

New studies examine elimination of hepatitis B and C

April 1 2009

Two new studies in the April issue of *Hepatology* explore the ways that hepatitis B virus (HBV) and hepatitis C virus (HCV) can be cleared from patients' bodies. *Hepatology* is a journal published by John Wiley & Sons on behalf of the American Association for the Study of Liver Diseases (AASLD).

Both HBV and HCV are global health problems. They can lead to cirrhosis and liver cancer and they cause millions of deaths each year. Treatments to contain or cure these infections have been difficult to find. Researchers continue to explore potential therapies and the immune system response to the diseases.

The first new study sheds light on the immunological response to coinfection with HBV and HCV. Researchers led by Evangelista Sagnelli of Naples, Italy, report that for patients with chronic HCV, HBV superinfection can lead to clearance of the HCV.

They compared 29 HCV patients to 29 people, matched by age, gender and risk factors, who did not have HCV. All of the patients developed acute HBV during the same time period. The patients with HCV were more likely to have a severe course of illness, and one died of liver failure. However, nearly a quarter (six out of 24) emerged HCV-free.

"Extensive acute hepatocellular necrosis, although life-threatening, may lead to a clearance of chronic HCV infection," the authors report. Still, the severity of acute HBV in HCV patients raises "the concern that this

clinical event could become an emerging health care problem in countries with a wide spread of both HBV and HCV infection," they write.

"Further efforts should be made to extend the use of HBV vaccination in patients with chronic HCV infection" they also suggest.

The second study, headed by Maurizia Brunetto of Pisa, Italy, recommends interferon-based therapies as a first-line approach for patients with chronic HBV, because these have the best chance of clearing [hepatitis B](#) virus surface antigen (HBsAg). The reduction of HBsAg serum levels leading to HBsAg clearance is the hallmark of a newly achieved immune control of the infection by mean of a significant reduction of virus infected hepatocytes.

The researchers retrospectively investigated the relationship between treatment regimens and changing levels of HbsAg in 386 patients in a multinational study.

"Significantly more patients treated with peginterferon alfa-2a (21 percent) or peginterferon alfa-2a plus lamivudine (17 percent) achieved HBsAg levels under 100 IU/mL at the end of treatment compared with lamivudine (1 percent)," they report.

"HBsAg clearance represents the best possible and closest to cure outcome of antiviral therapy in patients with chronic hepatitis B, but is realistic almost exclusively among patients receiving interferon-based regimens, which are recommended as a first-line therapeutic approach," they conclude. Interferon therapy switches the chronic active hepatitis B patient in the non-active HBV carrier who lose serum HBsAg during the years after the end of therapy. If the case occurs before the development of liver cirrhosis it endows the patient with the same life expectancy of the non-HBV infected subject.

More information:

Article: "HBV Superinfection in HCV Chronic Carriers, A Disease That Is Frequently Severe But Associated With the Eradication of HCV." Sagnelli, Evangelista; Coppola, Nicola; Pisaturo, Mariantonietta; Masiello, Addolorata; Tonziello, Gilda; Sagnelli, Caterina; Messina, Vincenzo; Filippini, Pietro. [Hepatology](#); April 2009.

Article: "Hepatitis B Virus Surface Antigen Levels—A Guide to Sustained Response to Peginterferon Alfa-2a in HBeAg-negative Chronic Hepatitis B." Brunetto, Maurizia; Moriconi, Francesco; Bonino, Ferruccio; Lau, George; Farci, Patrizia; Yurdaydin, Cihan; Piratvisuth, Teerha; Luo, Kangxian; Yuming, Wang; Hadziyannis, Stephanos; Wolf, Eva; McCloud, Philip; Batria, Richard; Marcellin, Patrick. [Hepatology](#); April 2009.

Source: Wiley ([news](#) : [web](#))

Citation: New studies examine elimination of hepatitis B and C (2009, April 1) retrieved 20 April 2024 from <https://medicalxpress.com/news/2009-04-hepatitis.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--