

Author's Reply

To the Editor,

There are large clinical data on the importance of mean platelet volume (MPV) in unstable patients; its importance in stable atherosclerotic disease is scarce. We reported that MPV is independently associated with sub-clinical thoracic atherosclerosis in the article entitled "Mean platelet volume is associated with aortic intima-media thickness in patients without clinical manifestation of atherosclerotic cardiovascular disease" published in *Anatol J Cardiol* 2015; 15: 753-8.

One of the main disturbances that play a role in atherosclerosis is increased platelet aggregation, and increased platelet volume is a marker of increased platelet activity (2). Recently, one meta-analysis showed that a larger MPV is associated with coronary artery disease (3). According to our results, we confirm that an increase in MPV may be an important biochemical marker for initial atherosclerosis.

Previous studies demonstrated that platelets play a critical role in carotid atherosclerosis and that P-selectin that is stored in platelet secretory granules is important for the development of atherosclerosis. Additionally, platelets directly affect the degree of plaque maturation, including the existence of smooth muscle cells and calcification (4). These findings comprise the rationale to our hypothesis.

As far as we know, our article is the first to report a relationship between thoracic aorta intima media thickness and the mean platelet volume in healthy subjects. Therefore, more studies are needed to confirm this finding. Our study is not a prospective clinical study, so we do not know whether the mean platelet volume is a predictor of future cardiovascular events in healthy subjects or not. Prospective clinical trials must be conducted to investigate the prognostic importance of the mean platelet volume.

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Is atrial septal defect alone able to affect the cardiac autonomic function or are there different factors that influence this function?

To the Editor,

We read with a great interest the paper by Özyılmaz et al. (1) entitled "Heart rate variability improvement in children using transcatheter atrial septal defect closure" published in the *Anatol J Cardiol* 2015 Mar 4. The authors aimed to evaluate cardiac autonomic functions in children who underwent transcatheter closure of atrial septal defect (ASD) using analysis of heart rate variability (HRV) parameters. They concluded recovery of HRV indices approximately 6 months after transcatheter ASD closure.

ASD is a frequently seen congenital heart disease characterized with left-to-right shunting and dilation of the right cardiac chambers and pulmonary artery, which might result in heart failure, arrhythmia, and thromboembolic events as well as increased mortality. The enlarged right ventricle usually returns to normal size during the first 24 months after transcatheter device closure or surgical repair, although this normalization may persist for up to 5 years after defect closure (2). As mentioned in the article by Özyılmaz et al. (1), HRV impairment in patients with ASD has been attributed to right ventricular filling and right atrial tension due to left-to-right blood flow through ASD (3). However, in the study by Özyılmaz et al. (1), no data demonstrating dimensions of cardiac chambers before and after the transcatheter closure are available, and we do not know whether the initial dimensions are significantly different from those measured 6 months after transcatheter closure. In addition, the mean diameter of ASD as well as the range of the diameter of the defect in the study population is not mentioned in the article. With these additional data, we believe that readers of the journal can more easily understand whether the size of the defect and the dimensions of cardiac chambers have an effect on HRV parameters.

The interpretation of HRV analysis is not as simple as thought because of various factors that influence HRV indices, which might be affected by many variables such as hyperlipidemia and blood pressure (3-5). We think that it would be more helpful to demonstrate blood pressure levels and blood lipid profiles of the study population in terms of showing no variable affecting HRV parameters rather than ASD. Thus, one can understand whether ASD alone really impairs the cardiac autonomic function, which has a prognostic importance for survival (5).

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Author's Reply

To the Editor,

We would like to thank the authors of the letter for their interest and criticism on our study entitled "Heart rate variability improvement in children using transcatheter atrial septal defect closure" published in *Anatol J Cardiol* 2015 Mar 4 (1).

Heart rate variability is a parameter used for the non-invasive evaluation of the neurohumoral control of the heart. One study reported reduced measurements of HRV in children with various congenital heart diseases (2). In another study, it has been shown that the dilatation of RV can decrease for up to 5 years after ASD closure (3). Some studies have published the normalization of RV size during the first 24 months after device closure (4). There may be other factors that affect the cardiac autonomic function besides atrial septal defect as the author mentions. However, Cansel et al. (4) found that the right ventricular diameter and pulmonary artery systolic pressure significantly decreased 6 months after transcatheter closure compared with values measured before transcatheter closure in patients with ASD. In our study, we concluded that HRV in children recovers approximately 6 months after transcatheter ASD closure. We did not report the dimensions of cardiac chambers before and after transcatheter closure. In our article, HRV after transcatheter ASD closure was compared with that of the control group. We did not declare that heart chambers reached normal values in 6 months. In our study, the 6th month HRV of patients who underwent transcatheter ASD closure approached the levels of the control group (1). HRV and reaching normal levels of right ventricular measurements are two different things. HRV could return to the normal range before the normalization of heart cavity due to hemodynamic improvement after transcatheter closure.

Our study was designed using the heart rate variability data of Holter ECG in the previously published "Holter Electrocardiographic Findings and P-wave Dispersion in Pediatric Patients with Transcatheter Closure of Atrial Septal Defects" study. A previously published part of this study was not used the heart rate variability data (5). Patient information [mean±SD, pulmonary artery pressure (mm Hg), Qp/Qs ratio, stretched diameter of ASD (mm), device defect ratio, device diameter (mm): 20.8±4.4, 2.1±0.4, 16.8±3.8, 1.3±1.4, 19±4.2, respectively] were not written again because they were declared in this previously published study (1).

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Potential benefits of oral pentoxifylline before coronary artery bypass surgery

To the Editor,

We read with interest the recent publication by Mansourian et al. (1) published in *Anatol J Cardiol* 2014 Dec 31 entitled "Preoperative oral pentoxifylline in case of coronary artery bypass grafting with left ventricular dysfunction (ejection fraction equal to/less than 30%)" on effects of preoperative oral pentoxifylline in a cohort of high-risk patients undergoing coronary artery bypass surgery. They reported a shorter ventilation time and intensive care unit stay, less frequent need for blood product transfusion along with a significantly lower TNF-alpha and insignificantly lower interleukin (IL)-6 levels postoperatively in patients who received oral pentoxifylline. An increase in the level of inflammatory cytokines has been shown after cardiac surgery (2). It has been reported in both off-pump and on-pump CABG (3). Some studies reported a diminished activation of the inflammatory system after off-pump procedures, but surprisingly, this has not been reported to have a clinically relevant benefit (2). Pentoxifylline is a xanthine derivative, and its main mechanism is decreasing blood viscosity. This drug has been shown to inhibit inflammatory cytokine release in both oral and intravenous forms (4).

The authors stated that they excluded patients with recent myocardial infarction, but the preoperative troponin-T levels are well above the normal range. The reason for the increased cardiac biomarkers is not