

Convergent Ablation And Minimally Invasive Left Atrial Appendage Closure In Persistent Atrial Fibrillation, Two Year Outcomes

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BACKGROUND

The Convergent Ablation procedure for treatment of persistent atrial fibrillation (Afib) continues gaining strength as a hybrid option offering the best of both worlds: minimally invasive heart surgery plus electrophysiological intervention. Left atrial appendage closure (LAAC) is an established therapy targeted at stroke risk reduction and prevention in patients with A-fib. Recently, electrical LAA isolation gains increasing attention in treating persistent AF. We present our two-year outcomes of a single-center experience after Convergent Ablation procedure with concomitant LAAC and electrical isolation (EI).

METHODS

Patients were followed up in 3, 6 and 12 month intervals with 24 h Holter in accordance to HRS consensus paper.

Surgical steps: subxiphoid incision → epicardial ablation of posterior left atrial wall → thoracoscopic LAA clip closure.

Primary end-point:

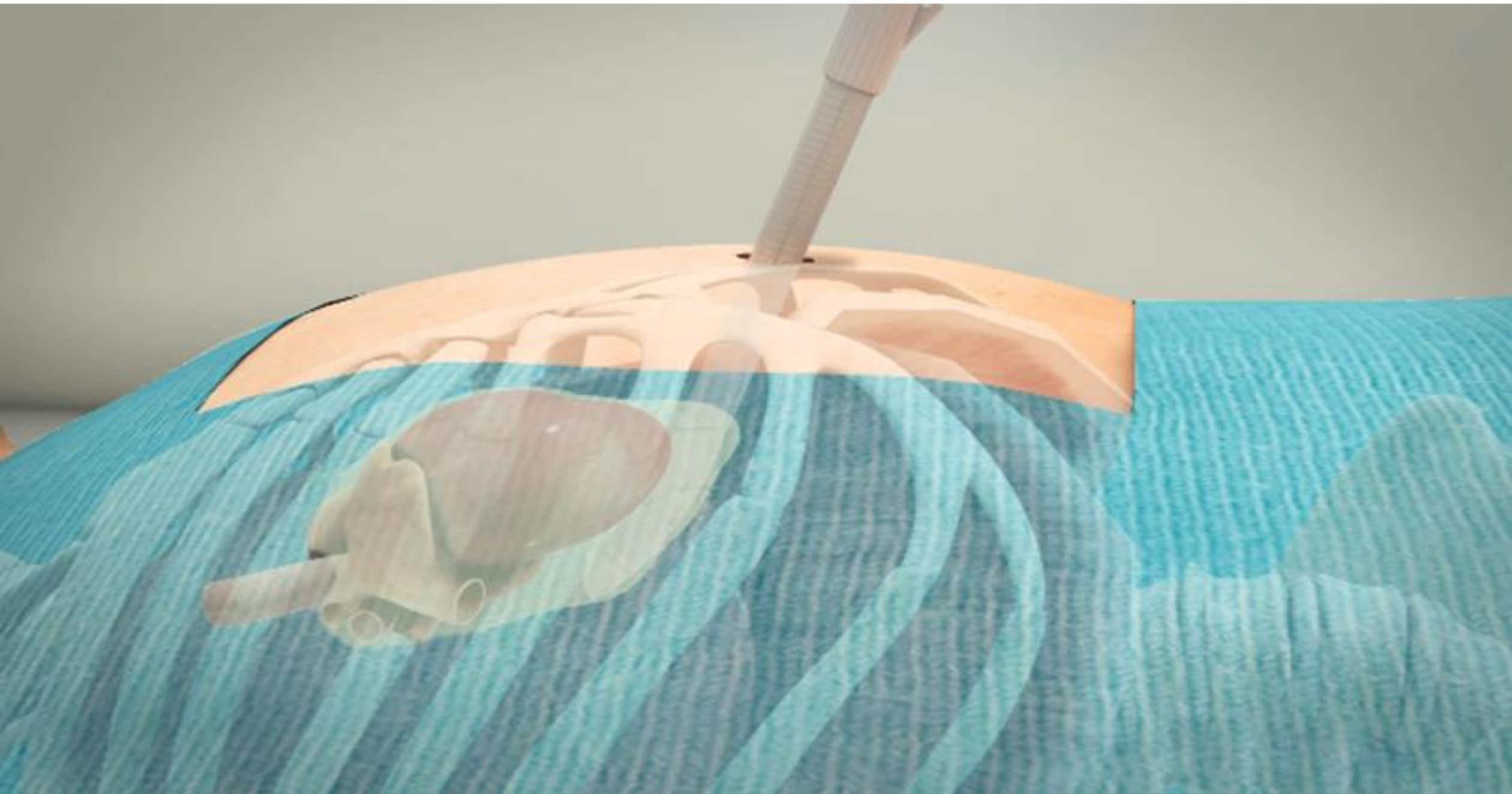
- freedom from Afib at one year after the procedure.

Secondary end-point: perioperative and 30-day mortality, complications, such as:

- bleeding/tamponade, stroke, conversion to sternotomy, wound infection, in-hospital length of stay and readmission.

RESULTS

Postoperative results	N=34 patients
Postoperative stroke/TIA, N (%)	0 (0)
Bleeding complications/tamponade, N (%)	1 (5.8)
Conversion to sternotomy, N (%)	0 (0)
Wound infections, N (%)	0 (0)
Need for postoperative eCV, N (%)	4 (11.7)
Need for postoperative PM, N (%)	0 (0)
Cessation of oral anticoagulants, N (%)	34 (100)
Perioperative mortality, N (%)	0 (0)
30-day mortality, N (%)	0 (0)
Freedom from Afib at discharge, N (%)	34 (100)
Freedom from Afib at two years, N (%) <u>*</u>	16 (76.1)
Values are mean or n (%). Afib= atrial fibrillation; eCV= electric cardioversion; PM = pacemaker; TIA= transient ischemic attack;	
<u>*</u> = two-year follow-up in 21 patients	

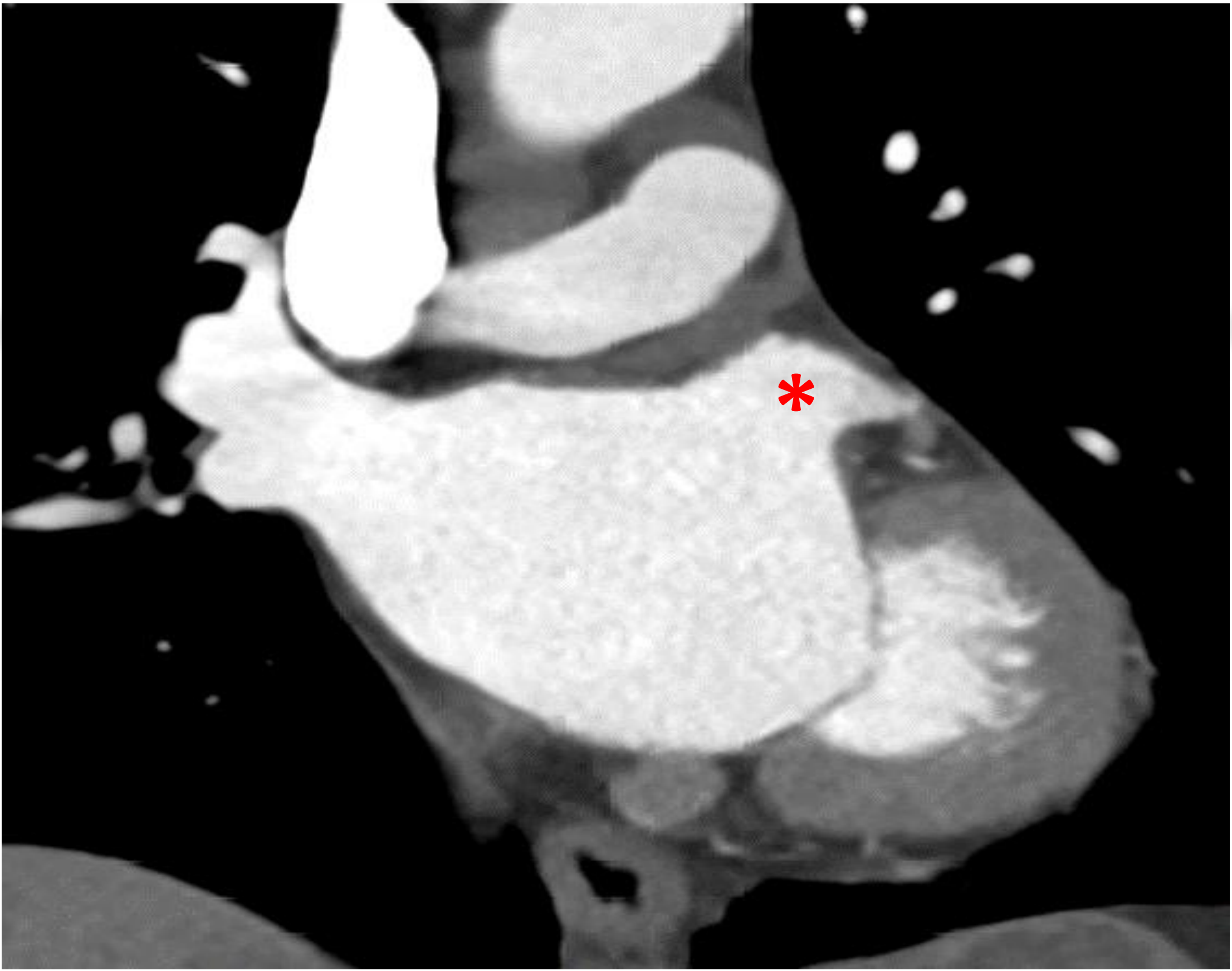


Subxiphoid access for left atrial posterior wall ablation
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**Epicardial:
Outside the Heart**

Ablation of the posterior left atrial wall
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Preoperative CT: open LAA, free of thrombotic material *



Postoperative CT: complete LAA closure (arrow)

CONCLUSIONS

The Convergent procedure combined with minimally invasive LAAC/EI proved an effective and safe treatment for symptomatic persistent/long standing persistent Afib, restored sinus rhythm, and improved the quality of life (at two years postoperatively). The length of in-hospital stay and readmission rates decreased significantly. The addition of LAA electrical isolation/closure improved ablation effectiveness and reduced postoperative stroke rate despite cessation of anticoagulation therapy.