between MPV and AHI and minimum  $O_2$  saturation. Nena et al. (3) studied 610 non-diabetic subjects with suspected OSA. MPV (12.1 femtoliters) was significantly higher in patients with severe OSA defined by an AHI greater than 30 events per hour than in controls (9.8 femtoliters). They found significant correlations between MPV and AHI and between MPV and the percent of time the  $O_2$  saturations were below 90%. This study suggested that there are significant correlations between MPV and important variables in patients with severe OSA. Varol et al. (4) studied 31 patients with severe OSA and measured MPV before and after treatment with CPAP for 6 months. The median MPV was significantly higher in patients with severe OSA than in control subjects, and there was a significant reduction in this volume after 6 months of CPAP therapy.

In our view, MPV is an easily available laboratory test that may identify patients with an increased risk for cardiovascular events and may represent a response parameter to monitor during treatment of these patients. It seems important to develop large prospective studies on its utility in patients with OSA.

### Marcella Rivas, Atul Ratra, Kenneth Nugent Department of Internal Medicine, Texas Tech University health Sciences Center, Lubbock-TX-*USA*

# References

- Rivas M, Ratra A, Nugent K. Obstructive sleep apnea and its effects on cardiovascular diseases: a narrative review. Anatol J Cardiol 2015; 15: 944-50. [CrossRef]
- Karakaş MS, Altekin RE, Baktır AO, Küçük M, Cilli A, Yalçınkaya S. Association between mean platelet volume and severity of disease in patients with obstructive sleep apnea syndrome without risk factors for cardiovascular disease. Turk Kardiyol Dern Ars 2013; 41: 14-20.
- Nena E, Papanas N, Steiropoulos P, Zikidou P, Zarogoulidis P, Pita E, et al. Mean platelet volume and platelet distribution width in nondiabetic subjects with obstructive sleep apnoea syndrome: new indices of severity? Platelets 2012; 23: 447-54. [CrossRef]
- Varol E, Öztürk O, Yücel H, Gonca T, Has M, Doğan A, et al. The effects of continuous positive airway pressure therapy on mean platelet volume in patients with obstructive sleep apnea. Platelets 2011; 22: 552-6. [CrossRef]

Address for Correspondence: Kenneth Nugent, MD 3601 4<sup>th</sup> Street, Lubbock, TX 79430-*USA* E-mail: kenneth.nugent@ttuhsc.edu

# The role of platelet-lymphocyte ratio in the severity of coronary artery disease assessed by the angiographic Gensini score

## To the Editor,

I am grateful to have read with great interest the article entitled "The association between platelet-lymphocyte ratio and coronary artery disease severity" by Yüksel et al. (1), published in Anatol J Cardiol 2015; 15: 640-7. In this well-presented study, the authors aimed that the platelet-lymphocyte ratio (PLR) was associated with the severity of coronary artery disease, assessed by the Gensini score, because a high PLR was shown to be closely related with inflammation and atherosclerosis. They found that a high PLR was significantly and independently related with the severity of coronary artery disease.

Prior studies investigated that PLR, a combination of both platelet and lymphocyte counts, is a novel inflammatory marker and predictor of adverse cardiovascular outcomes (2–6). Yüksel et al. (1) showed that PLR was significantly higher in the group of severe atherosclerosis than in the other control and mild atherosclerosis groups. As known, the mild atherosclerosis group has a more severe inflammation than the control group; however, there was no difference between the mild atherosclerosis and control groups (p=0.729).

In conclusion, according to these results, it was not clear to highlight the pathogenesis role of PLR in the severity of coronary artery disease. According to me, further larger studies are needed to show and clarify this situation.

#### Harun Kundi

Department of Cardiology, Ankara Numune Education and Research Hospital, Ankara-*Turkey* 

## References

- Yüksel M, Yıldız A, Oylumlu M, Akyüz A, Aydın M, Kaya H, et al. The association between platelet/lymphocyte ratio and coronary artery disease severity. Anatol J Cardiol 2015; 15: 640-7. [CrossRef]
- Kundi H, Balun A, Çiçekçioğlu H, Çetin M, Kızıltunç E, Çetin ZG, et al. The relation between platelet-to-lymphocyte ratio and Pulmonary Embolism Severity Index in acute pulmonary embolism. Heart Lung 2015; 44: 340-3. [CrossRef]
- Kundi H, Balun A, Çiçekcioğlu H, Çetin M, Kızıltunç E, Çetin ZG, et al. Association between platelet to lymphocyte ratio and saphenous vein graft disease in patients with stable angina pectoris. Anatol J Cardiol 2015 May 5. Epub ahead of print.
- 4. Kurtul A, Murat SN, Yarlioglues M, Duran M, Ergun G, Açıkgöz SK, et al. Association of platelet-to-lymphocyte ratio with severity and complexity of coronary artery disease in patients with acute coronary syndromes. Am J Cardiol 2014; 114: 972-8. [CrossRef]
- Azab B, Shah N, Akerman M, McGinn JT Jr. Value of platelet/ lymphocyte ratio as a predictor of all-cause mortality after non-ST-elevation myocardial infarction. J Thromb Thrombolys 2012; 34: 326-34. [CrossRef]
- Açar G, Kalkan ME, Avcı A, Alizade E, Tabakçı MM, Toprak C, et al. The relation of platelet–lymphocyte ratio and coronary collateral circulation in patients with stable angina pectoris and chronic total occlusion. Clin Appl Thromb Hemost 2015; 21: 462-8. [CrossRef]

Address for Correspondence: Dr. Harun Kundi Ankara Numune Eğitim ve Araştırma Hastanesi Kardiyoloji Bölümü, Ankara-*Türkiye* E-mail: harunkundi@hotmail.com

©Copyright 2016 by Turkish Society of Cardiology - Available online at www.anatoljcardiol.com DOI:10.14744/AnatolJCardiol.2016.6996