



Author Reply—Bariatric Surgery and Liver Function Tests in Nonalcoholic Fatty Liver Disease

Geraldine J. Ooi^{1,2} · Paul R. Burton^{1,2} · William W. Kemp³ · Stuart K. Roberts³ · Wendy A. Brown^{1,2}

Published online: 15 January 2017
© Springer Science+Business Media New York 2017

Dear Editor,

We thank the authors for their letter, which highlights the important issue of the high prevalence of viral hepatitis within East Asia and the common coexistence of this condition with nonalcoholic fatty liver disease (NAFLD) within this population [1]. We agree with the authors that obesity is less of an issue in East Asia, and that NAFLD in East Asia may occur in “lean” subjects. However, it is important to note that the prevalence of overweight and obesity has nearly trebled in adults from China in the last three decades [2]. Moreover, the definition of obesity in Asia has now been proposed to be a body mass index $>25 \text{ kg/m}^2$. This is considerably lower than that used in Western countries and is due to the higher risks of developing features of the metabolic syndrome associated with overweight and obesity in Asia, at lower weight thresholds [2].

In our study, we observed rapid improvements in NAFLD with modest weight loss in the obese [3]. This study population, and general demographics in Australia, more accurately reflects those of Western countries and of European descent. Furthermore, consistent with many current publications in NAFLD, we have excluded participants based on positive viral hepatitis status. We agree that these findings may not be applicable to a mixed etiology cohort, as this is often seen in the Asian setting. Interpretation of ALT may indeed be more challenging in this scenario.

Further research into the effects of weight loss on NAFLD in the setting of concurrent viral hepatitis, particularly in subjects from Asia, is an area of research that is of great importance given the large population affected from Eastern countries.

Compliance with Ethical Standards

Disclosures GO, PB, and WB report being affiliated with the Centre for Obesity Research and Education. The Centre has received funding for research purposes from Allergan and Apollo Endosurgery, the manufacturers of the LapBand™. The grant is not tied to any specific research project, and neither Allergan nor Apollo Endosurgery had any control of any aspects of the study. The Centre also receives a grant from Applied Medical towards educational programs.

Financial Support WB reports financial support for a bariatric surgery registry from the Commonwealth of Australia, Apollo Endosurgery, Covidien, Johnson and Johnson, Gore and Applied Medical, and a speaker’s honorarium from Merck Sharpe and Dohme. These are outside of the submitted work.

GO reports scholarships from the National Health and Medical Research Council and the Royal Australasian College of Surgeons.

Conflict of Interest The authors declare that they have no conflict of interest.

✉ Geraldine J. Ooi
geraldine.ooi@monash.edu

¹ Centre for Obesity Research and Education, Monash University, 99 Commercial Road, Prahran, Melbourne 3181, Australia

² Department of Surgery, The Alfred Hospital, Melbourne, Australia

³ Department of Gastroenterology, The Alfred Hospital, Melbourne, Australia

References

1. Seto WK, Yuen MF. Nonalcoholic fatty liver disease in Asia: emerging perspectives. *J Gastroenterol* 2016
2. Cheong WS. Overweight and obesity in Asia. Underwriting focus (Gen Re), Edition2/2014
3. Ooi GJ, Burton PR, Doyle L, et al.. Effects of bariatric surgery on liver function tests in patients with nonalcoholic fatty liver disease. *Obes Surg* 2016