

published in *Anatol J Cardiol* 2016; 16: 667-72. (1).

The prognostic value of the slow heart rate recovery index (HRR) after exercise in predicting cardiovascular disease and mortality has been established (2). Our study determined that the 1st-, 2nd-, 3rd-, and 5th- minute HRRs after maximum stress testing were statistically significantly lower in the heavy smoker group than in the nonsmoker healthy control group.

HRR is calculated by extracting the heart rate during the 1st, 2nd, 3rd, and 5th minutes after finalizing the test from the patient's maximum heart rate during exercise. In our study, we used this formula and mentioned it in the "Method" section. However, in the "Introduction" section, the definition was incorrect. Therefore, we thank the author for bringing this to our attention. In summary, HRR was calculated correctly in our study.

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Analysis of platelet-to-lymphocyte ratio requires methodological consideration

To the Editor,

I read the article by Kundi et al. (1) entitled "Relationship between platelet-to-lymphocyte ratio and the presence and severity of coronary artery ectasia" published in *Anatolian J Cardiol* 2016;16: 857-62. The authors aimed to investigate the relationship between the platelet-to-lymphocyte ratio (PLR) and coronary artery ectasia in the adult population. They found that PLR values in patients with isolated coronary artery ectasia were significantly higher than those in patients with obstructive coronary artery disease and the control group with normal coronary artery angiograms. I have a few comments:

PLR is calculated as the ratio of the platelet to lymphocyte count from the same complete blood count, which is a widely available, automated, inexpensive, and easy-to-do test, and

it can be used as a marker of systemic inflammation in coronary artery disease and cardiovascular events (2). However, the standardized laboratory methods are crucial with regard to PLR analysis. Kundi et al. (1) did not mention from where blood samples were obtained, what kind of sample tubes were used, or when blood samples were analyzed after venipuncture in each patient. First, the platelet count obtained from citrate-anticoagulated blood samples has been reported to be higher than that obtained from EDTA-anticoagulated blood samples (3). Second, EDTA-induced pseudothrombocytopenia due to platelet agglutination because of EDTA-induced alteration of surface glycoproteins and anionic phospholipids is an important issue when using EDTA-anticoagulated samples (4). EDTA-induced pseudothrombocytopenia should be checked by a peripheral blood smear. Because of the factors I have mentioned above, it may be deceptive to make an interpretation based on results of the study by Kundi et al. (1) regarding the relationship between PLR and coronary artery ectasia.

In addition to PLR, the mean platelet volume (MPV) or platelet distribution width (PDW) can be also used as a marker of inflammation, which is obtained from the same blood sample (5). Thus, one can speculate about a relationship among MPV, PDW, and PLR in patients with coronary artery ectasia. Analysis of MPV and PDW also requires methodological consideration, as I have stated previously.

In conclusion, I think that it will be more helpful to design a prospective study considering the methodological details mentioned above to determine the relationship between PLR and coronary artery ectasia.

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**Author's Reply**

To the Editor,

I thank Dr. Gülgün for his/her great interest in our article entitled "Relationship between platelet-to-lymphocyte ratio and the presence and severity of coronary artery ectasia" published in *Anatolian J Cardiol* 2016;16: 857-62 (1). I fully agree with Dr. Gülgün, but as mentioned by Dr. Gülgün, the mean platelet volume (MPV) and platelet distribution width (PDW) values were studied in patients with coronary artery ectasia in previous studies (2). Therefore, we first aimed to investigate the association of the platelet-to-lymphocyte ratio and the presence and severity of coronary artery ectasia. This study was the first to be reported in the literature. I believe that further larger prospective studies including MPV and PDW and considering the methodological details, as mentioned by Dr. Gülgün, should better clarify the relationship between PLR and coronary artery ectasia.

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Sports, energy drinks, and sudden cardiac death: stimulant cardiac syndrome

To the Editor,

Recently, it has been detected that unexplained cardiac arrest in some young individuals developed after consuming

energy drinks, particularly simultaneously with alcohol intake. It is known that several stimulants are included in formulas of different energy drinks. More credible is the argument that energy drinks affect the cardiovascular conduction system and lead to catastrophic events via lethal arrhythmias (1, 2). The aim to achieve higher levels of athletic performance and academic success leads to a gradual increase in consumption in the young population. Although the mood of an individual in the social environment becomes better in a short time after the consumption of these substrates, the claim about increasing athletic and academic performance is not true. Another important subject that has received too little attention is that unscientific promotions by beverage firms, attractive shows in public fields, more advertisements in readable and visible media, and extraordinary sports activities as stimulants for using the energy drinks stimulate consumption by serving as false models.

The main concern is that these beverages could easily lead to severe cardiovascular events in young and older individuals who have underlying silent cardiovascular disease. Because of their high amounts of caffeine and other substrates, dangerous arrhythmias can easily develop in the hearts of individuals who consume them. The problem is that there are many additional sources of caffeine that are "masked" by the labeling (3, 4). Frequent ingredients such as guarana, ginseng, and taurine have caffeine concentrations in different energy beverages that are equal to, or higher than those found in coffee (3, 4). Which doses of any of these substances with or without other artificial supplements or/and alcohol might be mostly dangerous is one of the most important points that remain unknown.

In any case, it seems clear that energy drinks, some beverages, and some supplements that include stimulants might lead to critical and rarely irreversible cardiovascular events in the young population. Judged by these criteria, this should be discussed to a greater extent in scientific meetings, government-related offices of the health ministry, and public environments for controlling of the intake of these products by means such as smoking in the young population.

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