Received: 6 September 2023 | Accepted: 24 September 2023

DOI: 10.1002/ags3.12747

AGSurg Annals of Gastroenterological Surgery Open Access WILEY

LETTER TO THE EDITOR

COVID-19 vaccine in liver transplant recipients

Dear Editor,

We would like to share ideas on the publication "Antibody titer after administration of mRNA-based vaccine against severe acute respiratory syndrome coronavirus 2 in liver transplant recipients."[1] The researchers wanted to look at antibody levels in liver transplant recipients who had received vaccinations against spike and nucleocapsid proteins. There were 125 liver transplant recipients and 20 healthy volunteers in the study. After the second, third, and fourth vaccine doses, antibody levels were tested. According to the findings, 89.1% of liver transplant recipients had a favorable humoral response after the second dose, which increased to 100% after the third dose. However, anti-spike antibody levels were significantly lower after 3 and 6 months compared to 1 month after the second treatment. Anti-spike antibodies were considerably increased in both liver transplant recipients and healthy controls after receiving a booster immunization. Antibody degradation rates were comparable between transplant recipients and controls. Only 4.0% of transplant patients were immunized.

While the study sheds light on the humoral response to vaccination in liver transplant recipients, it is vital to assess the technique and consider potential limitations. The study is restricted to a specific cohort of liver transplant patients and does not include an unvaccinated transplant recipient control group. This makes determining the baseline humoral response and comparing it to the reaction after vaccination difficult. Furthermore, while the study focuses on antibody levels as a marker of immunological response, it does not examine other components of immune protection, such as cellular immune responses or the presence of memory B and T cells. These elements are critical in determining the overall efficacy of vaccination. Furthermore, the trial provides no data on clinical outcomes or the efficacy of vaccination in reducing COVID-19 infection or severe disease in liver transplant recipients. In this susceptible population, it is critical to assess the influence of vaccination on reducing the risk of infection and its associated sequelae.

These factors might alter how COVID-19 infection and vaccination behave, altering the vaccine's previously established scientific efficacy. It's possible that previous asymptomatic COVID-19 infections influenced the results. Genetic make-up may also have an impact on the response.[2] Evaluation of the vaccine's long-term effectiveness in preventing COVID-19 in people may be difficult due to the lack of a clear follow-up time in the experiment. Comorbidities, socioeconomic position, and accessibility to healthcare are examples of potential confounding variables that may have affected the findings but were not explored in this study.

FUNDING INFORMATION

None.

ETHICS STATEMENT

Approval of the research protocol: N/A.
Informed Consent: N/A.
Registry and the Registration No. of the study/Trial: N/A.
Animal Studies: N/A.

AUTHOR CONTRIBUTIONS

HD 50% ideas, writing, analyzing, approval. VW 50% ideas, supervision, approval.

ACKNOWLEDGMENTS

None.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest for this article.

DATA AVAILABILITY STATEMENT

There is no new data generated.

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