Which One Should Be Preferred: Liver Biopsy or Non-Invasive Procedures?

Hangisi Tercih Edilmelidir: Karaciğer Biyopsisi mi Non-İnvazif Testler mi?

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In this recent issue of Journal of Viral Hepatitis, Karacaer et al. (1) aimed to evaluate the percutaneous liver biopsy safety. Liver biopsy has currently some major roles that are diagnosis, assessment of prognosis (especially staging of parenchymal liver diseases) and deciding of therapy. It is seen as the gold standard according to current clinical practice. Because of its some restrictive and limiting features and some complications, several non-invasive methods have been developed (2).

Percutaneous liver biopsy has a risk of complication and mortality; 1-5%, 0.009-0.01% respectively. In addition, the other disadvantages are sampling error, at least 6-24 hours of monitoring in hospital, difficulties in follow-up treatment, and high cost. Karacaer et al. (1) found that 71% of patients had complaints (mostly pain) and 19.9% developed complications but no mortality occurred at this multicenter study. They noted that biopsy methodology and patient-specific factors are not related with the post biopsy pain but biopsy needle type and physician-specific factors.

Prebiopsy and peribiopsy patient preparations are very important for prevention of some complications during percutaneous liver biopsy. The patient should be informed about this procedure’s details. Cooperation of patient is important issue for successful procedure. The major complications are pain and bleeding. After biopsy, patient should be monitored closely.

Non-invasive procedures are also recommended as an alternative to liver biopsy for the purpose of determining the severity of liver disease and deciding for treatment in chronic viral hepatitis. According to the last European Association for the Study of the Liver guideline, evaluation of liver disease severity is the mainstay of the therapy indication (3). As liver biopsy which demonstrates only 1/50,000 of liver parenchyma and the evaluation may be varied according to the pathologist’s eye, the strength of the histopathologic assessment of disease severity may not be perfect. Moreover, it may be necessary to repeat the procedure for monitoring the response of the treatment. There are many non-invasive diagnostic methods. Although the sensitivity, specificity and diagnostic accuracy rates of these methods are quite high, liver biopsy is still gold standart for assessment of liver disease severity. However, the combination of non-invasive tests enhances the sensitivity of these tests (4). Therefore, their use may reduce the need for biopsy which has several complications.

References