Prevalence of nonalcoholic steatohepatitis (NASH) in morbidly obese Japanese patients who underwent bariatric surgery

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Background:

Non-alcoholic fatty liver disease (NAFLD) is increasingly being recognized to occur more commonly in the obese with a clinicopathologic entity that extends beyond uncomplicated steatosis to steatohepatitis (NASH), advanced fibrosis, liver failure and hepatocellular carcinoma. In our previous report, we showed that racial difference between Japanese and Western people in terms of NAFLD and related liver dysfunction. There are few reports investigating the prevalence of NASH in morbidly obese Japanese.

Methods:

Twenty-eight consecutive morbidly obese Japanese who underwent bariatric surgery in Yotsuya Medical Cube from October 2009 to July 2010 were enrolled. There were 16 females and 12 males (mean age: 40.3 ± 11.2). Mean pre-operative weight was 114.4 ± 22.3 kg and mean BMI was 41.9 ± 6.9 kg/m2. A trucut liver biopsy was performed from left lobe of the liver at the time of surgery and analysed by a single pathologist. The liver biopsies were assessed by applying histopathological criteria that are accepted in the pathology literature.

Results:

Eighty-nine percent (25 in 28) of the patients undergoing bariatric surgery were found to have steatosis. And 71.4% (20 in 28) were found to have NASH. One patient was found to have established cirrhosis.

Conclusion:

Hepatic steatosis was very prevalent in our cohort of patients presenting for bariatric surgery. The prevalence of NASH was much higher in Japanese morbidly obese patients than the reported prevalence of NASH in Western individuals. These findings support that Asian are more prone to central obesity and, thus, have increased risk for obesity-related comorbidities.