

Postoperative atrial fibrillation after coronary bypass surgery: Where should a cardiac surgeon stand?

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I have read with great interest the article by Yuksel et al. [1], entitled "Multi-inflammatory index as a novel predictor of new-onset atrial fibrillation after off-pump coronary artery bypass grafting". First of all, I would like to congratulate the authors for their valuable contribution to the literature. However, I would like to discuss some issues related to postoperative atrial fibrillation (PoAF) after coronary artery bypass grafting (CABG) surgery.

PoAF after isolated CABG surgery is an important problem that can lead to mortality and morbidity. Many studies in the literature have attempted to identify the risk factors [2]. The aim here is to identify preventable risk factors and take necessary precautions. Parameters obtained from routine blood tests are used in the diagnosis and prognosis of cardiovascular diseases as in many other areas of medicine. However, these values can be influenced by many clinical conditions. These parameters may be elevated in acute coronary syndrome [3]. The authors did not report the timing of CABG surgery in their current study [1]. It should be considered that inflammatory markers may be affected in patients undergoing early surgery after acute coronary syndrome. In addition, there is no information on patients with thyroid dysfunction in the exclusion criteria [1]. Thyroid dysfunction may also be a risk factor for PoAF [4].

Another important issue in PoAF studies is the diagnosis of PoAF. When PoAF develops, it usually lasts longer than 5 minutes. PoAF without hemodynamic compromise can usually be treated with amiodarone infusion. In some cases, electrocardioversion may be necessary [5]. I think it is very important to specify the duration of atrial fibrillation in PoAF studies. What duration of atrial fibrillation episode did the authors define as

PoAF in their current study [1]? 30 seconds or 5 minutes?

PoAF usually occurs between days 2 and 4 after CABG surgery. Therefore, early postoperative medical treatment of these patients may also be effective for PoAF. A meta-analysis showed that perioperative treatment with statins significantly reduced the incidence of PoAF [6]. In addition, postoperative beta-blocker therapy may also reduce the incidence of PoAF [7]. Therefore, it may be useful to demonstrate perioperative treatments in studies investigating inflammatory parameters, which may be the first in the literature to predict the risk of PoAF.

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Response

The authors of the article cited were invited to reply. They do not respond to it.