



## EFFECTIVE THERAPEUTIC INTERVENTION FOR LAA THROMBUS: PERCUTANEOUS LAA CLOSURE

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### **Background and objective:**

Left atrial appendage occlusion is a feasible and effective therapeutic intervention for thromboembolic prevention in patients with non-valvular AF. Some procedural difficulties, such as thrombus formation in LAA, can be challenging for operators and increase periprocedural complication risk. In this clinical study, outcomes of LAA closure in patients with LAA thrombus were evaluated.

### **Method:**

One hundred and fifty consecutive patients had undergone percutaneous LAA closure in our clinic between 2015 and 2021. Sixteen patients had thrombus formation in LAA before occlusion and enrolled in the study. Patients were apprised of a paravalvular leak and thrombus formation on the device with transesophageal echocardiography 1, 6, and 12 months after the procedure. One year after the closure, evaluation with transesophageal echocardiography was done only under clinical suspicion. Major adverse clinical events during follow-up, including disabling stroke, clinically relevant hemorrhage, myocardial infarction, and all-cause mortality, were recorded.

### **Results:**

Sixteen patients had been followed for a median of 36 months (1-60 months). The median age was  $71.1 \pm 6.7$  years. Nine patients were male (56.3%). CHA<sub>2</sub>DS<sub>2</sub>-VASc and HAS-BLED scores were calculated at 5 (2-8) and 5 (1-6), respectively. In four patients, LAA occlusion was indicated due to malign LAA. LAA occlusion was performed with Amplatzer Amulet Device in all patients. Postprocedural antiplatelet treatment was decided on clopidogrel, DAPT, or oral anticoagulant plus clopidogrel in 3, 9, and 4 patients, respectively. Five patients died during follow-up. Covid-19 related respiratory failure was responsible for death in three patients. Five patients were hospitalized due to heart failure, and 2 of them died during the hospitalization. Any clinically significant cerebrovascular event or major bleeding was not observed during



follow-up. The first month and sixth-month echocardiographic evaluations were done on all patients. Peridevice leak or thrombus formation was not observed in any patients.

**Conclusions:**

LAA closure in patients with LAA thrombus is a feasible and effective method to reduce thromboembolic risk. It can be performed as an alternative therapy to OACs in patients who have contraindications to OACs or malign LAA.

