366 Letters to the Editor Anatol J Cardiol 2016; 16: 364-8

## Effects of cardiopulmonary bypass on new-onset atrial fibrillation

To the Editor,

We read the article titled "SYNTAX score predicts postoperative atrial fibrillation in patients undergoing on-pump isolated coronary artery bypass grafting surgery" that is published in Anatolian J Cardiol October 18. Epub ahead of print (1), in which the authors described the effects of SYNTAX score on postoper-

Anatol J Cardiol 2016; 16: 364-8 Letters to the Editor 367

ative atrial fibrillation, with great interest. In this study, the groups are well balanced and standardized in many aspects, but there is no data revealing the duration of the on-pump procedures, which is very important and forms a basic variable in coronary artery bypass grafting. On the other hand, one should underline the two major causes of atrial fibrillation as cardiopulmonary bypass and oxidative stress/inflammatory response triggered by cross clamping (2–4). Many cellular and non-cellular elements are activated during cardiopulmonary bypass, particularly the triggering pro-inflammatory mechanisms (5). Thus, we strongly believe that the groups in this study should have been standardized considering the cardiopulmonary bypass and cross-clamp times if the SYNTAX score is a predictor of postoperative atrial fibrillation. We would deeply appreciate if the authors share their opinion or any data related to the matter.

Orhan Gökalp, Börtecin Eygi<sup>1</sup>, Yüksel Beşir<sup>1</sup>, Ali Gürbüz

Department of Cardiovascular Surgery, Faculty of Medicine, İzmir
Katip Çelebi University, İzmir-*Turkey*<sup>1</sup>Department of Cardiovascular Surgery, Atatürk Education and
Research Hospital, İzmir Katip Çelebi University, İzmir-*Turkey* 

## References

- Geçmen Ç, Güler GB, Erdoğan E, Hatipoğlu S, Güler E, Yılmaz F, et al. SYNTAX score predicts postoperative atrial fibrillation in patients undergoing on-pump isolated coronary artery bypass grafting surgery. Anatol J Cardiol 2015 October 18. Epub ahead of print.
- Qu C, Wang XW, Huang C, Qiu F, Xiang XY, Lu ZQ. High mobility group box 1 gene polymorphism is associated with the risk of postoperative atrial fibrillation after coronary artery bypass surgery. J Cardiothorac Surg 2015 June 25. Epub ahead of print.
- Ascione R, Caputo M, Gomes WJ, Lotto AA, Bryan AJ, Angelini GD, et al. Myocardial injury in hypertrophic hearts of patients undergoing aortic valve surgery using cold or warm blood cardioplegia. Eur J Cardiothorac Surg 2002; 21: 440-6.
- Nesher N, Frolkis I, Vardi M, Sheinberg N, Bakır I, Caselman F, et al. Higher levels of serum cytokines and myocardial tissue markers during on-pump versus off-pump coronary artery bypass surgery. J Card Surg 2006; 21: 395-402.
- Zakkar M, Ascione R, James AF, Angelini GD, Suleiman MS. Inflammation, oxidative stress and postoperative atrial fibrillation in cardiac surgery. Pharmacol Ther 2015; 154: 13-20.

Address for Correspondence: Dr. Orhan Gökalp
Altınvadi Cd. No:85 D:10 35320 Narlıdere, İzmir-Türkiye
E-mail: gokalporhan@yahoo.com
@Copyright 2016 by Turkish Society of Cardiology - Available online
at www.anatoljcardiol.com
DOI:10.14744/AnatolJCardiol.2016.6990

