Liver Cancer Unrelated to Viral Hepatitis Is Rising

From 1992 to 2018, liver cancer cases related to hepatitis C fell in Japan.

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Cases of hepatocellular carcinoma (HCC), the most common type of liver cancer, that are not linked to either hepatitis B or hepatitis C are increasing, and are often associated with metabolic risk factors, according to a study by researchers in Japan. These findings were published in BMC Gastroenterology.

“Metabolic syndrome may be an important risk factor for HCC,” wrote the researchers.

Over time, chronic hepatitis B virus (HBV) or hepatitis C virus (HCV) infection, heavy alcohol use and fatty liver disease can lead to serious liver complications, including cirrhosis and liver cancer.

Hiroshi Aikata, MD, PhD, of Hiroshima University, and colleagues examined incidence rates and characteristics of hepatocellular carcinoma with varying causes. The team recruited 2,171 individuals with HCC between 1992 and 2018 at Hiroshima University Hospital.

Over the study period, high blood pressure, diabetes and hyperlipidemia (elevated cholesterol and other blood lipids) grew more common. These factors, along with abdominal obesity, are associated with non-alcoholic fatty liver disease (NAFLD) and its more severe form, non-alcoholic steatohepatitis (NASH). On the other hand, the FIB-4 index, a marker of liver fibrosis, decreased over the study period.

Liver cancer cases related to HCV and HBV were seen in 59% and 17% of the study population, respectively. Liver cancer unrelated to hepatitis B or C, was identified in 24% of participants. People with HCC not related to viral hepatitis tended to be older.

Over the study period, the proportion of individuals with HCC unrelated to viral hepatitis rose from 27% to 46%. From 2009 to 2018, cases of liver cancer related to HCV fell, while those unrelated to viral hepatitis rose. HCC cases related to HCV decreased from 74% during 1992 to 2000 to 61% during 2001 to 2009 and to 48% during 2010 to 2018. In the same time span, cases of liver cancer unrelated to viral infection rose from 9% to 19% to 36%.

During the study period, 194 participants with HCC unrelated to viral hepatitis underwent surgery

to remove a portion of their liver to treat NASH (15%), alcohol-related liver disease (29%) or cryptogenic hepatitis with an unknown cause (56%). Cirrhosis was more common among people with NASH. Cirrhosis was seen in 72% of individuals with NASH and 39% and 16% of individuals with alcohol-related hepatitis and cryptogenic hepatitis, respectively. Those with cryptogenic hepatitis had a lower FIB-4 index compared to other participants.

“The prevalence of [non-HBV, non-HCV HCC] has increased rapidly even in a regional university hospital,” wrote the researchers. “The FIB-4 index may be a useful screening method for HCC” in patients without hepatitis B or C.

Click here to read the study in BMC Gastroenterology.

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