

Guidelines for Liver Transplantation and COVID-19 infection

These guidelines have been prepared by Liver Transplant Society of India (LTSI). In view of rapidly changing scenario of COVID-19 infection in India, these guidelines may be revised/updated accordingly.

Covid-19 is caused by the novel coronavirus named Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV2) that emerged in Hubei, Wuhan province of China in December 2019. It has now been declared as Global Pandemic. Immunocompromised patients are at a greater risk and there is an immediate need of guidelines for liver transplantation in India, both in deceased donor Liver Transplant (DDLT) and living donor Liver Transplant (LDLT) Centres. Also, health care transmissions of COVID-19 have occurred and given the potential for greater infectivity, strict isolation precautions should be followed for anyone with suspected SARS-CoV2.

Guidelines for issues specific to Liver Transplant

A. Status of doing Liver Transplant

1. With the currently available knowledge, it is likely that the COVID---19 pandemic in India is going to be prolonged. This is likely to have an impact on the patients who are in need of liver transplants in the country. As the current situation is not ideal for liver transplantation, it should be done cautiously in selected situations.
2. Acute liver failure (ALF) – can be done as usual after medical therapy has failed.
3. Acute-on-Chronic Liver Failure (ACLF with organ failure) - decision for transplantation should be based on individual's centre's discretion

B. Deceased donor Liver Transplant (DDLT)

1. Elective DDLT should be done only if donor is COVID-19 negative (both RT-PCR and Serologic test (when available)negative).

C. Living donor liver transplant (LDLT)

1. The current situation is not appropriate for routine living donor liver transplant activity. Transplants for Acute Liver failure as well for Acute on Chronic liver failure with organ failure can be done. For other cases, the urgency of liver transplants to be decided by the individual centers on case-to-case basis.

D. Testing for COVID-19

1. All donors and recipients must undergo testing for COVID-19 as per the national guidelines. Liver transplant should only be carried out if both donor and recipient test negative (both serology (when available) and RT-PCR). The timing of the tests should be immediately before the transplant operation. One set of tests (RT-PCR) was deemed mandatory, but a second set of tests would be desirable if transplant is not being carried out immediately.

E. Positive COVID-19 Test Pre-Transplant

1. If donor / recipient test positive, then the transplant should be put on hold. Subsequently, it can be carried out if they test negative on 2 consecutive tests, and are declared clear of the COVID-19 infection.

F. Positive COVID-19 Test post-Transplant:

1. Should the donor or the recipient test positive for COVID-19 post-transplant, treatment including Hydroxychloroquine may be offered after consultation with the infectious disease team. Cardiac workup especially QTc interval is vital. The decision regarding immunosuppressive therapy was left to the individual centers with options of either withholding in cases of severe infection/pneumonia versus reducing the doses in asymptomatic cases.

G. Personal Protective Gear (PPE):

1. The transplant operation should be carried out with full personal protective gear as specified by the hospital guidelines.

H. Consent:

1. Consent for transplant during the COVID-19 pandemic should clearly mention the possible impact of COVID-19 on the transplant, including false negative rates of the current tests, and the risks of acquiring the infection during their hospital stay/visits.

I. Donor surgery:

1. One should avoid minimally invasive surgery and prefer open surgeries during the pandemic in keeping with general guidelines for surgeries during this period.

J. Follow up post-transplant

1. Patients should follow up with their respective centres as usual. All routine follow up visits to be done online via telemedicine
2. However, those patients with post-transplant emergencies should attend hospital as usual

K. Care of sick recipients on waitlist

1. The management of recipients for various medical complications to be continued in the hospital, including ICU admissions

L. Prophylactic medications for COVID-19

1. At present, there is no recommendation for prophylactic medications or vaccinations for transplant patients

M. Advisory for transplant recipients for COVID-19

1. All transplant recipients should be sent an advisory from the respective transplant centre regarding various do's and don'ts for prevention of COVID-19 infection

N. Testing of Transplant Professionals

1. This should be done selectively if there has been a positive case of COVID-19 in the concern hospital.