

New-onset postoperative atrial fibrillation after coronary artery bypass graft surgery. Authors' reply

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Referring to the letter from Engin et al. [1], we would first like to thank the authors for their interest in our manuscript. We are grateful for all words of appreciation, as well as interesting observations and questions.

Our study concerned new-onset postoperative atrial fibrillation (POAF) following elective coronary artery bypass graft surgery (CABG), hence patients with a history of atrial fibrillation were excluded. However, the exclusion criteria were based on medical records, and a 12-lead electrocardiogram and 24-hour heart rhythm monitoring were available immediately after surgery. We assumed that the probability of a new atrial fibrillation episode between admission and the surgery would be negligible.

The issue of functional thyroid disorders is well known to us, therefore, all patients with a history of hypothyroidism had to be euthyroid and adequately treated with triiodothyronine replacement [2]. Moreover, in our study, a history of hypothyroidism did not differentiate patients with POAF from patients without POAF [3]. Only patients currently being treated for hyperthyroidism were excluded from the study to avoid its influence on the development of POAF.

As we stated in the introduction, the study was designed to determine whether the preoperative or postoperative neopterin concentration was a better prognostic factor

in POAF. Since neopterin was first evaluated as a predictive factor in POAF, we decided to test it before surgery and at two-time points after surgery, and, indeed, we also investigated its association with a possible recurrence of POAF.

Finally, there is the question of multivariable statistical models. One of the limitations of our study was the number of patients, which then limited the examination of all factors in one model. Therefore, we decided to divide many statistically significant potential predictors into three groups: preoperative, surgical, and echocardiographic. According to these analyses, apart from the higher preoperative concentration of neopterin, important factors were also: higher body mass index (BMI, kg/m²), history of pulmonary disease, increased diastolic thickness of interventricular septum, and duration of operation [3].

Article information

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