

Safety of catheter ablation of AF without pre- or periprocedural imaging for the detection of LA thrombus

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Background: The need for pre- or peri-procedural imaging to rule out the presence of left atrial thrombus in patients undergoing catheter ablation of atrial fibrillation (AF) is unclear in the era of uninterrupted direct oral anticoagulant (DOAC) regimen. We sought to examine the safety of catheter ablation in appropriately selected patients with paroxysmal AF without performing screening for left atrial thrombus.

Methods: Consecutive patients planned for radiofrequency AF catheter ablation between January 2016 and June 2020 were enrolled, and prospectively studied. All subjects were receiving uninterrupted anticoagulation with DOACs for at least 4 weeks before the procedure. All subjects were in sinus rhythm the day of the procedure. The primary outcome of the study was ischemic stroke or transient ischemic attack (TIA) during at 30 days.

Results: A total of 451 patients (age 59.7 ± 10.2 years, 289 males) with paroxysmal AF were included in the study. The mean CHA₂DS₂-VASc score was 1.4 ± 1.2 . The mean left ventricular ejection fraction and left atrial diameter were $60 \pm 5\%$ and 39.3 ± 4 mm, respectively. Regarding the anticoagulation regimen, apixaban was used in 197 (43.6%) patients, rivaroxaban in 148 (32.8%) patients, and dabigatran in 106 (23.5%) patients. None of the patients developed clinical ischemic stroke or TIA during the 30-day post-discharged period.

Conclusions: Catheter ablation can be safely performed in low-risk patients with paroxysmal AF without imaging for the detection of left atrial thrombus in the era of uninterrupted DOAC anticoagulation.