EMBARGOED UNITL 20th NOVEMBER 2022 1730HRS SGT

What to do when rhythm control strategies fail?

Context:

The aim is to keep patients in sinus rhythm after atrial fibrillation (AF) ablation. However AF sometimes could not be eliminated by conventional ablation strategies. There may be a role for ablation of non-pulmonary vein foci such as the left atrial appendage (LAA).

Summary:

The study evaluated the incidence, characteristics and risk factors of patients who had cerebral infarction after AF ablation. There were 1084 patients who underwent ablation of AF (592 had paroxysmal AF, 492 had persistent AF). Anticoagulation was administered prior to ablation for > 3 months for all patients and subsequently continued for at least 3 months regardless of success or failure of ablation. Thereafter for those in sinus rhythm, anticoagulant was discontinued unless patients had CHADS2 score >2 points or prior strokes. It was noted during the study that patients with persistent AF are more likely to have AF recurrence post ablation despite multiple procedures. Amongst the study population, stroke was observed in 6 patients (0.5%) during the 984 days of mean follow-up, out of which 4 had persistent AF and 2 had paroxysmal AF. Of note, there was a correlation between the number of ablation procedures and the likelihood for these patients to have stroke subsequently (p value <0.001). Therefore, it is recommended for patients to be anticoagulated even if they have low risk of stroke (CHADS2 0 or 1) if they have had multiple ablation procedures.

In the 2nd part of the study, LAA ablation was performed in patients with persistent AF after conventional catheter ablation. Inclusion criteria included patients with (1) more than 2 procedures performed, (2) persistent AF despite anti-arrhythmic drugs (3) patient agreeable for anticoagulation to be continued after catheter ablation regardless of clinical outcome. It was noted that non-pulmonary vein foci originating from LAA was more frequently noted in patients with persistent AF compared to paroxysmal AF. 17% of local atrial tachycardia related to catheter ablation of persistent AF originated from the LAA. It was difficult to completely isolate the LAA (only achieved in 1 patient during the study). This study managed to achieve sinus rhythm for 60% of the study population (who were otherwise resistant to standard catheter ablation).

Message:

1. It is recommended for patients to be anticoagulated even if they have low risk of stroke (CHADS2 0 or 1) if they have had multiple ablation procedures.
2. There may be a role for ablation of non-pulmonary vein foci such as the left atrial appendage (LAA) for patients who are otherwise unable to achieve sinus rhythm with conventional catheter ablation approaches.

Session details:

Oral presentation. Symposium 1: Atrial fibrillation 1- persistent atrial fibrillation ablation. Friday November 18, 2022. 430PM-540PM.

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