



Non-alcoholic fatty liver and cancer

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I read with interest the comprehensive article by Elhence and Shalimar [1] on non-alcoholic fatty liver disease (NAFLD). The authors mentioned about the higher risk of hepatocellular carcinoma (HCC) even in the NAFLD, and of colorectal cancer. Long-term studies from Sweden have shown that patients of NAFLD are at higher risk of other extrahepatic cancers; in the larger study of 256 patients followed up for a period of 28 years [2], 14 of the 67 deaths recorded (21%) were due to extrahepatic cancers. More recently, a case control study from Mayo Clinic [3] on 4722 patients with NAFLD followed up over 8 years showed a 90% higher relative risk of malignancy (RR 1.9) in this cohort. Not surprisingly, the maximum risk was for HCC (RR 2.8), but increased risk for extrahepatic cancers such as of endometrium (RR 2.3), stomach (RR 2.3), pancreas (RR 2.0), and colon (RR 1.8) was also noted. Surprisingly, the risk of incident cancers was more often associated with NAFLD (RR 2.0) than with obesity per se (RR 1.0), suggesting that ectopic fat in liver in some way contributed to carcinogenesis. The tendency of Asian Indians towards central obesity at lower body mass index (BMI) is well known, and association with metabolic syndrome, NAFLD, and cardiometabolic diseases has been well studied [4]. In a rural population from West Bengal, India [5], central obesity was associated with higher risk of NAFLD (OR 3.6), almost as much that associated with excess weight (BMI > 25) (OR 4.3). With increasing control over the main causes of cancer (tobacco use and infections), the association of can-

cers with NAFLD, delinked from generalized adiposity, is worrisome, and must be accorded research priority in India.

Compliance with ethical standards

Conflict of interest AV declares that there are no competing interests.

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