

## NHS BLOOD AND TRANSPLANT

### KIDNEY ADVISORY GROUP

#### ACCESS TO TRANSPLANT FOR LIVER AND KIDNEY PATIENTS – REVIEW OF REVISED ODT HUB OPERATIONS PROCESS

#### INTRODUCTION

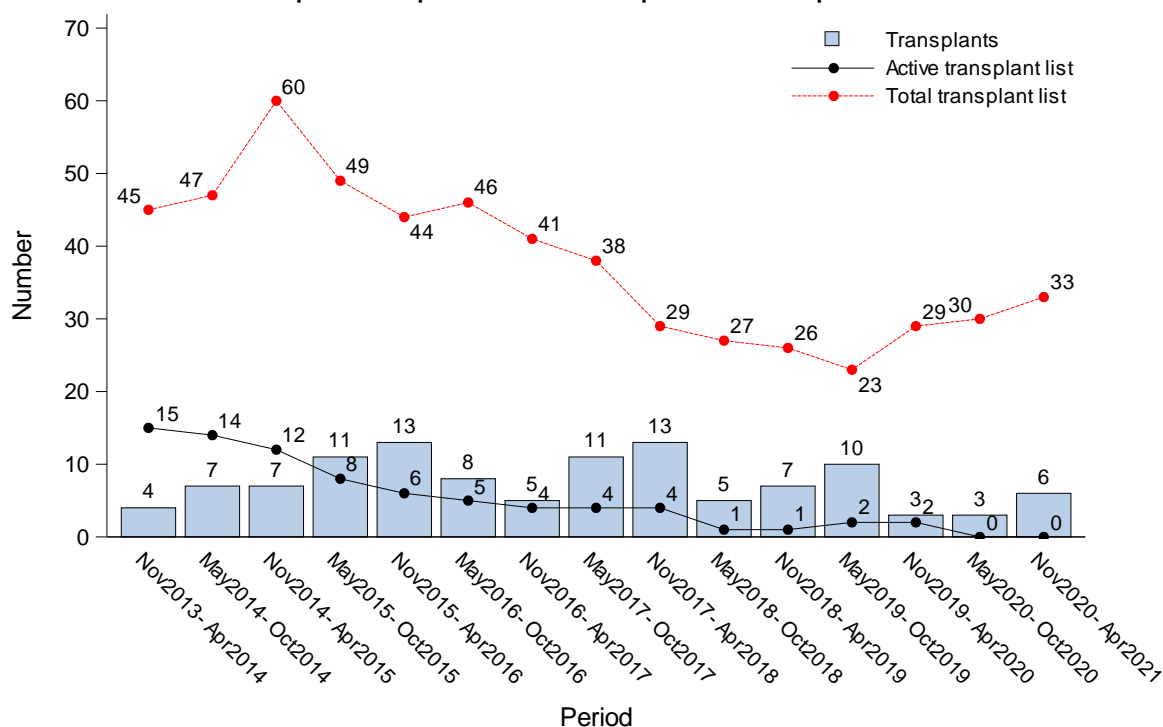
- 1 Following concerns raised about potential disadvantage for patients needing a combined liver/kidney transplant, the Liver Advisory Group (LAG) and Kidney Advisory Group (KAG) agreed a slight change in the ODT Hub Operations processes to more readily facilitate combined liver/kidney transplant. At February 2015, 52 patients were awaiting such a transplant with 10 (19%) having waited more than two years.
- 2 On 5 May 2015, a new process was implemented on a trial basis. This was that the ODT Hub Operations would delay offering one kidney from a donor after brain death (DBD) for up to 60 minutes during which time the liver zonal centre could declare whether they wished to accept a kidney to accompany the liver. This has allowed liver zonal centres to consider their liver and kidney patients with the knowledge that a kidney will be available to them if needed (rather than already be committed to a kidney patient).
- 3 On 20 March 2018, the National Liver Offering Scheme was introduced which has changed how kidneys are offered with the liver. For adult DBD donors, one kidney is reserved for liver patients only if one of the top three ranking recipients on the elective list require a kidney. The kidney will become available for kidney patients after 60 minutes, or once it has been declined for the liver/kidney patient. The offer is provisional and subject to there not being high priority patients on the National Kidney Waiting List (Tiers A-C under previous scheme and Tier A in the new offering scheme).
- 4 Professor Chris Watson contacted the Chairs of LAG and KAG in December 2020 asking whether both advisory groups could review the offering of DCD kidneys for liver/kidney patients. The proposal is that DCD kidneys would follow a similar process followed for DBD kidneys prior to 20 March 2018 (described in paragraph 2) where, subject to there not being any high priority patients in the new Kidney Offering Scheme, a DCD kidney would be offered to both the liver zonal and linked centre(s) before being offered through the Kidney Offering Scheme.
- 5 This report gives an overview of waiting list and transplant activity for liver and kidney patients, from 1 November 2013 to 30 April 2021.

#### LIVER/KIDNEY ACTIVITY

- 6 **Figure 1** shows the number of liver and kidney transplants in the period since 1 November 2013 along with waiting list activity. The number of transplants increased from November 2013 to April 2018 with a fall between May 2016 and April 2017. The number of transplants subsequently decreased before increasing between November 2018 and October 2019. There were 6 liver/kidney transplants performed during the most recent period (November 2020 – April 2021). All but one of the 109 SLK transplants performed between 1 November 2013 and 30 April 2021 involved DBD donors. The DCD SLK transplant occurred at Cambridge in February 2020.

- 7 The number of patients on the transplant list for a liver and kidney fell between May 2015 and October 2019 before increasing to 33 patients as at 30 April 2021. Of the 33 patients 28 were active on the liver transplant list on 30 April 2021 while 5 were suspended.
- 8 **Table 1** shows that 19 (56%) of the 34 patients on the list as at 28 February 2021 were registered at Kings College and that all transplant centres had at least one patient registered. **Table 1** also shows that 21 (62%) patients would consider a DCD liver as recorded on the latest Sequential Data Collection form.

**Figure 1** Liver and kidney patient activity in the UK, 1 November 2013 - 30 October 2021  
Number of transplants and patients on the transplant list at 30 April and 31 October



	<b>N</b>	<b>N (%) would accept a DCD liver (as recorded on last SDC form)</b>
<b>Adult</b>		
Newcastle	2	2 (100%)
Leeds	3	0
Cambridge	5	4 (80%)
Royal Free	3	2 (67%)
Kings College	16	9 (56%)
Birmingham	1	0
Edinburgh	1	1 (100%)
<b>Paediatric</b>		
Leeds	0	-
Kings College	3	3 (100%)
Birmingham	0	-
<b>Total</b>	<b>34</b>	<b>21 (62%)</b>

## IMPACT FOR KIDNEY PATIENTS

- 9 To assess the impact on kidney patients who may have missed out on a transplant as a result of a kidney being used for a liver/kidney patient, the kidney matching runs for the 9 liver/kidney transplants since 1 May 2020 were examined. Over this period, there have been three cases with one high priority patient and one case with two high priority patients.
- 10 Three of the high priority patients were ranked first or second on the matching run and did receive an offer of a kidney. The three patients were not transplanted. Two patients did not receive an offer. One patient was ranked 1st but did not receive an offer as the transplant centre was not taking kidney offers due to COVID-19. One patient was ranked 1<sup>st</sup> but did not receive an offer as the donor was aged over 70 and in donor risk category D4 so the kidney was offered to the centre for any locally listed patient.
- 11 In summary, the impact for kidney patients overall has been small and there were no cases identified where a patient was disadvantaged.

## DISCUSSION

- 12 Currently liver patients also requiring a kidney are only offered through the DBD liver offering pathway if they appear in the top three named patients and are limited to approximately 60% of the deceased kidney donors. Providing access to DCD organs for SLK patients will lessen the use of DBD organs for such patients and there is no reason to suggest an increase in demand for SLKs or change in indications.
- 13 There has been increased utilisation of machine perfusion for DCD organs and in particular NRP with excellent outcomes observed for both liver and kidneys. It has also been observed that NRP organs have a better tolerance of ischaemia enabling combined transplantation to be done safely.
- 14 Members are asked to consider how DCD kidneys are offered to liver/kidney patients subject to there being no high priority patients in the kidney offering scheme.

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**June 2021**