Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Table 1 Clinical Characteristics of the Second Patient

Characteristic	Description
Date of transplant	May 17, 2017
Immunosuppression	Tacrolimus 1.5 mg in the morning, 2 mg in the evening
Mycophenolate mofetil 0.5 g twice daily	
Blood concentration of tacrolimus	8.3 ng/ml
Allograft function	Left ventricular ejection fraction 64%
Comorbidities	Hyperlipidemia and impaired glucose tolerance
Lab test	January 25, 2020: WBC 8.2 $\times$ 10^9 cells/liter, lymphocyte 0.8 $\times$ 10^9 cells/liter, CRP 13.4 mg/liter
	February 7, 2020: WBC 8.4 $\times$ 10^9 cells/liter, lymphocyte 1.5 $\times$ 10^9 cells/liter, CRP 1.0 mg/liter
RT-PCR of 2019-nCoV (Throat swab)	Positive on January 28, negative on February 8 and 10
Treatment	Ceftriaxone sodium 2.0 g and ganciclovir 0.25 g intravenously (January 25—31); oral moxifloxacin 0.4 g/day and arbidol 0.2 g 3 times a day (February 1—10)
Symptoms evolution	Fever for 2 days, up to 38.5°C
	Fatigue and poor appetite from January 28 to February 5
Rejection during or after COVID-19	None
Other complications	None

Abbreviations: CRP, C-reactive protein; nCoV, novel coronavirus; RT-PCR, reverse transcriptase—polymerase chain reaction; WBC, white blood cell.

These cases may represent the first descriptions of COVID-19 in heart transplant recipients and suggest that presentations appear to be similar to those observed in non-transplant recipients. We have also followed 200 heart transplant patients in the Hubei area by telephone and found a third confirmed patient who is currently under treatment in another hospital, but the case details are not available to us, and therefore, are not included in our report. Whether organ transplant recipients are more susceptible to COVID-19 requires further large-scale epidemiologic investigation, but the presentation pattern and resolution of the disease using the described supportive measures may serve to inform direction of care if such patients are encountered elsewhere.

Editor's Note: The article published from China may include patients transplanted at a time when concerns existed with unethical procurement of organ donors, and therefore, may represent a violation of the publication policy. However, the editors have chosen to override this aspect because of the critical importance of the information provided in such a paper for the benefit and help of our patients while recognizing the dignity of those from whom the unethical organs were most probably obtained.

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Donor heart selection during the COVID-19 pandemic: A case study

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In recent weeks, the number of cases of coronavirus disease 2019 (COVID-19) has surged worldwide.[1] It is unclear how transplant programs should approach donors with possible COVID-19 infection, especially when real-time testing for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is not widely available or impractical owing to increased processing time. We review issues surrounding evaluation of our first donor offer from a deceased patient with possible COVID-19 infection and decisions despite uncertain information.

In early 2020, a hospitalized child with end-stage heart failure awaiting heart transplant received a donor heart organ offer. The donor progressed to brain death after presenting with an anoxic brain injury in the setting of a recent upper respiratory tract infection. A nasopharyngeal swab was positive for respiratory syncytial virus. A chest radiograph revealed patchy opacifications of the lung fields consistent with viral pneumonitis or aspiration. As part of the

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evaluation, in the wake of the COVID-19 pandemic, we were given the opportunity to request testing for COVID-19 as the donor had not been previously tested. The donor resided in an area where confirmed cases of COVID-19 infection had been reported. Moreover, because the patient's viral symptoms fell within the past 21 days, and the patient was hospitalized, the donor met Center for Disease Control and Prevention criteria for a person under investigation for COVID-19 infection.[2] However, because COVID-19 testing was still in limited use, the testing required an additional 1 to 3 days to process, a relatively long-time period for an organ procurement organization to maintain the donor's medical eligibility to donate and for a grieving donor family to wait.

As the offer was contemplated, a number of questions rapidly surfaced. These included (1) what is the likelihood of COVID-19 infection in a patient whose viral symptoms have resolved, and COVID-19 testing status is unknown, but a common respiratory virus has been identified; (2) if the donor were infected with COVID-19, what is the risk of donor-derived transmission involving a heart allograft (as opposed to lungs where the virus primarily resides); (3) is selective screening of donors acceptable, and if so, how, and who should be screened selectively, or should screening for COVID-19 in donors be performed universally in both symptomatic and asymptomatic donors, similar to other viruses; (4) would this particular donor family be willing to wait up to 3 additional days for the test result, and could the organ procurement organization keep the donor stable during this timeframe; (5) should lack of effective therapies for SARS-CoV-2 infection play into the decision to accept a heart with unknown COVID-19 status; (6) if the donor were infected, what is the risk to health care staff (e.g., procurement team, anesthesiologists, surgeons, operating room staff, and cardiac intensive care unit staff), and what is the risk to the recipient's family and relatives; and (7) given all these uncertainties, how do providers weigh the risk of COVID-19 infection against the competing risk of waitlist mortality.

In consultation with the infectious disease service, it became apparent that it was difficult to predict the risk of COVID-19 infection in this donor without confirmatory testing. Yet, because of a national testing shortage at the time of the donor offer,[3] timely donor testing for SARS-CoV-2 was not feasible. The risk of donor transmission with SARS-CoV-2 in the heart is also unclear. Data from 4 patients with SARS-CoV-1 showed no viral protein or RNA present in their hearts at autopsy but SARS-CoV-2 may behave differently.[4] Studies have also shown angiotensin-converting enzyme 2 receptors in the heart that could readily serve as a possible portal of entry.[5] Similarly, it was difficult to predict the severity of illness in a heavily immunocompromised patient undergoing induction therapy because the infrequent reports of COVID-19 infection in transplant recipients have occurred in late survivors after heart transplantation on lower levels of immunosuppression.[6,7]

In our case, the donor was at high-risk of underlying COVID-19 on the basis of the presence of clinical symptoms in the past 21 days and residence in an area where local spread was known. Even the positive respiratory syncytial virus result could not be interpreted to lower the pre-test probability of COVID-19 infection because viral coinfection is not infrequent in children, making it difficult to know how the result impacts the risk of COVID-19 in this patient. We decided that we would accept the donor offer provided COVID-19 testing could be performed and was negative, and the donor family agreed to wait the additional time. The COVID-19 test performed on a nasopharyngeal swab using a reverse transcriptase polymerase chain reaction assay returned negative, and the donor heart was accepted for transplantation. However, a single negative test may not reliably exclude the diagnosis of COVID-19, and the sensitivity may vary depending on the sample source (anecdotal reports from adult patients suggest that bronchoalveolar lavage specimens may have the highest yield). So repeat testing in either the donor or the recipient may be warranted. The purpose of this case anecdote is to define the issues that may need to be reconciled as decisions are being made during the evolution of this pandemic.

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Rhabdomyolysis with the combined use of danazol and rosuvastatin in left ventricular assist devices

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Danazol, a synthetic steroid analog, is approved for the treatment of endometriosis, fibrocystic breast disease, and