

Risk factors for postoperative atrial fibrillation

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Sir,

We have read with interest the article about the assessment of risk factors for new-onset atrial fibrillation (AF) after cardiac surgery, by Dave *et al.* They reported that prior reduced ejection fraction, presence of history of myocardial infarction, extended cardiopulmonary by-pass, and ventilatory duration are associated with AF, while the use of beta-blocking agents are protective from AF.^[1]

There are several studies on postoperative atrial fibrillation (POAF) and lots of well-defined predictive factors. Use of some medications, such as beta-blocking agents, angiotensin converting enzyme (ACE) inhibitors, statins, and glucocorticoids, is protective toward POAF. Postoperative inflammation is one of the causes of AF, so glucocorticoids and statins have beneficial effects via reducing inflammation. ACE inhibitors reverse atrial remodeling and improve diastolic function by decreasing afterload preventing POAF by reducing atrial pressures and fibrosis.^[2]

Left atrial dysfunction is another underlying mechanism of POAF and peak atrial longitudinal strain and peak atrial contraction strain of left atrium is significantly related with POAF. Hidayet *et al.* impressed that left atrial volume index is also an independent predictor of POAF.^[3,4]

In conclusion, POAF is a frequent complication of cardiac and noncardiac surgery. There are several risk factors for POAF, including medications and left atrial function, which should be considered preoperatively to help predict POAF.

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Conflicts of interest

There are no conflicts of interest.

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