ABDOMINAL IMAGING

Iran J Radiol. 2015 January; 12(1): e17078. DOI: 10.5812/iranjradiol.17078

Published online 2015 January 18. **Letter**

# Liver Biopsy Versus Non-Invasive Tests in Determining Liver Disease Status

Seyed Moayed Alavian [1,*]

[1]Baqiyatallah Research Center for Gastroenterology and Liver Diseases, Baqiyatallah University of Medical Sciences, Tehran, Iran

[*]*Corresponding author*: Seyed Moayed Alavian, Baqiyatallah Research Center for Gastroenterology and Liver Diseases, Baqiyatallah University of Medical Sciences, Tehran, Iran. Tel/Fax:+98-2188945186, E-mail: alavian@thc.ir

**Received:** December 22, 2013; **Accepted:** January 20, 2014

*Keywords:* Liver; Biopsy; Pathology

## *Dear Editor,*

I read with interest the article by Cakmakci et al. published in your journal recently (1). Although liver biopsy has been considered as the "gold standard" for defining liver disease status, and evaluating the progress of the disease, it is a risky procedure and there are a few limitations that affect the clinical acceptance of the process (2). Risk of bleeding due to invasiveness of the procedure is one of the factors that affects both patient and clinician tendency to the procedure (3). I agree with the authors that liver biopsy guided by ultrasonography is a safe procedure with a lower complication rate, it obtains sufficient liver specimen, and subsequently increases the probability of definitive pathological diagnosis. However, sampling error and inter-observer variability have raised questions on the value of liver biopsy in defining the status of liver disease (4). Thus, alternative noninvasive methods have been evaluated to obtain information on the extent of fibrosis by focusing on noninvasive blood marker indicators (4). Inter-observer and intra-observer reliabilities are other limitations in the pathological evaluation of liver biopsies. Some researchers have shown that in the evaluation of liver samples from chronic viral hepatitis, the level of experience of the pathologist in terms of specialization, duration, and location of practice has a stronger effect on the agreement compared to the characteristics of the specimen (5).

## References

1. Cakmakci E, Caliskan KC, Tabakci ON, Tahtabasi M, Karpat Z. Percutaneous liver biopsies guided with ultrasonography: a case series. *Iran J Radiol.* 2013;**10**(3):182–4.
2. Tarantino G. Is Assessing the Presence of NASH by Liver Histology or Surrogate Markers Always Advisable? *Hepat Mon.* 2013;**13**(2).
3. Castera L. Non-invasive assessment of liver fibrosis in chronic hepatitis C. *Hepatol Int.* 2011;**5**(2):625–34.
4. Khairy M, Abdel-Rahman M, El-Raziky M, El-Akel W, Zayed N, Khatab H, et al. Non-invasive prediction of hepatic fibrosis in patients with chronic HCV based on the routine pre-treatment workup. *Hepat Mon.* 2012;**12**(11).
5. Rousselet MC, Michalak S, Dupre F, Croue A, Bedossa P, Saint-Andre JP, et al. Sources of variability in histological scoring of chronic viral hepatitis. *Hepatology.* 2005;**41**(2):257–64.