# Hepatitis D Linked to Higher Liver Cancer Risk

Study emphasizes the need for better liver cancer screening for people with hepatitis B and D coinfection and certain risk factors.

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Delta hepatitis dramatically raises the risk of hepatocellular carcinoma (HCC), the most common type of liver cancer, and certain risk factors predict poor outcomes, according to a study published in the Journal of Viral Hepatitis. The researchers recommend more intensive liver cancer screening for people living with both viruses, especially those with identified risk factors.

Hepatitis D virus (HDV), also known as hepatitis delta, is a defective virus that can only replicate in the presence of hepatitis B virus (HBV). Over time, chronic hepatitis B can cause liver fibrosis, cirrhosis and liver cancer, and people with both HBV and HDV tend to experience more rapid and severe liver disease progression. Although only around 5% of people with hepatitis B also have hepatitis D, according to the World Health Organization, coinfection contributes to a disproportionate share of advanced liver disease and mortality.

Antiviral drugs used to treat hepatitis B, which interfere with the HBV lifecycle, also block HDV replication. There is currently no medication approved specifically for hepatitis D in the United States, though it is sometimes treated with pegylated interferon. One medication, Hepcludex (bulevirtide), was approved in Europe in 2020, but the Food and Drug Administration declined U.S. approval two years later.

Liliana Gheorghe, PhD, of the Carol Davila University of Medicine and Pharmacy in Romania, and colleagues conducted a study to better understand risk factors linked to complications among people with hepatitis D, particularly liver cancer. As part of the study, they evaluated a risk-assessment tool, called the Baseline Event Anticipation (BEA) score, that is used to predict liver-related events within a year of HDV diagnosis.

This retrospective study included all patients admitted with chronic hepatitis D at the Romanian Hepatology Tertiary Care Centre from January 2021 through December 2022. Among the 6,848 people seen at the clinic, 271 adults (just under 4%) tested positive for HDV antibodies, had chronic infection and had a minimum of two admissions to the clinic spaced at least a year apart. Of these, 79 (29%) had hepatocellular carcinoma.

People with HDV who were older when they were first diagnosed with hepatitis B, had higher BEA scores at admission, had higher MELD scores (a measure of disease severity used to allocate liver transplants) and had advanced fibrosis when they started pegylated interferon were more likely to experience HDV-associated complications. On the other hand, people with low BEA scores, normal blood tests and prior pegylated interferon therapy tended to fare better. People with HCC has significantly shorter survival than those without liver cancer.

A BEA score higher than 2 was a warning sign: It successfully predicted liver cancer about 79% of the time, validating it as a potential HCC screening tool. The researchers therefore recommended that people with a BEA score above 2 should receive intensified screening to ensure early HCC diagnosis and prompt access to curative treatment. They also suggested that those with the other negative prognostic factors should undergo more frequent monitoring. HCC monitoring typically involves ultrasound screening and blood tests.

“We advocate for intensified ultrasound and biomarkers monitoring in patients with high MELD scores, a BEA score above 2, advanced fibrosis at initiation of antiviral treatment or older age at HBV diagnosis,” wrote the researchers. “Conversely, those with stable indicators—normal albumin levels, normal platelet count, prior antiviral treatment, BEA A class—should adhere to established local monitoring guidelines.”

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