NHS BLOOD AND TRANSPLANT RETRIEVAL ADVISORY GROUP

USE OF NEW ORGAN DAMAGE GRADING

BACKGROUND

A fixed term working group was set up in 2019 to review and improve data collection for damage and improve reporting. As part of this, more robust definitions for organ damage grades were produced for data collected on the Retrieval Team Information (RTI) form and the HTA-B form to provide less subjective damage recording. The new grades are shown below. The new grading system was released on 22 July 2021 to both retrieval teams and recipient centres, with work to follow on development of CUSUM monitoring for organ damage.

RTI form

- 10. No Effect/No Damage. Surgical damage is absent or has no clinical effect.
- 11. Mild Effect. Damage is present but organ can be repaired for transplant.
- 12. Moderate Effect. Damage may contribute, with other significant factors, to a decision not to use the organ.
- 13. Severe Effect. Damage is severe and would be sufficient in isolation to result in decline for transplantation. The organ could have been used if no damage was present.

HTA-B form

- 10. No Effect/No Damage. Surgical damage was absent or had no clinical effect
- 11. Mild Effect. Damage was present but organ was repaired for transplant.
- 12. Moderate Effect. Damage contributed, along with other serious concerns, to the decision not to use the organ.
- 13. Severe Effect. Damage was the primary factor in the decision to decline for transplantation. The organ would have been used if no damage was present.
- 14. Not performed (organ not inspected for damage).

DATA

- 2 The cohort considered were all deceased donors in the UK between 22 July 2021 and 31 August 2021 who proceeded to donate at least one organ. For each organ, the damage grade, as reported on the HTA-B form by the recipient centre, was extracted and is reported below. All data are as at 8 September 2021.
- 3 In the period, there were 156 proceeding donors with 296 kidneys donated, 112 livers, 37 pancreases, 23 hearts, and 31 lungs. **Table 1** shows for each organ, the number of HTA-B forms returned with damage information and the damage recorded on each one. Overall, 3 kidneys (1% of those retrieved), 2 livers (2%), and 1 (3%) pancreas were not transplanted due to damage. Of the 31 kidneys with mild effect damage reported, 6 (19%) had arterial injury reported, for the 11 livers with mild effect, 2 (18%) had arterial injury reported, 1 (33%) of the 3 pancreases with mild effect had arterial injury reported, and none of the 6 lungs had arterial injury reported.

Table 1	Organ damage reported for organs retrieved from deceased donors, by organ, 22 July 2021 – 31 August 2021				
Organs retrieved	Kidney 296	Liver 112	Pancreas 37	Heart 23	Lung 31
Damage information recorded on HTA-B (% of retrieved)	244 (82%)	89 (79%)	29 (78%)	21 (91%)	21 (68%)
Damage (% of reported)					
No damage/no effect	210 (86%)	76 (85%)	25 (86%)	21 (100%)	15 (71%)
Mild effect	31 (13%)	11 (12%)	3 (10%)	0	6 (29%)
Moderate effect	0	1 (1%)	0	0	0
Severe effect	3 (1%)	1 (1%)	1 (3%)	0	0

FURTHER WORK

4 Results are shown for members' information. Work will be undertaken by the Statistics and Clinical Research team alongside a working group for development of CUSUM monitoring for organ damage and updating the regular damage paper for RAG.

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