

## Hepatology Highlights

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### Is pre-treatment liver biopsy necessary for all hepatitis C genotypes?

**Peltekian KM, et al.**<sup>1</sup> In this study authors retrospectively compared the sustained viral response (SVR) in 985 treatment-naïve patients with hepatitis C who did or did not undergo liver biopsy before starting peginterferon alfa-2a plus ribavirin. The results showed that physicians elected to treat 141/654 (21.6%) genotype-1 patients and 126/331 (38.1%) genotype-2/3 patients without liver biopsy. SVR rate was no different amongst genotype-2/3 patients who had a biopsy before treatment with 66.3% SVR vs. 69.8% of those treated without biopsy ( $p = 0.546$ ), but significantly higher among genotype-1 patients with pre-treatment liver biopsy at 54.6 vs. 44.0% for those treated without a liver biopsy ( $p = 0.029$ ). Authors concluded that pre-treatment liver biopsy was associated with better SVR amongst genotype-1 patients. In genotype-2/3 patients, pre-treatment liver biopsy may not be essential to maximize SVR rates.

This is an interesting study and it has some strength, because it has a large number of patients and is a multicenter study. The authors point out the importance of liver biopsy in the SVR amongst genotype-1 patients. Also it confirms that in genotype-2/3 patients, pre-treatment liver biopsy may not be essential to maximize SVR rates. Three comments are mandatory on this study. First, the current practice guidelines from the AASLD,<sup>2</sup> EASL,<sup>3</sup> CASL<sup>4</sup> and LASLD<sup>5</sup> guidelines recommend the use of liver biopsy prior to treatment of hepatitis C genotype-1 but not for genotype-2/3. Also it has been suggested that there are three primary reasons for performing a liver biopsy: it provides helpful information on the current

status of the liver injury, it identifies features useful in the decision to embark on therapy, and it may reveal advanced fibrosis or cirrhosis that necessitates surveillance for hepatocellular carcinoma (HCC) and/or screening for varices.<sup>1</sup>

Furthermore, the practice guidelines also suggest that treatment should be initiated in patients with advanced fibrosis (METAVIR score F3-F4), and strongly considered in patients with moderate fibrosis (F2). Interestingly in the present study the mayor percentage (64.7 vs. 35.3%) undergo liver biopsy before starting treatment had moderate fibrosis. Secondly, the authors of the present study did not describe in detail what kind of biopsy was performed in each centre. However, it is important to mention that although the standardized scoring systems have been improved the inter-observer and intraobserver variability, there are still several factors that may significantly influence the diagnostic accuracy of a liver biopsy.<sup>6,7</sup> Thirdly, it could be interesting if authors are able to determine IL28B polymorphisms in order to define the role of liver biopsy in their results.

### REFERENCES

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### Is gallbladder cancer decreasing in view of increasing laparoscopic cholecystectomy?

**My Di Le, et al.**<sup>1</sup> The aim of this was to describe trends in GBC incidence and mortality rates and LC rates. Additionally, authors examined the relationship between GBC and LC rates. The authors found that GBC incidence and mortality rate have declined. Women and older age groups continue to have the highest risk for GBC, despite having greater declines. Incidence significantly decreased among whites, but did not among blacks. The number of inpatient LC procedures increased by 15% between 1994 and 2008; however, inpatient and outpatient LC rates remained stable. LC rate was not significantly correlated with either GBC incidence or mortality. The authors concluded that there is a decline in incidence and mortality of GBC began decades before the introduction of LC and apparently has stabilized in the past decade. No temporal relationship existed between LC rate and the incidence and mortality rates of GBC.

This is an interesting study that deserves some comments. Firstly, it is known that in the United States GBC is more frequent in among American Indians and Hispanics.<sup>2</sup> Also the highest prevalence of the main risk factor (gallstone disease) for GBC is in Hispanics.<sup>3</sup> However, in the present study the Hispanics were not included in the analysis. Secondly, the results of the present study does not add nothing new in this field. But interestingly the authors found an increase in LC procedures in the groups of inpatients and outpatients respectively. Although, this increase was not statistically significant. In this regard is important to mention that cholecystectomy has been implicated as a predisposing factor for the development of abdominal cancer, especially colorectal.<sup>4</sup> Finally, a very recent study found an association of gallstone disease with overall, cardiovascular disease, and cancer mortality in a large, national, population based, prospective study.<sup>5</sup> Those interesting observations are supported by several studies one of them carried-out in the UK general population, where ischemic heart disease was associated with a 30% higher odds of symptomatic gallbladder disease after adjustment for poten-

tial confounders.<sup>6</sup> Also the results of our cross-sectional study shown 3 times the odds of cardiovascular disease in subjects with gallstones.<sup>7</sup> Finally and independent association between gallstones and coronary heart disease was demonstrated prospectively in the Framingham Study.<sup>8</sup> In conclusion although the mortality rates of GBC in the United States have decreased. Other types of cancer are related with gallstones and cholecystectomy and need to be explored.

### ABBREVIATIONS

- HCV: Hepatitis C virus.
- SVR: Sustained virological response.
- AASLD: American Association for the Study of Liver Diseases.
- EASL: European Association for the Study of the Liver.
- CASL: Canadian Association for the Study of the Liver.
- LASL: Latin American Association for Study of the Liver.

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