

# Acute Experience with Pulsed Field Ablation for Typical Flutter



**KBC SPLIT**

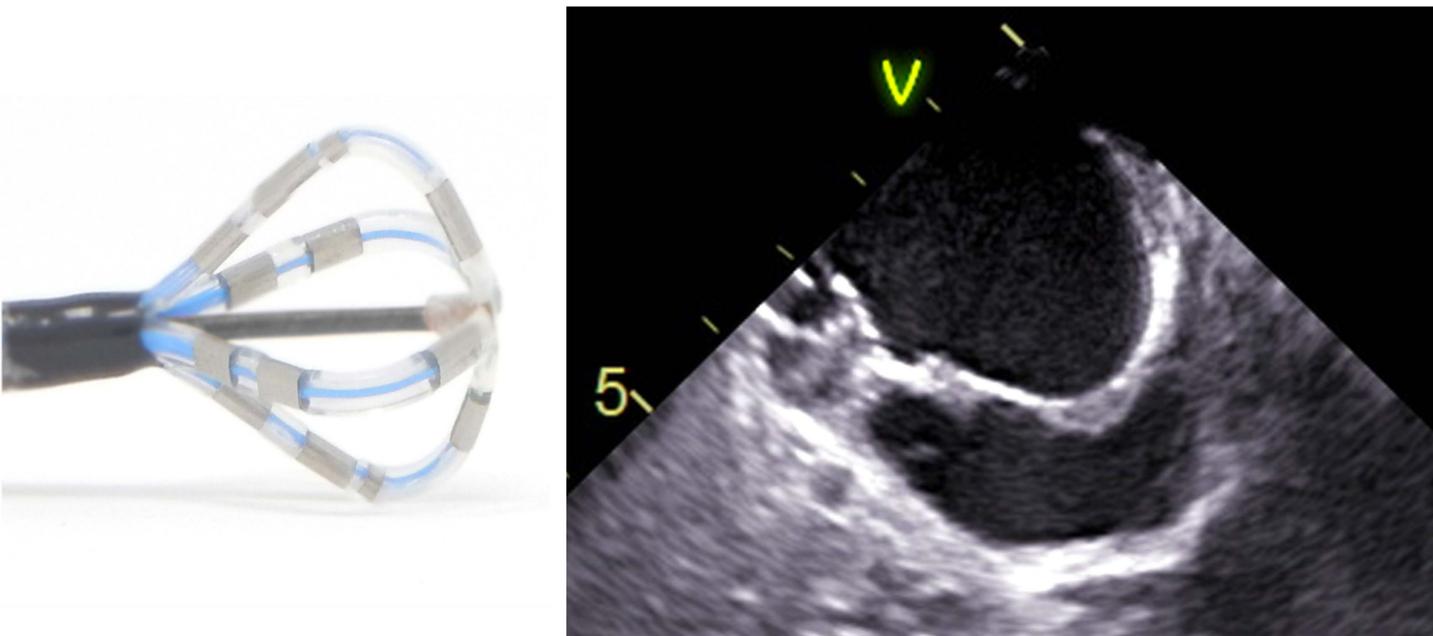
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## INTRODUCTION

- Cavotricuspid isthmus (CTI)-dependent atrial flutter (AFL) can challenge ablation systems reliant on contact and small, contiguous lesions leading to longer procedure times, operator fatigue and elevated safety risks
- **Pulsed field ablation (PFA)** may improve CTI ablation: it is fast, contact-forgiving and has demonstrated myocardial-specificity

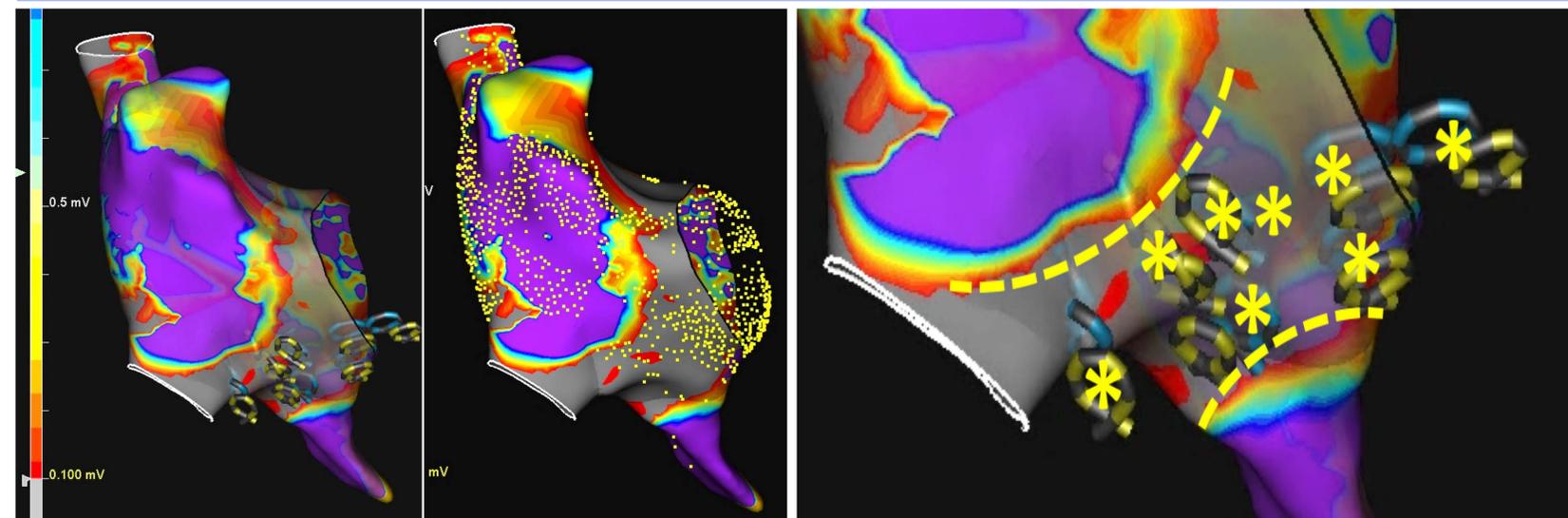


## METHODS

- Three patients (48-69 years, 2 male) with paroxysmal (2 pts) or persistent AF were enrolled in two studies
- Each patient received PFA-based PVI and adjunct atrial ablation
- Following successful PVI, a deflectable 12F catheter with a deployable four-spline, multi-electrode tip (FARAPULSE) was introduced via a 13F deflectable sheath to the right atrium for ablation of the CTI
- Bidirectional block (BDB) was tested after a waiting period

## RESULTS

- Creation of a contiguous, non-conducting line of PFA lesions in the CTI was successful in all (3/3) patients
- The CTI length measured by intracardiac echocardiography (ICE) was 35, 29 and 45 mm
- The catheter required few ablation sites (4, 3 and 6 respectively) and little time from the first application (3, 4 and 6 minutes) to achieve BDB
- Mapping system visualization was employed but ICE-based navigation was sufficient, owing to the catheter's 13mm footprint
- BDB was confirmed after a 15-minute waiting period in all patients, during which time reinforcing lesions were placed
- Adenosine challenge was administered to one patient and demonstrated persistent BDB
- No safety events occurred through 22 days following the procedures



## CONCLUSIONS

- A deflectable, basket-shaped PFA catheter successfully created bidirectional block in the CTI in a small and early series of patients
- The potential advantages of PFA, including reduced positional dependence, rapid deliveries and fundamental tissue-specificity, warrant continued study for CTI ablation.