

## A multicentre study of the usefulness of liver biopsy in hepatitis C

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The role of liver biopsy in the assessment of chronic hepatitis C is generally accepted yet there is no prospective data available to quantify its contribution. A previous single centre pilot study suggested that the clinician could predict the amount of fibrosis and to a lesser extent, inflammation with moderate accuracy. The 2002 National Institute of Health Hepatitis C Consensus Conference recommended further study of the role of liver biopsy. Our objective was to compare a prediction of biopsy findings by expert clinicians using usually available clinical and laboratory data to actual biopsy results in order to determine whether biopsy is required routinely. This was a prospective observational study conducted at seven university centres in which the accuracy of clinician's predictions of the degree of inflammation and fibrosis were compared with the actual liver

biopsy using an adaptation of a standard histological scoring system. We studied 81 adults with previously untreated chronic hepatitis C, raised serum transaminases and positive HCV-RNA in serum. Clinicians predicted the inflammatory grade in 44 of 80 cases (55%) and the fibrosis stage in 46 of 81 cases (57%). Nine of 17 cirrhotic cases were predicted (sensitivity 53%, specificity 56%). No unexpected additional diagnoses were made on the biopsies. Thus despite knowledge of the clinical and laboratory investigations of patients with hepatitis C, clinicians are unable to accurately predict the hepatic inflammatory grade and fibrotic stage. Liver biopsy is an essential investigation to accurately evaluate the grade and stage of liver disease patients with hepatitis C.

## Hepatitis Monthly Editorial Board Comment

### Liver Biopsy is not necessary but helpful sometimes

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We read with great interest the article by Bain et al (J viral Hepat 2004, 11, 375-382) about usefulness of liver biopsy in hepatitis C. We agree with the author on the superiority of liver biopsy in assessing the degree of liver damage and predicting the outcome. Nonetheless, looking more practically and legally to the issue arises some other ideas as well. Recent advances in the treatment of HCV showed that identification of viral genotype is an important pretreatment evaluation which can influence the duration and dose of ribavirin in combination therapy. Patients with genotype 2 or 3 and low viral load ( $\leq 2 \times 10^6$  copy/ml) can achieve a sustained virologic response rate (SVR) as high as 80% by 24 week treatment with Peginterferon plus Ribavirin.<sup>1</sup> Consequently in this subset of patients pretreatment liver biopsy will not affect one's treatment decision or disease outcome and can be postponed except for those who do not achieve an SVR with the above treatment. So performing a pretreatment liver biopsy in this subgroup of patients may have legal questions? Another controversy about pretreatment liver biopsy is in patients with normal serum ALT. Such cases may constitute up to 40% of all those with HCV infection<sup>2</sup>. Most of these patients have histologically mild disease, but up to 20% of them may progress to advanced fibrosis and cirrhosis<sup>3</sup>. According to recent consensus conference, finding advanced fibrosis in a patient with normal ALT ( $\geq F2$ , METAVIR) is a definite indication for treatment, so performing a pretreatment liver biopsy in these patients may be helpful.<sup>4</sup> We believe that liver biopsy is helpful in some patients, but not necessary in other cases.

# REFERENCES

1. Hadziyannis et al, Peginterferon- $\alpha$  2a and Ribavirin Combination Therapy in Chronic Hepatitis C , *Ann Intern Med*, Mar 2004; 140: 346 - 355.
2. Gholson CF, Morgan K, Catinis G, et al. Chronic hepatitis C with normal aminotransferase levels. A clinical histologic study. *Am J Gastroenterol* 1997; 92:1788 –91.
3. Russo MW, Brown R.S. Patients with Chronic Hepatitis C who have normal ALT: a role of Interferon-based therapy. *Current Hepatitis Repoet*, volum 2, no 1, Feb 2003
4. Treatment of hepatitis C. The 2002 French consensus. *Gut* 2003;52:1784–1787