



Published in final edited form as:

*Gastroenterology*. 2016 January ; 150(1): 283–284. doi:10.1053/j.gastro.2015.09.050.

## High False-Negative Rate for Nonalcoholic Steatohepatitis in Extreme Obesity

**GLENN S. GERHARD,**

Temple University School of Medicine, Philadelphia, Pennsylvania

**CHRISTOPHER D. STILL,** and

Geisinger Obesity Institute, Danville, Pennsylvania

**JOHANNA K. DISTEFANO**

Translational Genomics Research Institute, Phoenix, Arizona

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### Dear Editor

The article by Lassailly et al<sup>1</sup> reported on 1540 patients who had undergone a bariatric surgery procedure that included 1489 cases in whom intraoperative liver biopsies were obtained. Surprisingly, histologic nonalcoholic steatohepatitis (NASH) was diagnosed in only 115 of the 1489 cases (7.7%). In the Discussion, this unusually low rate of disease is given only sparse attention. In addressing limitations of the study the authors state that, “the prevalence of NASH was lower than in other studies, but this could be explained by the absence of any selection of enrolled patients among surgical candidates.” This is not an adequate explanation for results that are significantly discrepant from other published studies of liver biopsy data from patients with extreme obesity undergoing bariatric surgery procedures. A review<sup>2</sup> of such studies found the prevalence of nonalcoholic fatty liver disease (NAFLD) and NASH averaged 90% and 37%, respectively, consistent with our own recent data.<sup>3</sup> Rather than an absence of selection criteria as an underlying cause, the results presented are more likely highly biased owing to a lack of representative sampling from an extremely high false-negative detection rate, that is, many individuals from a cohort with extreme obesity expected to manifest NASH were excluded. We believe that sampling error from the use of needle biopsies versus the much larger size of wedge biopsies commonly used in other studies contributes to the disparity in the NASH prevalence reported. Wedge biopsies have consistently been shown to be superior to needle biopsies for assessment of liver histology primarily because substantially more tissue is obtained for evaluation.<sup>4,5</sup>

In addition, the lack of correction for multiple comparisons is highly problematic and further weakens the analysis. These factors render the conclusions drawn from the data uncertain and in need of replication.

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#### Conflicts of interest

The authors disclose no conflicts.

## References

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