Convergent Ablation for Persistent Atrial Fibrillation: Single Center Experience

This retrospective study examined 31 symptomatic patients—with persistent AF (n =16) or long-standing persistent (LSP, n = 15) AF—who were treated with the Convergent procedure. All patients underwent surgical epicardial ablation via subxiphoid approach, followed by radiofrequency endocardial ablations on the same day. Median LA size was $4.3 \, \text{cm}$. All but $4 \, \text{patients}$, who were lost to follow-up, completed 2-year follow-up.

| Arrhythmia Recurrence with or without AADs | | |
|--|-----------|------------|
| Type of Arrhythmia | At 1 Year | At 2 Years |
| AF only | 13% | 29% |
| AF/AFL | 29% | 48% |

| Freedom from Arrhythmias | | |
|--------------------------|------------|--|
| Type of Arrhythmia | At 2 Years | |
| AF only | 71% | |
| Atrial Tachyarrhythmias | 52% | |

Interestingly, there was no statistical significance in AF/AFL recurrence in patients with or without AADs. Perioperatively, there was a 12.9% (4/31 patients) complication rate, but "some of these complications occurred early in our experience and steps were taken to avoid" these complications in the future. Of the 3 mortalities, 2 were from noncardiac causes within 18 months, and one was from cardiac arrest due to unknown causes at 4 months post intervention.

It is important to point out that 16.1% of this patient cohort had hypertrophic cardiomyopathy, and these patients are known to have much higher AF recurrence rates.

The Convergent procedure emphasizes the importance of silencing the posterior LA, which is an important area of arrhythmogenicity. This study demonstrates that the Convergent approach can be a reasonable alternative for treating patients with advanced stages of AF and severely dilated LA.

The authors concluded the hybrid procedure is a relatively safe and effective option for patients with PAF. Further studies are needed to better determine its long-term outcomes.



Convergent Ablation for Persistent Atrial Fibrillation

Reference: Gulkarov, I. et al. (2019). Convergent ablation for persistent atrial fibrillation: single center experience. Journal of Cardiac Surgery, 34(10):1037-43.

EPi-Sense® Guided Coagulation System

EU Indications: The EPi-Sense® Guided Coagulation System with VisiTrax® is intended for the coagulation of cardiac tissue using radio frequency (RF) energy during cardiac surgery for the treatment of arrhythmias including Atrial Fibrillation (AFIB) or Atrial Flutter (AFL). Contraindications include patients with Barrett's Esophagitis, left atrial thrombus, a systemic infection, active endocarditis, or a localized infection at the surgical site at the time of surgery. Reported adverse events associated with epicardial ablation procedure may include, but are not limited to, the following: pericardial effusion, excessive bleeding, Pericarditis, phrenic nerve injury, stroke/TIA/neurologic complication.

 $Please\ review\ the\ Instructions\ for\ Use\ for\ a\ complete\ listing\ of\ contraindications, warnings, precautions\ and\ potential\ adverse\ events\ located\ at\ the\ following\ AtriCure\ web\ address:\ https://europe.atricure.com/healthcare-professionals/product-labeling$

This material is intended to provide objective information about the use of AtriCure's Technology, including where and how the device can be used within the continuum of care. The enclosed publication includes information regarding patients with persistent or long-standing persistent atrial fibrillation treated with the EPi-Sense technology in a hybrid procedure. This material is being provided to demonstrate use of the EPi-Sense system in the treatment of long-standing atrial fibrillation and its clinical outcomes. This publication was chosen for this purpose because the study summarized herein utilized a trial design similar to that used in the CONVERGE IDE study which supported FDA approval of the EPi-Sense System for the indication stated above.

