



# Non-Invasive Evaluation of Liver Fibrosis by Using Real Time Elastography

Coskun Ozturker<sup>1</sup>, Ergenekon Karagoz<sup>2</sup>, Güner Sonmez<sup>1</sup>

## Dear Editor;

In a recent issue of the *European Journal of General Medicine* we have read the article by Uslu et al with great interest (1). We would like to thank the authors for their comprehensive contribution. However, we would like to report few concerns regarding this study from a methodological point of view. First, it would have been more relevant if the sample size of CHB patients was larger. Second, the usefulness of elastographic methods in abdominal imaging was demonstrated in many trials. In these trials, although the elastic properties of the tissue were mentioned, the lack of analyses of tissue viscosity may cause false results in the estimation of elasticity (2,3). In this point of view, it would be useful if the authors evaluated the cases according to the viscosity parameters.

Third, it was described in the study that the METAVIR scoring system for chronic hepatitis was used to assess the fibrosis stage and the liver specimens were fixed in formalin, embedded in parafin, and stained with hematoxylin and eosin (1). It would have been relevant if the authors had mentioned the length of the biopsy material and the number of the pieces of the portal tracts. It is crucial to state that it has been demonstrated that liver has a heterogeneous fibrotic distribution. Additionally, if the biopsy material is not long enough, appropriate evaluation cannot be done.

A length of at least 25 mm is required to assess the fibrosis score accurately (4). It was demonstrated that 65% of biopsies 15 mm in length were categorized correctly according to the reference value while its sensitivity increased to 75% for a 25-mm liver biopsy specimen without any substantial benefit for longer biopsy specimens (4). Additionally, this sensitivity decreased to 60% when the length of the biopsy specimen is under 10 mm (4).

We are of the opinion that further studies are required to unify the role of transient elastography in the management of chronic hepatitis.

## REFERENCES

1. Uslu A, Batur A, Biyik M, Acikgozozlu S. Non-Invasive Evaluation of Liver Fibrosis Using Real-Time Elastography and Comparison of Intercostal and Subcostal Approaches. *Eur J Gen Med* 2015;12(2):109-113
2. Scola MR, Baggesen LM, Gallippi CM. Multi-push (MP) acoustic radiation force (ARF) ultrasound for assessing tissue viscoelasticity, in vivo. *Conf Proc IEEE Eng Med Biol Soc* 2012;2012:2323-2326.
3. Joo SK, Kim JH, Oh S, et al. Prospective Comparison of Noninvasive Fibrosis Assessment to Predict Advanced Fibrosis or Cirrhosis in Asian Patients With Hepatitis C. *J Clin Gastroenterol* 2015;49(8):697-704
4. Bedossa P, Dargere D, Paradis V. Sampling variability of liver fibrosis in chronic hepatitis C. *Hepatology* 2003; 38(6): 1449-1457.

GATA Haydarpaşa Training Hospital Departments of Radiology<sup>1</sup> and Infectious Diseases<sup>2</sup>, Istanbul, Turkey

Received: 20.08.2015, Accepted: 12.10.2015

Correspondence: Dr. Ergenekon Karagoz,  
Department of Infectious Diseases and Clinical Microbiology,  
Gulhane Military Medical Academy, Haydarpaşa Training Hospital,  
34668, Uskudar-Istanbul, Turkey  
Phone: +90 5071425910  
E-mail: ergenekonkaragoz@hotmail.com