HYBRID TOTALLY THORACOSCOPIC MAZE AND CATHETER ABLATION FOR LONG STANDING PERSISTENT ATRIAL FIBRILLATION: INITIAL EXPERIENCE

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Abstract

Atrial Fibrillation is now a pandemic in our ageing community. Although Cox (1987) devised a surgical procedure with near-universal curative success, widespread clinical endorsement has not followed. Meanwhile, catheter-based interventions have flourished. For persistent Atrial Fibrillation (AF), however, an isolated endocardial approach has significant limitations: procedural times are long, carry risk, and the outcomes are poor. By combining left atrial endocardial and epicardial interventions with staged mapping, we optimise the benefits of both approaches. We report our first twenty-five consecutive patients undergoing Totally-Thoracoscopic-Maze procedure (TT), followed at three months by staged electrophysiologic (EP) mapping. Selected patients had symptomatic, lone atrial fibrillation, of greater than twelve months duration, having failed to revert despite multiple antiarrhythmic agents. Patients were excluded if they had received prior EP intervention or required additional procedures for coronary revascularisation, valvular heart disease, or thoracic surgery. The average patient age was 60 years (78% male). The main symptoms observed were palpitations (53%), fatigue (59%), chest pain (20%) and dizziness (23%). A history of transient ischemic attack was recorded in only one patient. There were no major in-hospital complications; death, stroke, left atrio-oesophageal fistula or conversions to sternotomy. Perioperative atrial-fibrillation was observed in only three patients and, with the institution of antiarrhythmics, all patients achieved sinus-rhythm. 14/25 patients progressed to staged EP mapping for an overall sinus conversion rate of 100%. Our initial series of hybrid ablation for long-standing, persistent atrial fibrillation reports excellent early outcomes, freedom from complications and universal success.

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