

LETTER TO THE EDITOR

Impact of COVID – 19 in patients awaiting liver transplantation

Dear Editor,

We read with interest the review article “Impact of chronic liver disease on outcomes of hospitalized patients with COVID-19: A multi-centre United States experience” published in the July 2020 issue of *Liver International* (PMID: 32585065).¹ Although the review brings very important information regarding COVID-19 in patient with underlying liver disease, we observed that information regarding patients awaiting liver transplantation was missing. This is the reason why we would like to share our experience of patients awaiting liver transplantation during the first wave of the COVID pandemic.

During this period, for more than 1 month, our hospital was overwhelmed by patients needing care for COVID-19.^{2,3} The result was unfortunately to break our previous continuous contact with the patients awaiting liver transplantation. On the other hand, liver transplantation was never discontinued in France, even though the activity in liver transplantation centres slowed down. Precisely, according to our public institution which regulates organ procurement and transplantation, the activity of liver transplantation decreased by 17% during 2020 in France compared to 2019.

In this context, we wanted to keep in touch with our patients and understand their point of view regarding the pandemic. For this reason, we built a questionnaire that was sent to all patients on waiting list for liver transplantation between 15 April and 15 May 2020 in Hepatobiliary Center of Paul Brousse Hospital, France. The questionnaire was sent either by email or filled up instantly after a phone call.

We defined as “suspect for COVID-19” the patients with symptoms suggesting COVID-19 or those who had a contact with a confirmed COVID-19 person. We defined as “certain for COVID-19” the patients with positive PCR or compatible CT scan features.

Among 117 patients in our waiting list during this period, ninety-one (77.8%) patients answered the questionnaire. Forty-one (45%) patients were on list for decompensated cirrhosis, 32 (35%) patients for hepatocellular carcinoma and 18 (20%) patients for other cause. Forty patients (44%) of patients were older than 60 years old. Forty-five (49%) patients were active or past smokers, 46 (50%) patients were overweight, 38 (42%) patients suffered from arterial hypertension, 19 (18.5%) patients from chronic renal failure and 10 (11%) patients from diabetes.

The first information we would like to share is the consequences of COVID-19 in our population. Fourteen (15.3%) patients were suspect, and 3 (3.3%) patients had certain COVID-19. Two certain

patients were hospitalised in intensive care unit and one of them died after liver transplantation. His death was not related to COVID-19. No patient in our waiting list died before liver transplantation.

The second information we extracted from our questionnaire is the impact of COVID-19 in terms of drop-out from waiting list. Two (2.2%) of our patients were dropped out of waiting list because of hepatocellular carcinoma progression.

The third information we would like to share is the patients’ experience during the pandemic. Seventy one percent of patients felt themselves more at risk compared to general population, 41% felt stressed, but also 82% felt informed on COVID-19 and 97% of patients respected strict lockdown rules.

In February 2021, we updated our data in order to watch the long-term outcome. Among the 117 patients on waiting list in May 2021, 43 (47.5%) patients were transplanted. This number results after excluding the new listed patients.

In conclusion, COVID-19 was uncommon in patients awaiting liver transplantation during the first period of the pandemic. We did not observe deterioration of liver functions or death related to COVID-19 before liver transplantation. Since then, about half of the patients were transplanted. This fact could be explained by the global respect of the strict lockdown rules.

This result may be opposed to recent reports showing a pejorative impact of COVID-19 in patients with cirrhosis¹⁴ and the European study of Belli et al showing a high mortality in patients with COVID-19 awaiting liver transplantation (32.7% peaking at 45% in case of MELD score >15).⁵

On the one hand, patients awaiting liver transplantation appear to be at greater risk of a severe COVID-19 because of their disease that exposes them to a higher mortality. On the other hand, these patients are probably less exposed to COVID-19 as they strictly respect the lockdown rules. However, except from preventive measures like face masks, hand hygiene and physical distancing, anti SARS-COV2 vaccination should be recommended for these high-risk patients.

KEYWORDS

COVID-19, liver transplantation, waiting list


DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author, IK, upon reasonable request.

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