

# Hepatitis B Vaccination in Patients with Chronic Liver Disease in the Era of COVID-19

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## BACKGROUND

Hepatitis B (HBV) is one of the most prevalent infectious diseases worldwide. It is preventable with vaccination and experts recommend screening for HBV immunity in all patients with chronic liver disease<sup>1</sup>. The 2019 novel coronavirus (COVID-19) pandemic disrupted ambulatory care clinics throughout the United States, interfering with normal vaccination screening and administration. In the subsequent years after the pandemic began, clinicians and patients alike have had to play catch up on healthcare maintenance. This study was done to determine if the rate of screening and vaccination of patients with chronic liver disease for Hepatitis B changed in the subsequent years after the onset of the COVID-19 pandemic at our single institution.

### METHODS

A retrospective study was performed from January 2000 to January 2019 and from February 2022 to April 2022 on patients seen in the ambulatory clinic of our community-based hospital. The criteria to be vaccinated for Hepatitis B was patients with chronic liver disease (defined as cirrhosis, nonalcoholic fatty liver disease, alcoholic liver disease, autoimmune hepatitis, and transaminitis (ALT or AST >2x ULN) not immune to HBV. 790 patients were selected from the first period and 86 patients were selected from the second period.

### **DISCUSSION/CONCLUSIONS**

We believe that the increases in both screening rates and subsequent vaccination are due to both patient and physician driven motives. Our patients are requesting reevaluation of vaccination history with increased compliance in vaccination course. We have also noticed a more thorough review of patient history by our physicians, focusing on what was missed during the years since the onset of the pandemic and prior. Further studies qualifying these observations are underway, however, we believe it is important to present these results now to demonstrate that we can continue to improve the care we provide in the outpatient setting despite the pandemic. In fact, the COVID-19 pandemic itself may have improved the overall care we provide for patients.



We found that there were increases in the rate of screening for HBV immunity (+6.4%), 1<sup>st</sup> dose of Hepatitis B vaccine (+37.7%), 2<sup>nd</sup> dose of Hepatitis B vaccine (+28.8%), and 3<sup>rd</sup> dose of Hepatitis B vaccine as (+4.7% complete immunization) in the post-COVID onset years compared to the pre-COVID onset years.



