

Surgical Full Maze Procedure Through Left Atrial Appendage

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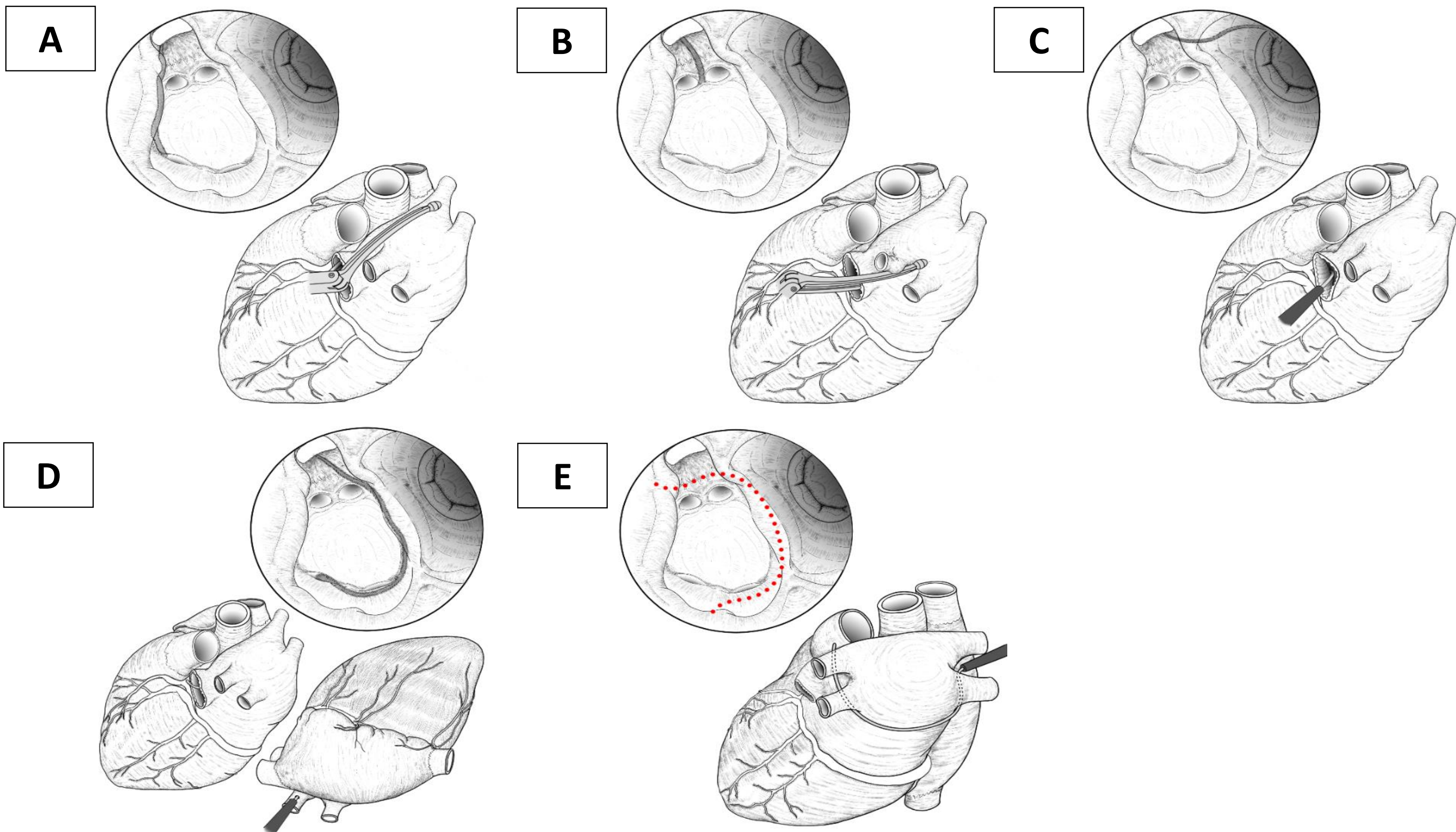
Background

Despite high-level evidence support, the full Maze procedure remains underused because of complexity, prolonged arrest time, and training gaps. Therefore, a simplified left atrial Maze procedure through the left atrial appendage was developed

Methods

The technique comprised : LA Maze was performed through an amputated left atrial appendage.

- bilateral pulmonary vein isolation
- Left atrial ablation
 - A) appendage-to-roof ablation, B) appendage ridge ablation, C) mitral annulus ablation
 - D) endocardial bottom line ablation, E) epicardial bottom line ablation
- inferior vena cava and tricuspid line ablation

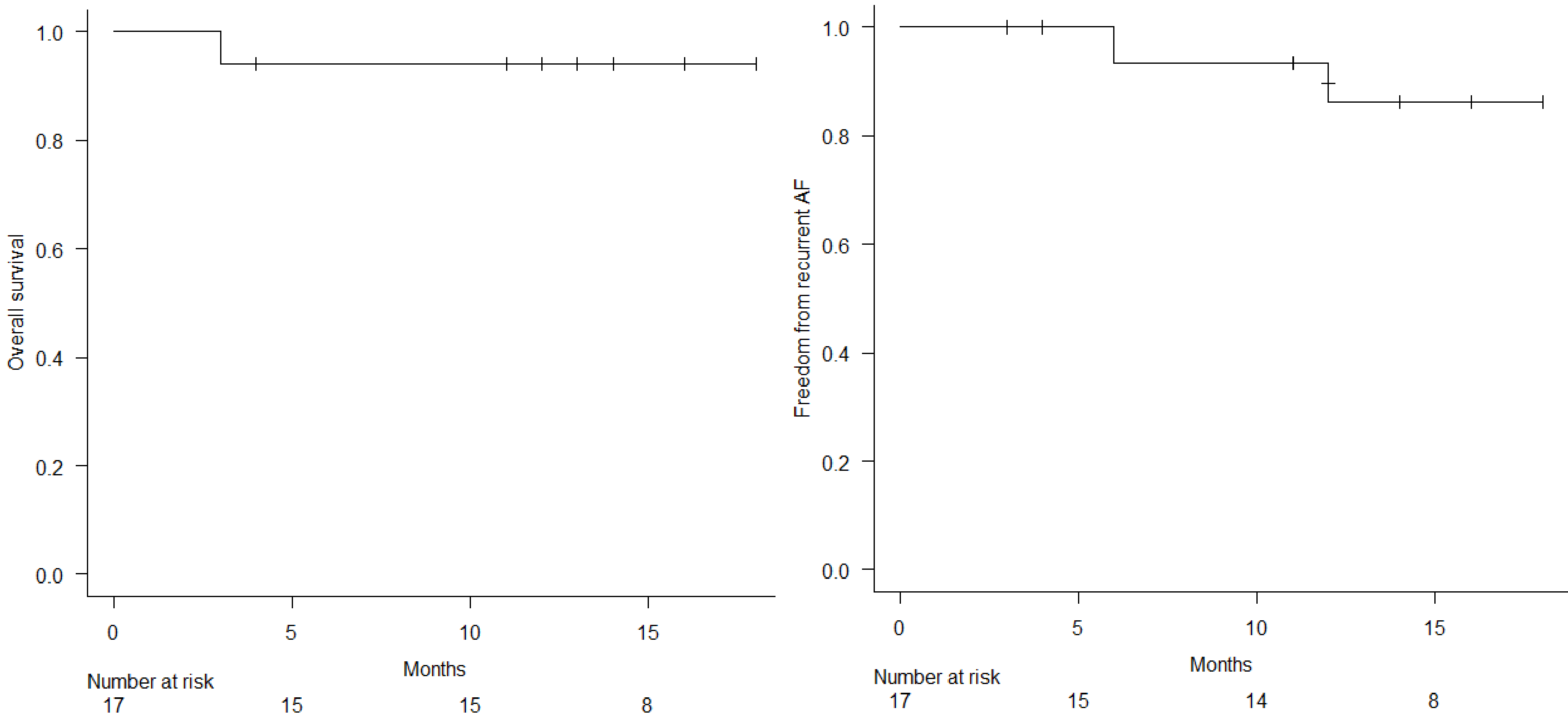


*All ablation lines were created using the AtricureRF (AtriCure, Inc., Cincinnati, Ohio, United States) and CryoICE (AtriCure, Inc., Cincinnati, Ohio, United States) devices

Results

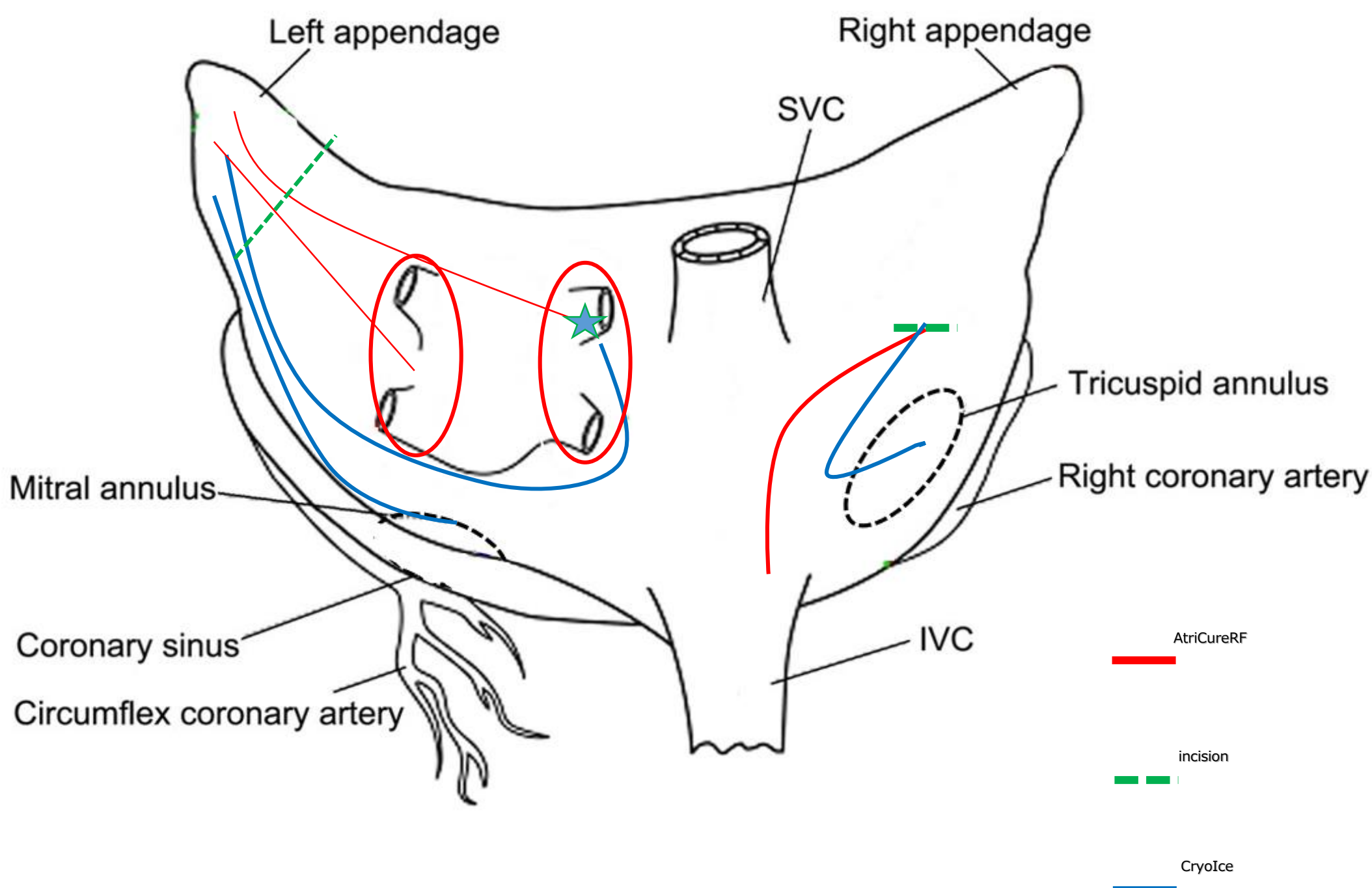
Patient summary

	N=17
Age, years	75 (IQR: 66-77)
Male, n(%)	12 (71)
Post cardiopulmonary arrest	3
MCS support	3 (IABP:1, Impella:2)
Failed catheter ablation	2
AF	
• Long-standing AF	13 (76)
-Longer than 5 years	8 (47)
• Persistent AF	4 (24)
LVEF, %	47 (31-74)
Left atrial diameter, mm	63 (60-71)
Left atrial volume index, ml/m2	49 (43-58)
Concomitant procedures	
• Valve surgery, n(%)	6 (35)
• CABG surgery, n(%)	11 (65)
Additional cardiac arrest time for LA-Maze <20 min.	17 (100)



Complications at follow up duration

	N=17
• Cardiac tamponade	0
• Stroke after cardio genic shock , n	1
• PM implantation, n	0



Summary

Procedural complication was not experienced
Additional cardiac arrest time for LA Maze was shorter (< 20 min.)
The durability of sinus return after our surgical ablation is acceptable (success rate: 86% at 12 months follow up)

Conclusion

Our technique is safe and simple, and atrial fibrillation free survival was acceptable
Our technique has a shorter cardiac arrest time and fewer complications and is recommended as a concomitant procedure, regardless of left atriotomy