# Asymptomatic Atrial Pacemaker Lead Thrombus

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#### Abstract

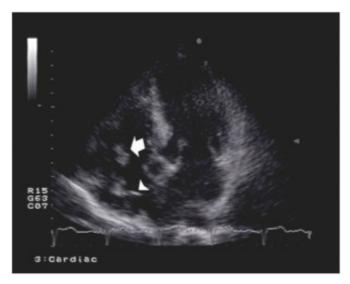
We report a case of a woman admitted for pace maker placement. On the 8th day after pace maker implantation an echocardiogram revealed a mass attached to the atrial lead. The mass dissolved without antithrombotic agents. A video clip of the echocardiogram is shown in this multimedia article.

## **CASE REPORT**

An 85-year old woman with complete atrioventricular block was admitted to our hospital because of faintness. A DDD pacemaker was implanted with a left subclavian puncture. On the 8th day after the operation, an echocardiogram demonstrated a mobile mass (arrow) in the right atrium, attached to the atrial pacemaker lead (arrow head) and partially prolapsing into the right ventricle during diastole.

#### Figure 1

Figure 1: An echocardiogram demonstrated a mobile mass (arrow) attached to the atrial pacemaker lead (arrow head).



But transesophageal and transthoracic echocardiograms on the 10th day did not reveal the mobile mass clearly, and then the thrombus disappeared completely on the 15th day without antithrombotic agents. The patient did not have any thromboembolic episodes until three months after the operation.

# ECHOCARDIOGRAM VIDEO CLIP:

Atrial pacemaker lead thrombus is a rare complication of permanent pacing and can cause a life-threatening thromboembolic event [1]. Therefore, thrombolytic therapy or surgical resection is needed to treat a symptomatic large thrombus [2]. On the other hand, we could not find a report of silent small thrombus. Because most of the reports date back to the 1970s, there is limited information about pacemaker lead thrombus with modern echocardiography. Thus, it remains unclear which small thrombus will become enlarged and how should we follow up.

#### References

1. Wierzbowska K, Krzeminska-Pakula M, Marszal-Marciniak M, Drozdz J, Zaslonka J, Kasprzak JD. Symptomatic atrial pacemaker lead thrombosis: Detection by echocardiography and successful surgical treatment. PACE 2001; 24: 391-393.

2. Kinney EL, Allen RP, Weidner WA, Pierce WS, Leaman DM, Zelis RF. Recurrent pulmonary emboli secondary to right atrial thrombus around a permanent pacing catheter: A case report and review of the literature. PACE 1979; 2: 196-202.

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