

Hepatitis B virus associated with pancreatic cancer

Past exposure to the hepatitis B virus (HBV) might be associated with the development of pancreatic cancer, researchers report.

There may also be a chance of the hepatitis B virus being reactivated during chemotherapy, according to researchers.

This is the first study to investigate a link between the hepatitis B virus and pancreatic cancer and was published in the *Journal of Clinical Oncology*. The study's authors found that the prevalence of past exposure to HBV was significantly higher in patients with pancreatic cancer than in healthy controls (7.6% vs 3.2%). However, exposure to hepatitis C (HCV) was not significantly different in the two groups.

Both HBV and HCV are significantly associated with end-stage chronic liver diseases, including hepatocellular carcinoma and cholangiocarcinoma, but hepatitis is also a systemic disease with extrahepatic manifestations. The association between the hepatitis virus and extrahepatic cancers has only been studied in non-Hodgkin's lymphoma to date; other studies have investigated the reactivation of HBV infection in cancer patients undergoing cytotoxic or immunosuppressive therapy.

The pancreas could be another potential target for the hepatitis virus because of its proximity to the liver, and because the two organs share common blood vessels and ducts, the authors write. Studies have found elevated levels of pancreatic enzyme in a substantial percentage of patients with acute or chronic HBV or HCV infection, which supports the possibility that viral hepatitis can lead to pancreatic damage.

Researchers recruited 476 patients with pathologically confirmed adenocarcinoma of the pancreas and 87 matched controls. Blood samples from both groups were tested for the presence of HCV antibodies, HBV surface antigen (HBsAg), antibodies against HBV core antigen (anti-HBc), and antibodies against HBsAg (anti-HBs).

They found that the prevalence of past exposure to HBV, which was indicated by the presence of anti-HBc, was significantly higher among patients with pancreatic cancer than among controls (7.6% vs 3.2%). Past exposure to HBV with evidence of HBV recovery or immunity was also significantly associated with an increased risk for pancreatic cancer, but past exposure without evidence of HBV recovery was associated with an even greater risk.

There was no association between hepatitis C and pancreatic cancer.