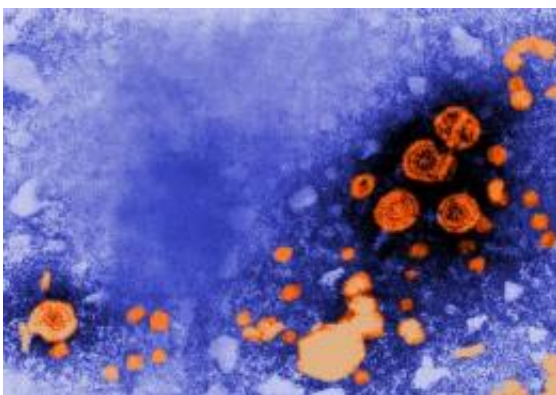


Toward explaining why hepatitis B hits men harder than women

November 18 2009



These are hepatitis B particles as viewed under an electron microscope. Credit: US Centers for Disease Control

Scientists in China are reporting discovery of unusual liver proteins, found only in males, that may help explain the long-standing mystery of why the hepatitis B virus (HBV) sexually discriminates -- hitting men harder than women. Their study has been published online in ACS' *Journal of Proteome Research*.

Shuhan Sun, Fang Wang and colleagues note that [chronic hepatitis B](#) seems to progress and cause liver damage faster in [men](#), with men the main victims of the virus's most serious complications -- cirrhosis and liver cancer. Men infected with HBV also are 6 times more likely than women to develop a chronic form of the disease. About 400 million

people worldwide have chronic [hepatitis](#) B, including a form that is highly infectious and can be transmitted through blood, saliva, and sexual contact.

In experiments with laboratory mice, the scientists found abnormal forms of apolipoprotein A-I (Apo A-I), a protein involved in fighting inflammation, in the livers of infected male mice but not infected females. They then identified abnormal forms of these Apo A-I proteins in blood of men infected with HBV, but not in women. In addition to explaining the gender differences, the proteins may provide important markers for tracking the progression of hepatitis B, the scientists suggest.

More information: "An altered pattern of [liver](#) apolipoprotein A-I is implicated in male chronic hepatitis B progression", *Journal of Proteome Research*, pubs.acs.org/stoken/presspac/p...ll/10.1021/pr900593r

Source: American Chemical Society ([news](#) : [web](#))

Citation: Toward explaining why hepatitis B hits men harder than women (2009, November 18) retrieved 1 May 2024 from <https://phys.org/news/2009-11-hepatitis-men-harder-women.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>
--