

Beaumont Hospital's experience in accepting kidney donations from donors considered at increased risk of blood-borne viruses.

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Background

In Ireland, over 2,000 patients are living with end-stage kidney disease (ESKD) and on haemodialysis (HD). This number is increasing on an annual basis. By the end of 2023, 535 individuals were waiting for a kidney transplant. By comparison, there were 189 kidney transplants performed nationally.

The practice of accepting kidney donations from donors who have a blood-borne virus (BBV), including hepatitis B, hepatitis C or HIV, is well-described internationally.

In 2023 Beaumont Hospital adopted a policy of considering kidney donation from deceased donors who either had hepatitis B or C, or who were considered 'increased risk of a blood-borne virus'.

Methods

In 2023 the Beaumont Hospital Renal Transplant Department and Infectious Disease Department collaborated to draft a protocol to facilitate kidney donation from deceased persons who were considered to be 'increased risk of having a blood-borne virus' or who had positive serology for Hepatitis B or C. This included those with evidence of active infection or previous infection with hepatitis B or C.

Results

To date, 10 kidneys have been donated by 5 deceased donors. This includes two donors who had serological evidence of previous hepatitis C, 2 donors who had serological evidence of previous hepatitis B, and one donor who had been reported to be a drug user.

The recipients of these kidneys are followed closely with BBV serology at 28 and 90 days. 4 patients who received a kidney from a patient with a history of hepatitis B were started on entecavir post-op.

Thus far there has been no evidence of donor-derived BBV infection.

Discussion

10 persons have received a renal transplant from a donor who previously would not have been considered a candidate for donation. This is a direct result of in close collaboration of the Renal Transplant service and the Infectious Disease department.

An important consideration in this context is the window period for BBV seroconversion. For this reason, and to ensure all recipients of an 'increased risk' transplant are followed appropriately, the 3 month follow up is organised in Beaumont Hospital.

One of the major benefits of receiving a kidney from this model is that the donor tends to be from a younger individual and, as a result, the graft lasts a lot longer.

With further planning, the number of kidneys accepted from donors on this pathway is likely to rise as a result of the involvement of the Infectious Disease team. There may be a role for a combined ID and Nephrology transplant clinic

Donor No.	Risk Factor
1	HepBcAb pos, sAg neg, PCR neg
2	HepCAB pos, Ag neg, PCR neg
3	HepBcAb pos, sAg neg, PCR neg
4	HepCAB pos, Ag neg, PCR neg
5	Reported Drug use

