



ISOT INDIAN SOCIETY OF ORGAN TRANSPLANTATION

26th March 2020

ISOT Transplant Specific Guidelines During Covid-19 Outbreak

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On behalf of ISOT Executive Council and Covid-19 Working Group of Indian Society of Nephrology

Organ transplant recipients are at a risk for more severe COVID-19 if they get SARS CoV-2 viral infection. Further, there is potential risk of infection transmission from the donor to recipient through organ transplantation. Also, there are issues in recipient and donor selection for transplant. In view of these issues' organ transplant at the time of COVID-19 pandemic should be undertaken with caution and should be done only at the centre where facilities of management of COVID-19 patients are available.

1. The pre, peri and post-transplant areas, including the operation theaters need to be specifically ear marked for this purpose.
2. Staff involved in care of transplant patients may not be involved in care of other patients.
3. There has to be adequate availability of PPE for care of these patients
4. The center should not be one earmarked for the treatment of COVID-19 patients and needs to have protocols for patient movement around the hospital to prevent nosocomial acquisition of COVID

1. Deceased Donors Transplants

Following individuals, who are potential deceased donor should NOT be accepted as deceased donors:

a. **Epidemiological criteria –**

- International travel in last 14 days before onset of current event leading to brain stem death
- Contact in last 14 days before onset of current event leading to brain stem death with a confirmed case of COVID-19 or a healthcare worker with direct patient contact

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b. Clinical criteria –

- Where the cause of death was due to unexplained respiratory failure
- where there was history of Fever or Acute respiratory infection (e.g. shortness of breath, cough, sore throat) with or without fever.
- Severe bilateral community-acquired pneumonia in absence of any other cause

c. Laboratory criteria -

- Confirmed Covid-19 positive case or test found positive while donor work-up is being done

Routine testing of deceased donors

Routine COVID-19 (SARS-CoV-2) viral testing should be undertaken in all potential deceased donors within 72 hours prior to donation, both for assessment of donor fitness as well as for improving safety of staff involved in transplantation

Even though the potential deceased donor is fit to donate organs, every hospital and organ transplant system must balance between care of other COVID-19 positive patients in their health care setting against the organ transplant vis-a-vis availability of resources for safely conducting the organ transplant.

2. Living related Transplants

The living donor transplant programme may be temporarily suspended in line with the MoHFW's advisory for Hospitals and Medical Institutions dated 3rd March 2020, accessible at <https://www.mohfw.gov.in/pdf/AdvisoryforHospitalsandMedicalInstitutions.pdf>

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However, if transplant is being done in view of emergency medical need of recipient, following individuals, who are living donor should NOT be accepted as donors:

a. Epidemiological criteria –

- International travel in last 14 days
- Contact in last 14 days with a confirmed case of COVID-19 or a healthcare worker with direct patient contact

b. Clinical criteria –

- History of Fever or Acute respiratory infection (e.g. shortness of breath, cough, sore throat) with or without fever.

c. Laboratory criteria -

- Confirmed Covid-19 positive or test found positive while donor work-up is being done

RT-PCR test of potential donors should be undertaken as suggested for deceased donors

Emergency lifesaving Transplantation

In case a transplant is to be done due to emergency need of recipient, it should be performed with appropriate assessment of COVID-19 infection in the recipient. Further, appropriate counseling of both the donor and recipient as well as their families should be done, and a high-risk informed consent taken before proceeding with the transplant.

3. Transplantation Recipients

Similar to the general population, transplant recipients should also strictly follow the travel advisories issued by the various ministries of Government of India from time to time. They should take extra precaution as they have risk of developing severe COVID-19 disease, if they acquire SARS CoV-2 viral infection.

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4. Transplant Recipients returning from abroad

All transplant recipients who have been exposed to a confirmed or suspected COVID-19 patient within the last 14 days or who have returned from nations with COVID-19 outbreaks should undergo quarantine and isolation for 14 days and should be tested for SARS CoV-2 infection.

If any transplant recipient has fever, cough or breathing difficulty, they should immediately call their respective transplant centres. All transplant centres must have guidelines in place specifying which patients need testing and inpatient management and which patients can stay at home with close follow up with various means like mobile and email etc.

If they are advised to visit the hospital, they should wear a mask while coming to hospital premises. In case of a medical emergency like difficulty in breathing, they should report to the nearest emergency department.

5. Treatment and modification of immunosuppression

There are two issues of management of organ transplant patients with COVID-19

a. Management of COVID-19 in transplant patient.

There is scarcity of data and consensus on effective treatments of COVID-19 as such and more so in transplant patients. Few centres have tried antivirals, hydroxychloroquine and macrolides in COVID-19 patients with variable results. However, as of now, there is no treatment approved by the Central Drugs Standard Control Organization (CDSCO) or Foods and Drug Administration (FDA) for COVID-19.

b. Handling of immunosuppressive medicines with COVID-19

There is no consensus regarding modification in the immunosuppressive regimen of transplant recipients with COVID-19. The dose adjustment has to balance the infection control and the organ rejection. However, there is overall agreement of stopping antimetabolite drugs and decrease calcineurin inhibitors by 50%. Steroid should be continued on same doses. (Massachusetts General Hospital COVID-19 Treatment Guidance).

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6. Post-transplant follows up measures

Transplant patients are at risk for severe COVID 19 if they acquire infection due to their immunosuppressed state. They may not manifest symptoms like general population. Fever may be absent as reported from study from China. Transplant units are advised to consider ways to limit hospital attendance for patients, such as:

1. Rescheduling non urgent out-patient appointments
2. Virtual or telemedicine or telephonic appointments
3. Home delivery of immunosuppression if feasible

Patients with stable graft function and adequate drug supply can avoid routine follow up visits to transplant hospitals.

7. Tissue Transplantation

At present, there is no evidence to suggest the transplant of Coronaviruses by blood transfusion.

Tissue and Eye Donation Criteria:

Deferral will be based upon infection status in the last 28 days before donation:

- Positive test for COVID-19
- Symptoms consistent with COVID-19 infection (e.g., unexplained fever, cough, shortness of breath) in a patient with suspected COVID-19 infection
- Donor defined as a Person under Investigation (PUI)
- Fever with severe acute lower respiratory illness (e.g., pneumonia, ARDS)

Additionally, deferral will be based upon exposure in the last 28 days before donation:

- Close contact with a person who has confirmed COVID-19
- Close contact with a Person under Investigation (PUI) for COVID-19
- International travel

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8. Personnel Precautions working in the program:

The health and safety of all the healthcare worker in the transplant program is of paramount importance. Transplanting hospitals are advised not to expose any of their staff if there is even the slightest risk of virus transmission from both epidemiological and clinical criteria.

It is likely that this pandemic may require the current resources to be utilized elsewhere, hence there is even more reason to practice caution when deciding on proceeding with donation and transplantation. It is with this in mind that all elective live living kidney and liver transplant should be postponed.

General principles for handling SARS CoV-2 infection in transplant centre

1. Personnel should follow all hospital-based protocols for the isolation and management of COVID-19 patients.
2. Any questions or concerns about the infectious status of a potential donor should be referred to your Medical Director / Organ sharing body for further guidance.
3. If a donor is being ruled-out due to hospital considerations, local or national health authorities be sure to record the information. It is important that this information be documented clearly and accurately. Documentation should include transmittable disease status, COVID-19 testing status/high risk suspicion and/or individual organ suitability.
4. Screening questions should reflect updated COVID-19 national guidelines

Please refer to below links for more information: -

- ❖ Coronavirus (SARS-CoV-2) causing COVID-19: Information for donation and transplant professionals Version 1 dated 18-3-2020 – BY Donate Life & The Transplant Society of Australia & New Zealand
- ❖ <https://tts.org/23-tid/tid-news/657-tid-update-and-guidance-on-2019-novel-coronavirus-2019-ncov-for-transplant-id-clinicians>
- ❖ <https://www.mohfw.gov.in/pdf/AdvisoryforHospitalsandMedicalInstitutions.pdf>
- ❖ <https://www.fda.gov/emergency-preparedness-and-response/mcm-issues/coronavirus-disease-2019-covid-19#fastfacts>
- ❖ <https://www.gaeba.org/2020/alert-coronavirus-2019-ncov-and-ocular-tissue-donation/>
- ❖ Guidelines for Liver Transplantation and COVID-19 Infection, as received from the President, Liver Transplant Society of India (LTSI) via official correspondence on 23-03-2020.

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Disclaimer:

The current outbreak is unpredictable. If widespread community-transmission occurs, healthcare infrastructure and capacity issues may have further impact on donation and transplantation. **These recommendations may require regular updation to account for the changing epidemiology and new information regarding treatment and testing.** All transplant units must be aware of national and local guidance for managing patients with COVID-19.

No suit or legal proceedings shall lie against any person for anything done or intended to be done in good faith under this suggestions/advisory unless proved otherwise

26th March, 2020 (Version 1)

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