

Sensitised Patients: Prospects for Pancreas Transplantation?

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In recent years there has been a rapid increase in pancreas transplant activity in the UK. Donated pancreata are offered first to the local designated transplant centre and, if declined, offered according to the Balance of Exchange to the other designated centres. Now that transplant activity is sufficient, the Pancreas Task Force (PTF) reviewed access to transplantation for sensitised patients.

Data analysed included patients actively registered on the pancreas transplant list (1 June, 2005) and the outcome of patient registrations during calendar years 2001-04.

95/121 (79%) patients registered on the pancreas transplant list were unsensitised and the remaining 26 (21%) had varying levels of HLA antibody reaction frequency (%RF). In terms of registration outcome, the likelihood of transplant decreases with increasing levels of %RF. Waiting times to transplant were estimated and the results showed that unsensitised patients (%RF<10%) are significantly more likely to be transplanted within one year of listing compared with patients with a RF>30% (Log-rank $p=0.04$). 52% of unsensitised patients were still awaiting transplant one year after registration, compared with 68% and 78% of patients with a %RF of 10-30% and >30%, respectively.

Analysis of recipients transplanted (2001-04) showed that the majority of transplants were performed in unsensitised patients 207/240 (86%) with only 8/240 (3%) in sensitised patients with a RF>30%.

To assess the chance of finding pancreata for sensitised patients, the number of acceptable (crossmatch negative) pancreata was calculated for sensitised patients (%RF>10%) where the antibody profile was defined into unacceptable specificities. The blood group compatible, HLA acceptable pancreata count from a pool of 348 actual pancreas donors (2001-2004) was calculated. The data show that in the pool of national donors available within a four-year period, there were less than 25 acceptable donors for patients with a RF>70%.

In summary, sensitised patients wait longer and have a lower chance of a pancreas transplant than unsensitised patients. Results indicate that organ sharing is necessary to find suitable organs for these patients. Following PTF discussions two pilot schemes for organ sharing have been agreed, the results of which will inform discussion on mechanisms to increase pancreas transplantation in sensitised patients.