

LETTER



Challenges and countermeasures for organ donation during the SARS-CoV-2 epidemic: the experience of Sichuan Provincial People's Hospital

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Dear Editor,

Up to 09:40 February 17, 2020, there have been 70,640 confirmed SARS-CoV-2 (aka 2019-nCoV) cases in China. Sichuan Provincial People's Hospital acts as an organ transplant center in west of China, approximately 200 solid organ transplants performed each year and can perform heart, lung, liver, kidney, small bowel, stem cell transplantation, so it is necessary to establish a hospital-specific protocol to deal with the SARS-CoV-2 infection for the donor and recipient.

The donation protocol of Sichuan Provincial People's Hospital

1. Epidemiological screening of SARS-CoV-2 for potential donors and their families:
 - (i) Ask in detail about the history of travel in Wuhan in the 14 days before the onset of the illness, or exposed to suspected respiratory infections. Also screen the families.
 - (ii) Whether he/she had clinical symptoms such as fever, dyspnea, dry cough, diarrhea recently.
 - (iii) Laboratory test according to the SARS-CoV-2 guideline.

- (iv) Chest CT examination before donation, ask a radiologist for a consultation.
 - (v) At least two negative tests of the coronavirus nucleic acid test to exclude the SARS-CoV-2 infection.
 - (vi) During the maintenance of the donor in the ICU, the ward should not have SARS-CoV-2 infected patients, and the medical staff should not have related epidemiological contact history.
2. Epidemiological screening of organ donation coordinators and organ transplant-related medical staff
 - (i) All the organ transplant-related medical staff should attend the training on SARS-CoV-2-related epidemiological knowledge.
 - (ii) The coordinator should learn more about the epidemic situation of the hospital from which the donor originates, and decide whether to accept the donor.
 - (iii) The coordinator should protect himself during the whole donation work, including surgical masks, hand hygiene, and avoid contact with suspected or confirmed SARS-CoV-2 pneumonia. Avoid public transportation.
 - (iv) Set up WeChat working groups, including organ transplant-related medical staff and members of 2019-nCoV Working Group. Minimize the chance to meet directly.

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3. Epidemiological screening of the recipients and the families

- (i) Avoid the transplant surgery for recipients who were from SARS-CoV-2 affected areas during the epidemic.
- (ii) Ask about the travel history in the 14 days before the transplant surgery, include the families.
- (iii) Twice nucleic acid tests, and CT examination, members of 2019-nCoV Working Group should have the consultation to exclude the SARS-CoV-2 infection.

4. Preoperative education for organ transplant recipients and the families.

- (i) Ask recipients to strengthen learning on how to strengthen the protection and avoid infection from SARS-CoV-2.
- (ii) Always put on masks during the epidemic situation, pay attention to hand hygiene, and cooperate with medical staff to perform SARS-CoV-2-related surveillance daily.
- (iii) Fix one person to take care of the recipient.
- (iv) Ensure a single isolated ward for recipient, pay attention to room disinfection, and open windows frequently.
- (v) Arrange psychological counseling for transplant recipients, reduce stress, and anxiety.

5. Management measures for suspected SARS-CoV-2 infection after transplantation

- (i) Isolate the recipient and the family immediately and report to hospital administration.
- (ii) Perform SARS-CoV-2 nucleic acid test, laboratory test, high-resolution CT examination immediately, and ask members of 2019-nCoV Working Group for consultations. Transfer to the isolation ward if necessary.

6. Follow-up protocol after transplant

- (i) Recipients with stable conditions should be followed up as much as possible through the network clinic.
- (ii) If the recipients have suspicious symptoms such as fever, he should actively put on a mask and promptly go to the hospital for fever clinic.
- (iii) Routinely screened for SARS-CoV-2 nucleic acid testing and CT.

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