LETTER TO THE EDITORS

Organ donation during the coronavirus pandemic: an evolving saga in uncharted waters

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Coronavirus 2 (SARS-CoV-2) is the cause of an ongoing pandemic of respiratory illness, known as coronavirus disease 2019 (COVID-19) [1]. The risk of developing COVID-19 from a SARS-CoV-2 infected organ donor is unknown. Therefore, extreme caution is necessary when considering transplantation. Transmission is affected by epidemiological risk factors, incubation period, degree of viraemia, and viability of SARS-CoV-2 in blood and organ compartments. Recent guidelines from NHSBT [2] recommend that all potential donors be tested for SARS-CoV-2 and donation suspended from those who test positive. Donation is discouraged for asymptomatic individuals who have been in a COVID-19-affected area in the last 28 days. Asymptomatic individuals being monitored following contact with a proven case of COVID-19 are excluded from donation. Finally, individuals being investigated for COVID-19 are excluded unless they are SARS-CoV-2 negative. At this point, there is low-quality evidence suggesting that bronchoalveolar lavage is more sensitive than sputum for detecting SARS-CoV-2 infection [3].

Though these current recommendations are reasonable, they are broad and may be difficult to implement in practice. Additionally, they lack adaptability based on patient and transplant centre characteristics. Consideration of the availability of transplant centre resources must be balanced against the need for urgent transplantation. Locoregional prevalence of the disease should be taken into consideration. Indeed, living donor and nonurgent deceased donor transplants may be suspended. Organ-specific guidelines are also needed. Additionally, the urgency for transplant is dependent on both individual patient characteristics and the specific organ in question: Patients awaiting kidney donation on dialysis are different than patients awaiting a liver transplant. The American Society of Transplantation (AST) recommended testing for living and deceased donors. Also, they advise against organ retrieval from COVID active or tested positive or high-risk donors. Donors of intermediate risk of COVID-19 should not donate lungs or small bowel, given the detection of SARS-CoV-2 RNA in these compartments [4,5]. AST recommended that other organs be procured and transplanted with caution. Finally, low-risk or test-negative donors as well as organs from donors who have recovered from COVID-19 (greater than 28 days prior to the procurement) are considered likely safe for use.

The American Society of Transplant Surgeons (ASTS) has communicated best practices for transplantation in the COVID-19 era. They state that living donation should be suspended unless absolutely necessary. Deceased donor transplantation should continue when it is in the interest of the recipient. ASTS recommends 'evaluat[ing] each organ off for the specific potential recipient'. They acknowledge lack of knowledge regarding bloodborne transmission but 'assume that' bloodborne transmission occurs. Finally, they state that it is a duty of transplant staff to 'stay healthy. . .to care for the immunosuppressed transplant patient [6].' ASTS also issued guidelines on procurement practices to limit the spread of SARS-CoV-2 [7].

We advocate for individualized decision-making regarding transplantation, including honest discussion about the risk of death on waiting list, the risk of donor derived SARS-CoV-2 transmission, the lack of therapies for COVID-19, and the possibility of severe COVID-19 disease post-transplant. Finally, we believe that patient preference is of some importance but must be weighed against societal benefits. Blanket refusal of organ offers due to uncertainties around COVID-19 transmission may increase mortality in vulnerable patients. At the same time, transplant centres must be cognizant of potential spread of SARS-CoV-2 during procurements, taking every precaution to prevent it.

Though epidemiologic comparisons are helpful in tracking COVID-19 worldwide, direct correlations are

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impossible and modelling imperfect. Organ transplantation remains a vital, life-saving, component of developed health systems. It affirms that sick patients are worthy of the utmost care. Transplantation supports social cohesion as transplants are the only surgeries that begin in acts of altruism – individuals positively affirm their desire to donate and help others. When uncertainty is in abundance, adaptability to emerging knowledge is paramount. Individualization of decision-making is necessary to continue the life-saving and societally affirming practice of transplantation.

Conflict of interest

The authors report no conflicts of interest.

Patient and public involvement

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