Annals of Hepatology

LETTER TO EDITOR

September-October, Vol. 13 No. 5, 2014: 572

Mean platelet volume: a useful predictor of ascitic fluid infection in cirrhotic patients?

Alpaslan Tanoglu,* Ergenekon Karagöz**

*Department of Gastroenterology, **Department of Infectious Diseases and Clinical Microbiology. GATA Haydarpasa Training Hospital, Istanbul, Turkey.

Dear Editor

We read with great interest the article 'Mean Platelet Volume is a useful indicator of systemic inflammation in cirrhotic patients with ascitic fluid infection' by Suvak, $et\ al.^1$

The authors concluded that MPV is increased in cirrhotic patients with ascitic fluid infection (AFI) and MPV may be a predictive test in predicting AFI. We would like to thank the authors for their valuable contributions. MPV depicts the size of platelets and is used as a promising marker of platelet activation and function.² MPV is a novel inflammation marker and it also predicts the intensity of inflammation.3 In previous studies it was demonstrated that autoimmune disorders, hepatitis B and C viruses may affect MPV levels. 3,4 Thus, it would have been more relevant if the authors described the cirrhotic patients in greater detail in terms of hepatitis B and/or C related or autoimmune hepatitis associated cirrhosis and also primary biliary cirrhosis. Moreover, thrombocytopenia and anemia may easily influence MPV levels.

So, it would have been useful if the patients with severe thrombocytopenia and deep anemia were excluded from the study.⁴ On the other hand, it has been shown that renal failure can easily affect MPV levels.⁵ Renal dysfunction is a common and life threatening problem in patients with advanced liver disease and in patients with cirrhosis specific functional form of renal failure known as hepatorenal

Correspondence and reprint request: Alpaslan Tanoglu, M.D., Gastroenterologist.

GATA Haydarpasa Training Hospital. Department of Gastroenterology. 34668, Uskudar/Istanbul-Turkey.

Ph.:+90 216 5422020. Fax: +90 216 5422007 E-mail: alpaslantanoglu@yahoo.com

> Manuscript received: April 08, 2014. Manuscript accepted: May 21, 2014.

syndrome (HRS). Thus, it would also have been better if the authors depicted the cirrhotic patients in terms of HRS. Medication may also alter MPV in patients with ascitic fluid infection, so it would have been useful if the patients were described, besides exclusion criteria, in a detailed manner in terms of diuretic use, steroid use and/or use of other immunsupressive agents.^{3,6}

We think to be true that the findings of Suvak, *et al.* will lead to further studies regarding the relationship between MPV and cirrhotic patients with ascitic fluid infection.¹

Anyway, it should be kept in mind that MPV alone without other variables as mentioned above may not predict the ascitic fluid infection in patient with cirrhosis.

CONFLICT OF INTEREST

None.

REFERENCES

- 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.
- Gasparyan AY, Ayvazyan L, Mikhailidis DP, Kitas GD. Mean Platelet Volume: A link between Thrombosis and Inflammation? Curr Pharm Des 2011; 17: 47-58.
- 3. Karagöz E, Tanoglu A. Mean platelet volume: an emerging diagnostic factor of recurrent aphthous stomatitis and behoet disease. *Angiology* 2014; 65: 326.
- Ceylan B, Mete B, Fincanci M, Aslan T, Akkoyunlu Y, Ozguneş N, Colak O, et al. A new model using platelet indices to predict liver fibrosis in patients with chronic hepatitis B infection. Wien Klin Wochenschr 2013; 125: 453-60.
- Yavuz S, Ece A. Mean platelet volume as an indicator of disease activity in juvenile SLE. Clin Rheumatol 2014 [Epub ahead of print].
- Cho SY, Jeon YL, Kim W, Kim WS, Lee HJ, Lee WI, Park TS. Mean platelet volume and mean platelet volume/platelet count ratio in infective endocarditis. *Platelets* 2013 [Epub ahead of print].