

Mean platelet volume is a useful indicator of systemic inflammation in cirrhotic patients with ascitic fluid infection

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THE AUTHORS REPLAY

Dear Editor

We would like to thank to Dr. Tanoglu and Karagoz for their interest to our article.¹ In their letter, the authors pointed out some concerns regarding our methodology that needs to be clarified.

First of all, Drs. Tanoglu and Karagoz mentions that autoimmune disorders, hepatitis B and C viruses may affect mean platelet volume (MPV) levels and suggests to describe the cirrhotic patients in greater details in terms of viral etiology, autoimmune hepatitis associated cirrhosis and also primary biliary cirrhosis. Although we agree with the authors that MPV levels can be affected by the etiology of the liver disorder, it must be noted that this alterations are mainly related to the severity of the hepatic fibrosis.^{2,3} In a study by Qi, *et al.*⁴ it has been shown that MPV levels are significantly elevated in cirrhotic patients compared with healthy controls and non-cirrhotic patients. Moreover Purnak, *et al.*² demonstrated that MPV levels are increased in chronic hepatitis C patients especially that developed advanced fibrosis. According to this data, we are thinking that classifying cirrhotic patients according to their fibrosis levels is suitable from classifying them according to cirrhosis etiology.

Secondly, Drs. Tanoglu and Karagoz also mentions that thrombocytopenia and anemia may have influence on MPV levels. We also agree with them, but we must highlight that abnormalities in hematological indices are frequently encountered in cirro-

sis.⁵ For this reason it is practically impossible to exclude this patients in a study consisting patients with cirrhosis. Being aware of this fact, in cirrhotic patients subgroup analysis was done between patients having ascitic fluid infection (AFI) and patients without AFI.

Finally, renal dysfunction and concomitant drug use can also affect MPV levels as mentioned by Drs. Tanoglu and Karagoz. However, as provided in the methodology section of our study, none of the study participants have received any drugs that can affect MPV levels and had a history of comorbid illnesses.

CONFLICT OF INTEREST

Authors declare no conflict of interest related to this article.

REFERENCES

1. Suvak B, Torun S, Yildiz H, Sayilir A, Yesil Y, Tas A, Beyazit Y, et al. Mean platelet volume is a useful indicator of systemic inflammation in cirrhotic patients with ascitic fluid infection. *Ann Hepatol* 2013; 12: 294-300.
2. Purnak T, Olmez S, Torun S, Efe C, Sayilir A, Ozaslan E, et al. Mean platelet volume is increased in chronic hepatitis C patients with advanced fibrosis. *Clin Res Hepatol Gastroenterol* 2013; 37: 41-6.
3. Ekiz F, Yüksel O, Koçak E, Yılmaz B, Altınbaş A, Çoban S, et al. Mean platelet volume as a fibrosis marker in patients with chronic hepatitis B. *J Clin Lab Anal* 2011; 25: 162-5.
4. Qi XT, Wan F, Lou Y, Ye B, Wu D. The mean platelet volume is a potential biomarker for cirrhosis in chronic hepatitis B virus infected patients. *Hepatology* 2014; 61: 456-9.
5. Qamar AA, Grace ND. Abnormal hematological indices in cirrhosis. *Can J Gastroenterol* 2009; 23: 441-5.