

Update from Organ Utilisation and Damage Working Group

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Background

The utilisation of solid organ pancreases in the UK remains low and as a consequence PAG initiated a working group to analyse the decline rate and reason for decline in the UK. A second step of the project was to undertake a prospective evaluation of the reasons for discard. Finally inter and intra-centre variations were assessed.

The retrospective study

The analyses of decline rate in the UK has been now completed and presented at IPITA and ESOT 2017. The analysis confirmed that there are significant variations in the decline rates between centres and between DBD and DCD pancreases. Some of the main reasons for discarding include donor age, history, fatty appearance and BMI. The detailed findings of this analysis were reported at the previous PAG meeting.

Prospective study

All pancreases discarded between July 2016 and January 2017 were assessed by Edinburgh and Oxford. This part of the evaluation confirmed that a significant number of organs (nearly 50%) were declined due to fatty appearance. Sixty percent of the organs assessed during this study were deemed transplantable by the additional assessment and the variation between decisions was primarily related to the size of capsular injury and the interpretation of steatosis.

Intra and inter-centre variation

As the next step of this evaluation, 50 videos of discarded pancreases were created. These were developed taking into account preliminary evaluation by 5 surgeons in 5 centres. The videos have now been circulated to every pancreas transplant surgeon in the UK with some replies already received. The purpose of this evaluation is to assess the inter and intra-centre variation in the interpretation of damage and the appetite for risk in terms of accepting marginal pancreases. The aim is to define a core set of criteria where all pancreases should be accepted and a set of criteria where all pancreases will be discarded. There is a significant group in the middle where the interpretation of utilisation varies

between centres and surgeons and therefore this may allow us to explore whether these grafts could be used by considering some temporary deviations from the current allocation policy.

Recommendations

Whilst the work for the third aspect of this study is yet to be completed, from the first 2 work streams it is quite clear that there is variation in interpretation of damage and the acceptance criteria between centres.

In order to improve the utilisation of pancreases based on the above studies we proposed the following approaches:

1. In conjunction with 'explant always' policy we propose a short video evaluation of the quality of the pancreas should be undertaken at the time of retrieval. This video should be made available through the NHSBT Hub to the transplanting surgeons, enabling them to make a rapid decision on whether the pancreas should be used for solid organ transplantation. This will allow those organs that are turned down by every centre to be diverted toward islet isolation with a minimal cold ischaemic time and thus potentially increase utilisation of pancreases for islet transplantation.
2. Given the variation in acceptance criteria we propose a variation of the allocation policy and offer these organs to centres which have a higher appetite for risk for marginal solid pancreas transplantation to allow them to be transplanted and results evaluated. This approach should be closely monitored and the results should be shared with the pancreas transplant community to learn whether indeed the transplantation of the organs which are declined by some centres leads to successful outcomes.

The mechanisms for the deviation from the standard allocation policy should be defined further but as an initial step centres should be invited to register their interest for such a scheme.

Gabriel Oniscu, Working Group Chair

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