Clin. Lab. 2024;70:XXX-XXX
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LETTER TO THE EDITOR

Impact of False Negatives on HDV Investigation in Endemic HBV Areas

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(Clin. Lab. 2024;70:xx-xx. DOI: 10.7754/Clin.Lab.2024.240303)

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KEYWORDS

HBV, HDV, co-infection, prevalence

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The hepatitis B virus (HBV) must be present for the hepatitis D virus (HDV), a tiny, faulty RNA virus, to replicate in the host liver cells. HDV infection has the potential to superinfect those who already have HBV infection or to occur concurrently with HBV infection (co-infection). Compared to HBV infection alone, HDV infection is linked to more severe liver disease, such as cirrhosis and hepatocellular cancer. Globally, there are differences in the frequency of HDV infection and how it affects individuals who already have HBV infection. Limited information is available on the prevalence of HDV infection among patients with HBV infection in a number of endemic locations. Screening and management efforts in this population must be guided by an understanding of the epidemiology of HDV infection. To diagnose HDV infection, immunological testing for anti-HDV antibodies is frequently performed. It is crucial to remember that some tests could have drawbacks, such as false negative results. To clarify the precise role that HDV co-infection plays in the development of liver disease in individuals infected with HBV, more investigation is required.

After correcting for the risk of a false negative, we can determine the precise estimated prevalence of hepatitis D virus (HDV) infection among patients with chronic hepatitis B infection based on data from recent research from endemic areas in Indochina [1].

Four (0.6%) of the 702 recruited patients exhibited positive and ambiguous answers for both anti-HDV tests,

Letter to the Editor accepted March 10, 2024

according to the Suksawatamnuay et al. study [1]. It should be mentioned, though, that there is a chance of false negatives with the Sorin test utilized in this investigation.

We can therefore postulate that there may be more cases of HDV infection that the Sorin assay missed in the second study, given that the Sorin assay has a sensitivity of 23.8% and a false negative incidence of 2.38% (1/42) for detecting HDAg in the study by Shattock and Morris [2]. As a result, the reported 0.6% and the anticipated prevalence ranges may not accurately reflect the prevalence of HDV infection among the 702 patients.

It is difficult to give an accurate assessment of the prevalence of HDV infection without more detailed information on how the Sorin assay performed in the second trial. Because the Sorin test has the tendency to provide false negative results, it is plausible to believe that the true prevalence may be higher than the stated 0.6%. If the impact of a false negative is not taken into consideration, the HDV epidemiology may be interpreted incorrectly. This may indicate that the prior study's inaccurate summary - according to which the frequency of HDV in the study was lower in Indochina than it was worldwide - was published [1]. It is advised that more research using more sensitive tests be conducted in order to precisely ascertain the incidence of HDV infection in the community in endemic areas.

Declaration of Interest:

None.

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