Response to Letter from Vroomen et al. Regarding Article, "Left Atrial Appendage Electrical Isolation and Concomitant Device Occlusion to Treat Persistent Atrial Fibrillation: A First-in-Human Safety, Feasibility, and Efficacy Study"

Panikker, Response to Vroomen et al. Letter

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We thank Vroomen et al. for their letter detailing the benefits of hybrid AF ablation, involving thoracoscopic epicardial ablation combined with endocardial catheter ablation followed by an epicardial LAA clip procedure, performed in an experienced centre.\(^1\)

However, wider adoption of this approach as routine clinical practice is not without concerns. Epicardial LAA closure/excision has been performed for many years, though follow-up imaging studies have shown that successful closure using a range of closure techniques may only range between 0% to 73%. Importantly, a significant proportion of patients with unsuccessful closure had evidence of thromboembolic events.\(^2\) Technology for epicardial LAA closure has since evolved, including more modern epicardial LAA clip devices, While improved efficacy has been shown in preliminary studies, data from multicentre trials is currently lacking. This is in contrast to the high successful closure rates (between 93% and 99%) in patients undergoing percutaneous LAA occlusion device implantation observed in the PROTECT AF and PREVAIL randomised controlled studies that allowed the discontinuation of warfarin.\(^3\) Furthermore, hybrid ablation requires the presence of both a cardiothoracic surgeon and cardiac electrophysiologist. This may be a logistical challenge and, combined with a potentially higher risk of complications \(^4\) and possibly longer hospital stays, may add to the procedural costs over and above a solely percutaneous approach.

Nonetheless, the concept of LAA electrical isolation and occlusion in a single step is attractive from a purely catheter based strategy, as reported by our group, or hybrid approach. However, the net clinical benefit and wider applicability will need to be substantiated by larger multi-centre studies.
Disclosures

Dr Panikker has received a research grant from Boston Scientific. Dr Virmani is a consultant for Abbott Vascular, Medtronic, 480 Biomedical, and W.L. Gore; has speaking engagements with Merck and receives honoraria from Abbott Vascular, Boston Scientific, C.R. Bard, Medtronic, Microport Medical, OrbusNeich Medical, 480 Biomedical, and Terumo Corporation. The other authors report no conflicts.

References


