Management of patients with left atrial appendage thrombus before atrial fibrillation ablation

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**Introduction**: The catheter ablation for atrial fibrillation (AF) becomes one of the important strategies of AF management. The presence of left atrial appendage (LAA) thrombus is an absolute contraindication for AF ablation. AF ablation must be postponed until resolution of LAA thrombus. There are few reports about the managements of patients with LAA thrombus before AF ablation. This study reports the subsequent courses of patients with LAA thrombus just before AF ablation.

**Methods**: We retrospectively assess the subsequent course of the patients who had LAA thrombus detected by Intra-cardiac echocardiography (ICE) just before AF ablation from January 2016 to May 2018.

**Result**: Out of 631 patients who were scheduled AF ablation, LAA thrombus was detected by ICE in 14 patients (2.2%, 9 male, 72±5 years-old, 0 paroxysmal AF, 8 persistent AF, 6 longstanding persistent AF). Preoperative oral anticoagulant (OAC) therapies were 2 patients with warfarin, 11 with appropriate dose of direct oral anticoagulant (DOAC), 1 inadequate with low dose of DOAC, and all patients had OAC for more than 4 weeks. After postponed ablation, the same OAC continues 6 patients, 2 patients changed from DOAC to high dose (PT-INR 2.5-3.5) of warfarin and 6 patients changed DOAC to another DOAC. Five patients who had LAA thrombus resolution by continuation of change of OAC and 6 patients who underwent surgical LA appendectomy underwent AF ablation. After mean follow-up period of 436, 5 out of 11 (55%) patients kept in sinus rhythm with 1 AF ablation procedure without antiarrhythmic medications, and 9 out of 11 (80%) patients kept in sinus rhythm with multiple (1.3) procedures with antiarrhythmic medications. No perioperative complication was occurred. Three patients who did no undergo ablation were treated with OAC and rate control therapy.

**Conclusion**: Even in AF patients with LA thrombi, ablation can be performed safely and effectively by continuation/change of OAC and LA appendectomy.