR CONTRIBUTIONS

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FUNDING INFORMATION

None

CONFLICT OF INTEREST

The authors have no conflicts of interest to declare.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are openly available in Methodist DeBakey Cardiovasc J. <http://doi.org/10.14797/mdcj-15-1-77>.

ETHICAL STATEMENT

I, Dr. Emmanuel Isang, am submitting this manuscript on behalf of myself and my coauthors. I consciously assure that the material is the authors' original work and has not been or being considered for publication elsewhere. All authors who have contributed have been properly credited and will take responsibility for its content.

CONSENT

Written informed consent was obtained to publish this report in accordance with the journal's consent policy.

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REFERENCES

1. Holmes DR, Reddy VY, Turi ZG, et al. Percutaneous closure of the left atrial appendage versus warfarin therapy for prevention

of stroke in patients with atrial fibrillation: a randomised non-inferiority trial [published correction appears in *Lancet*. 2009 Nov 7;374(9701):1596]. *Lancet*. 2009;374(9689):534-542. doi:10.1016/S0140-6736(09)61343-X

2. Hannawi B, Beg F, Valderrábano M, Kurrelmeyer K. Device-related thrombus: a reason for concern? *Methodist Debakey Cardiovasc J*. 2019;15(1):77-80. doi:10.14797/mdcj-15-1-77

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