To the Editor:

The enduring ramifications of simultaneous intervention for atrial fibrillation (AF) in individuals undergoing mitral valve surgery remain a subject of contention. Kim and colleagues have posited that the amalgamation of AF intervention and mitral valve surgery correlates with diminished mortality, cardiac mortality, major adverse cardiac and cerebrovascular events, and stroke incidence across the 15-year period after the index surgery, as opposed to mitral valve surgery devoid of AF intervention. Nevertheless, certain reservations have been articulated.

Clinical outcomes manifest heterogeneity contingent upon extravalvular lesions in patients afflicted with mitral valve pathologies, encompassing left ventricular systolic dysfunction, left atrial dilatation, concomitant pulmonary hypertension and tricuspid regurgitation, and the manifestation of right ventricular failure. The authors endeavored to effectuate propensity matching for the presence of systolic heart failure and the severity of tricuspid regurgitation, albeit extravalvular lesions beyond these parameters were not subjected to matching. How do the authors factor in the prognostic implications of these unmatched extravalvular lesions?

In the authors’ investigation, the recurrence rate of AF experienced a suppression of approximately 50% in those undergoing isolated mitral valve surgery without concurrent AF intervention. Can the authors elucidate the mechanistic underpinnings of why a substantial cohort of patients achieved freedom from AF recurrence absent concomitant AF intervention? Notably, concomitant AF intervention merely translated into a marginal 10% reduction in the recurrence rate. Such a modest diminution may not necessarily mitigate thromboembolic risk. The postsurgical administration of direct oral anticoagulants/warfarin may further influence clinical outcomes, including thromboembolic events.

Previous literature posits that roughly 80% of supraventricular tachycardia after maze surgery constitutes atrial tachycardia. Atrial tachycardia conventionally qualifies as a recurrence following AF surgery. What constitutes the definition of AF recurrence in the authors’ study? A majority of recurrent atrial tachycardia evolves as a re-entry arrhythmia attributable to incomplete linear ablation during maze surgery. AF surgery devoid of postprocedural electrical confirmation may occasionally result in incomplete ablation, thereby conferring a heightened risk of AF recurrence. Could the procedural intricacies of AF surgery be expounded upon?

Conflict of Interest Statement

The authors reported no conflicts of interest.

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References


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