Spotlight

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Hepatocellular Carcinoma: Skipping Cirrhosis

Ertle *et al*. http://doi.wiley.com/10.1002/ijc.25797

Non-alcoholic fatty liver disease (NAFLD) refers to a spectrum of diseases of the liver ranging from steatosis (fatty infiltration of the liver) to the more serious nonalcoholic steatohepatitis (NASH; inflammation and hepatocyte necrosis). NASH may lead to severe liver scarring and cirrhosis, which comes with its own set of complications, such as hepatocellular carcinoma (HCC). It is the most common cause of elevated liver enzymes in adults in the Western world and its prevalence tracks with increasing body weight. NAFLD is, in fact, regarded as the hepatic manifestation of the metabolic syndrome.

Just as NAFLD, including the more aggressive NASH, has been increasing with the growing epidemic of obesity and diabetes, the incidence of HCC has been steadily rising in the developed word. To pin down any possible connections between the two, Ertle *et al.* recruited 162 adults with HCC, investigated the underlying etiologies and determined the prevalence of metabolic syndrome and related features within each group.

As expected, patients with NAFLD/NASH-associated HCC exhibited a higher prevalence of metabolic features (type 2 diabetes mellitus, hypertension, dyslipidemia, and coronary artery disease) when compared to non-NAFLD/NASH-HCC. Surprisingly, however, almost half of all individuals with NAFLD/NASH-associated HCC lacked any sign of cirrhosis, leading the authors to conclude that NAFLD itself may pose a risk factor for HCC, even in the absence of cirrhosis. The complications of NASH, including HCC, are likely to increase as the current obesity epidemic continues to spread unimpeded.



Etiologies of underlying liver diseases for HCC. HCCs were most commonly associated with chronic viral hepatitis. The second leading cause for HCC was non-alcoholic steatohepatitis (NASH), while only 13% had alcoholic steatohepatitis.