

## Coronavirus pandemic

# Organ transplants, donations hit by Covid-19

Only urgent transplants allowed, with extra precautions, but recipients may face new risks

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Retiree Koh Khim Teck had spent 12 anxious months awaiting a life-saving call from Singapore General Hospital (SGH), so there was huge relief when the call finally came late one night in March.

SGH told Mr Koh, 69, that a suitable liver from a deceased donor had been located.

The next day, the grandfather of five went to the hospital for his liver transplant despite the Covid-19 outbreak still spreading.

Mr Koh was diagnosed with liver cancer more than three years ago and put on the waiting list for a liver about a year ago, when his condition deteriorated. "I thought there's no hope as I am already almost 70," he said in Mandarin. "The doctor says when I am 70, my heart may give way (during the transplant) and I won't make it."

Mr Koh is among the few who have been able to get a transplant amid the pandemic, which has seen healthcare resources diverted to help fight Covid-19.

The outbreak meant that only ur-

gent transplants are allowed. Deceased donor liver transplants could go ahead, as there are no alternatives. Living donor liver transplants are allowed, in urgent cases.

Kidney transplants, for instance, have been affected, as patients can function on dialysis. Deceased donor kidney transplants resumed in April while living donor kidney transplants remain suspended.

Overall, organ transplants and donations have been reduced due to the pandemic, said Associate Professor Jeyaraj Prema Raj, the head of the SingHealth Duke-NUS Transplant Centre.

It is the same scenario in places like the United States and France, where data shows that transplants have fallen significantly as Covid-19 cases soar.

Mr Koh, whose cancer was no longer responding to treatment, was able to have his liver transplant done in March after new guidelines put in place by SGH doctors in February.

A briefing on Friday outlined the considerations and extra precautions that were taken.

These included ensuring that enough resources were available and keeping the donor team, which



Retiree Koh Khim Teck, 69, is among the few who have been able to get a transplant amid the pandemic, which has seen healthcare resources diverted to help fight Covid-19. PHOTO: LIANHE ZAOBAO

might need to travel to another hospital to procure the organ, separate from the recipient team, which takes delivery of the organ.

SGH also undertook a living donor kidney transplant in March while the National Heart Centre Singapore performed a deceased donor lung transplant.

Organ transplants also take place at the National University Hospital (NUH), which had put in place protocols by end-January and has carried out four adult liver transplants and three adult kidney transplants since February.

While urgent transplants are allowed, they are not without new challenges.

"We have to make sure that the or-

gan is taken from someone who does not have Covid-19," said Prof Prema Raj, who is also the director of SGH's Liver Transplant Programme. "The other thing is that, with the recipient... you are altering the one mechanism that he has to fight Covid-19."

Transplant recipients are put on immuno-suppressants to prevent rejection of the new organs.

The risk of the patients acquiring Covid-19 in the community after their transplant is high and their infection will be more severe, based on cases seen worldwide.

"In patients who are transplant recipients, approximately 70 per cent to 80 per cent of them are going to require oxygen therapy, 20 per

cent to 30 per cent may be critically ill and requiring ICU (intensive care unit) care," Dr Jasmine Chung, a consultant at SGH's department of infectious diseases, said at Friday's briefing.

"The mortality rate is about 20 per cent to 30 per cent."

So, halting transplants during the Covid-19 pandemic may be in the interest of patient safety but it can also harm them.

"We think that Covid is going to last for months or even one to two years, so, then, there's a possibility that quite a lot of our patients here may fall off the wait-list and suffer the consequences of the disease progression," said Dr Chung.

SGH currently has 186 patients

UNCERTAIN, PROLONGED PANDEMIC

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on the waiting list for an organ.

Prof Prema Raj said they did a study and found 83 per cent of the 71 wait-list recipients who responded wanted to go ahead with their transplants.

NUH has 30 liver-failure patients and 159 kidney-failure patients waiting for urgent transplants.

Professor A. Vathsala, senior consultant and co-director of the National University Centre for Organ Transplantation (Nucot), said they will resume paediatric living donor kidney transplants this week. Elective living donor liver and kidney transplants are on hold.

As the country opens up, more transplants can be done, but the stricter hygiene measures that have been put in place will stay.

Said Associate Professor Shridhar Iyer, senior consultant and surgical director of Nucot's Adult Liver Transplantation Programme: "In any pandemic situation, the challenge to transplant services is the balancing act of the mortality on the waiting list, the added risk of the donation process or risk to living donors, the expected survival after transplantation and the availability of healthcare resources."

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