Intraoperative Factors Cause Postoperative Atrial Fibrillation?

To the Editor:
We read the study by Takahashi et al\(^1\) with great interest. When we reviewed the predictor factors for postoperative atrial fibrillation (POAF) in this study, we did not find any data clearing basic intraoperative factors like systemic inflammatory response and oxidative stress triggered by extracorporeal circulation.\(^2,3\) Proinflammatory mediators triggered by extracorporeal circulation and cross-clamping mediate depression of cardiac functions and apoptosis, along with ischemia-reperfusion injury.\(^2,4\) Arrhythmias are facilitated by these structural and humoral changes in cardiac muscle.\(^2\) In this study, however, it is very intriguing that Takahashi et al did not find a significant difference for POAF in the 2 groups when they analyzed extracorporeal circulation and cross-clamp time. In a similar study by the same authors, in which they used patients with aortic valve replacement, they found no significant difference for POAF in groups for the same parameters.\(^5\) We are wondering if they used any anti-inflammatory agents in the priming solution or during cardiopulmonary bypass via peripheral administration. We would deeply appreciate if the authors explain this matter.

References

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