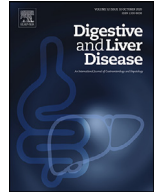




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Correspondence

Spike-specific humoral and cellular immune responses after COVID-19 mRNA vaccination in patients with cirrhosis

Dear Editor,

We would like to discuss the article, entitled “Spike-specific humoral and cellular immune responses after COVID-19 mRNA vaccination in patients with cirrhosis: A prospective single center study”, which was recently published in your journal [1].” In this article, the authors Iavarone et al. evaluated the incidence of breakthrough infections, adverse events, and humoral and cellular responses in comparison to healthy controls (AEs). Spike-specific T-cell responses and antibodies against spike- and nucleocapsid-protein (anti-S and anti-N) were measured at baseline, 21 days after the first and second doses, and during follow-up [1]. Iavarone et al. came to the conclusion that, though cellular response was intact and a low prevalence of breakthrough infections was seen, humoral response to COVID-19 vaccines appeared poor in patients with cirrhosis, particularly in SARS-CoV-2-naïve decompensated cirrhotics [1].

Most people would probably agree that it makes sense to keep a COVID-19 vaccine on hand in order to stay healthy. Additional factors need to be considered for a good interpretation of this statement. A genuine adverse reaction was one of the possible confounding factors that influenced the results of the initial dose. Examples include the COVID-19 strain, the delivery mechanism, the setting, and the recipient’s co-morbidity prior to vaccination. The absence of clinical symptoms and asymptomatic COVID-19 may be related [2]. It is necessary to rule out a previous, asymptomatic COVID-19. The efficacy, safety and therapeutic effectiveness of the COVID-19 vaccine have been established in numerous clinical investigations, despite the extremely little information on pre-vaccination health or immunological condition that is now available.

The likelihood of cross-contamination with an unidentified SARS-CoV-2 infection cannot be completely ruled out. The idea that inherited genetic variability affects vaccination recipients’

immunological responsiveness was examined by Čiučiulkaitė et al. [3]. The prevalence of genetic polymorphism should be taken into consideration in future clinical studies.

Finally, it should be stated that the booster shot is advantageous, however this is yet clearly indicated. The recommendations for booster shots may change depending on the specifics of the local outbreak and the prevalent immunization practices. If the original immunization is based on an effective vaccine and there is good disease control, the booster may not be strictly advised.

Conflict of interest

None declared.

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