

**NHS BLOOD AND TRANSPLANT  
ORGAN DONATION & TRANSPLANTATION DIRECTORATE**

**MINUTES OF THE RENAL TRANSPLANT SERVICES MEETING  
HELD ON WEDNESDAY, 10 FEBRUARY 2010  
AT THE ROYAL COLLEGE OF SURGEONS, LONDON**

**PRESENT:**

Andrew Bradley ( <b>Chair</b> )	Rachel Johnson	Deborah Sage
Niaz Ahmad	Najib Kadi	John Scoble
Murat Akyol	Nicos Kessarlis	Lin Shelper
Argiris Asderakis	Nithya Krishnan	Badri Man Shrestha
Richard Baker	Janson Leung	Sanjay Sinha
Martin Barnardo	Ann-Margaret Little	Paul Sinnott
David Briggs	Sandra Lloyd	David Smillie
Henry Brown	Iain MacPhee	Henry Stephens
Laura Buist	Will McKane	Dominic Summers
Lisa Burnapp	Meeta Malik	Karra Swinbank
Sean Carey	Stephen Marks	David Taube
Vaughan Carter	Susan Martin	Craig Taylor
Brendan Clarke	David Mayer	John Taylor
Nick Davey	Derek Middleton	Jane Tizard
Sue Falvey	Lisa Mumford	David Turner
Sue Fuggle	Cristina Navarrete	Robert Vaughan
Paul Gibbs	James Neuberger	Peter Veitch
Shaun Griffin	Neal Padmanabhan	Chris Watson
Sian Griffin	Neil Parrott	Ann Yates
Abdul Hammad	Julie Renfrew	Mary Younie
Andrea Harmer	Keith Rigg	Kathy Zalewska
Alex Hudson	Peter Rowe	

**APOLOGIES:**

Jacob Akoh	Jeannie Martin	Ella Poppitt
Pam Beales	Phil Mason	Karen Quinn
Louise Collar	Sandy Mather	Lesley Rees
John Connolly	Olive McGowan	Tracey Rees
Phil Dyer	Adrian McNeil	John Richardson
John Forsythe	David Milford	Chris Rudge
Peter Friend	Richard Moore	Stan Urbaniak
Terry Horsburgh	Mike Nicholson	Fiona Wellington
Martin Howell	Mary O'Connor	
Lesley Logan	Derek O'Neill	

**ACTION**

- 1 Introduction**
  - 1.1 A Bradley outlined the agenda for the day and gave a brief summary of the topics to be covered.
- 2 Update on donation and transplantation activity in the UK**
  - 2.1 R Johnson summarised donation and transplantation activity in the UK:
    - The transplant list is continuing to increase but there is also an increase in

the numbers of both donors and transplants.

- There has been a marked change in the type of donor over the last 10 years with the number of heartbeating (HB) donors decreasing and non-heartbeating (NHB) increasing.
- Over the past 4 calendar years the make-up of the donor population has changed with the ages of donors increasing; in the past couple of years in particular more than 20% of donors are aged over 60.
- The cause of death is also changing with fewer donors dying from trauma.
- There are marked differences between centres in terms of the number of transplants from HB and NHB donors.
- Data from the Potential Donor Audit, which has now been running for five years, shows that referral rates and family consent rates for those families approached is on the increase among HB potential donors. The conversion rate is in excess of 50% of potential HB donors and 15% of potential NHB donors.
- There has been an increase in the number of living related donors and a larger increase in the number of living unrelated donors and some altruistic/paired transplants. At the end of 2009 there had been 44 paired and 32 altruistic donor transplants.
- The number of antibody incompatible transplants is increasing rapidly with 43 HLAi and 47 ABOi transplants undertaken during 2008. Outstanding data forms are required to perform up to date analysis for 2009.
- The active kidney transplant list decreased slightly at the end of 2009; in part due to the increasing number of transplants but also due to a higher rate of removals from the list among the increasing number of older patients registered.
- Waiting times by blood group have seen an overall increase from 2 to 3 years over 1999 - 2002 and 2003 – 2006, with the biggest difference seen in blood group O.
- A summary of publications in 2009 was received.
  - A paper on living donor kidney transplants is also due to be published in the next few weeks.
  - Unadjusted and risk-adjusted analyses show no effect of donor-recipient CMV match on graft or patient outcome.
  - After adjustment for significant factors there is no difference between related and unrelated graft survival in living donor kidney transplants and no significant influence of HLA mismatch.
- Centre specific 5 year graft survival and patient survival for both living and deceased donor transplantation is published on the ODT website.

The overall rate for pre-emptive transplantation is 7% in deceased donor transplants from 2006 to 2008. Among live donor transplants the rate is much higher with variation ranging from 15 – 45% across centres.

### **3 Paired and altruistic donation**

#### **3.1 Update on activity**

By the end of 2009 there were 44 paired and 32 altruistic transplants undertaken and, during January 2010 a further 2 altruistic transplants and 2 x 3-way paired transplants. An increasing proportion of the patients enrolled on the paired donation programme are both blood group and HLA incompatible.

#### **3.2 Paired Donation Workshop – 30 September 2009**

A Bradley summarised the key outcomes from the National Paired Donation Workshop held in September:

- Recognition of the need to manage the expectations of patients
- A level of commitment from the pairs and centres when entering the

scheme

- The cross-matching process

Centres need to acknowledge that, having done the work-up for these patients, a certain percentage of these will not go ahead. Centres also need to have the infrastructure in place to ensure that transplants do take place and within an acceptable time period.

In the Netherlands, the transplant centres use one central laboratory for transplantation. This would not be practical within the UK as there are many more transplant centres. The number of positive cross-matches in the UK has decreased more recently compared to the high number identified in the early days. The situation has improved as patients' antibody profiles are being kept up to date. There are no moves to centralise the laboratory function within the UK. Discussion at the workshop did highlight a disparity with the number of blood samples being requested and the way in which these are acceptable to the laboratories. Work is underway to publish laboratories' requirements.

R Johnson acknowledged the work of L Shelper at ODT as the paired/pooled scheme co-ordinator, as well as the help of D Manlove and P Biro at Glasgow University for their work on the matching algorithms used in the scheme.

Anecdotally, there appears to be a good response to national and local publicity on organ donation. Once the current organ transplant advertising campaign is finished NHSBT will look at working with clinicians to assess what resources can be provided at a local level.

M Akyol suggested the establishment of a national register of those patients coming forward as potential altruistic donors. Some patients are being refused following psychiatric assessment and then coming forward again at a different centre.

#### **4 2006 Kidney Allocation Scheme**

- 4.1 R Johnson reported on the impact of the 2006 National Kidney Allocation Scheme and acknowledged the work of L Mumford at NHSBT. To achieve a smooth transition from the 1998 scheme there was a period of 'phasing in', which has now been completed. The scheme is monitored on an ongoing basis to ensure that the objectives of the scheme are met and to identify any issues that require a modification to the scheme.

Across all centres approximately 15% of kidneys are allocated through centre choice, usually as a result of positive cross-match or a patient being unfit for transplant. The data on positive cross-match results for the last calendar year is due to be audited shortly, which will give an insight into the reason for a positive cross-match in these cases.

Work is underway, for the next meeting of the Kidney Advisory Group, to consider changing the calculated reaction frequency for HSP patients in order to give this group of patients increased priority.

#### **5 Non-heartbeating donation:**

##### **5.1 Activity and outcomes**

D Summers, a trainee surgeon working as a clinical research fellow with NHSBT, gave a presentation on activity and outcomes in non-heartbeating donation. In summary:

- There is no difference in graft survival or function between kidneys from heartbeating and non-heartbeating donors.
- There appears to be potential to further increase the number of non-

heartbeating donors.

- CIT appears to have more of an influence on non-heartbeating than on heartbeating donation, although it is difficult to be certain on data available. This point may have implications on how these organs are allocated.

## 5.2 **Perfusion study**

C Watson gave a presentation on two randomised controlled trials of cold storage of non-heartbeating donor kidneys. These were trials of simple cold storage versus machine perfusion and resulted in NICE declaring that both methods were recommended for cold storage of kidneys. There may be a benefit of using machine perfusion in terms of longer ischaemic times although this cannot be proven. Following discussion, one suggestion put forward was that the finance required for machine perfusion might be better invested in reducing CIT by working with Trusts to make more theatres available at night.

## 6 **ABO incompatible transplantation**

6.1 D Taube presented data from the West London programme on ABO incompatible transplantation. In this particular area of London there is a large population on dialysis with a very high Indo-Asian and Afro-Caribbean population who are blood group O or B. Innovations in ABOi transplantation at the West London include steroid sparing and the use of Campath induction instead of Rituximab, Daclizumab and MMF. ABOi renal transplantation with Campath induction and Tacrolimus monotherapy is a logical extension of the ABO compatible programme.

D Taube outlined the Hopkins Algorithm for ABOi transplantation which considers whether paired donation or ABOi transplantation is more appropriate for a particular patient and concluded that ABOi transplantation is feasible, with increasingly minimalist immunosuppression, using a cut off titre of 1/256. 25% of patients experience AMR due to HLA DSAs rather than blood group antibody. Paired donation should be considered for patients with a titre >1/256 and preformed DSAs.

## 7 **Commissioning of renal transplant services and H & I services for transplantation**

7.1 A project to develop robust reference costs for kidney transplantation was undertaken during 2009. J Renfrew presented an update on the project and on the costing and tariff development. This project does not apply to either paediatric recipients or to donors. With input from clinicians, NHS kidneycare developed the project to look at the cost of kidney transplantation and how these costings could then be used towards the development of tariffs. The starting point for the project was the use of national reference cost information with particular focus on the main recipient kidney transplant HRGs (a national classification for commissioning costing purposes). This revealed a large variation in how different elements of the pathway are recorded and coded, as well as differences in the way organisations cost and provide the service. A detailed report with outputs from the project and recommendations for ways forward is due to be published late February 2010. All centres performing transplants will be informed as soon as the report is available.

## 8 **National organ retrieval service**

8.1. D Mayer updated attendees on the new arrangements for the organ retrieval service which will come into force on 1<sup>st</sup> April 2010.

In response to a query on stand-off times there is a joint initiative underway between the Surgeons Chapter of the BTS and NHSBT to define standards for

stand-off times. The stand-off time from April 2010 is set at a minimum of two hours although there is room for local flexibility.

If the local team wish to send a surgeon to assess an organ that is being retrieved from a donor by the NORS retrieval team they may do so providing they don't delay the retrieval process. Arrangements for the allocation of kidneys retrieved by the NORS retrieval team from a local non-heartbeating donor will remain as at present, ie the organ will remain with the local centre; however this arrangement is to be reviewed by KAG.

## **9 Patient consent form**

- 9.1 Recent publicity about the risks of solid organ transplantation highlighted the need for a review of the consent process surrounding the procedure. The BTS and NHSBT have agreed to form a working party to provide guidance to transplant centres on this subject as there are currently wide variations in practice. Any comments relating to the development of a template patient consent form should be forwarded to either C Watson or J Neuberger.

## **10 High risk living donor transplantation**

- 10.1 J Scoble gave a presentation on experience with high risk living donor transplantation at Guy's Hospital. Experience from the Mayo Clinic in the USA is that transplanting high-risk recipients from living donors is beneficial to the patient although centres performing these high risk transplants are likely to have worse outcome data. G Oniscu is conducting a research study into high risk recipients of living donor kidney transplantation and would welcome input from centres performing these transplants.

In the UK, transplant outcomes in renal centres are monitored using CUSUM methods, monitoring current outcomes against past performance based on less high risk transplants. It is not desirable to penalise centres performing high risk transplants or to encourage risk averse behaviour, so data requirements to adjust appropriately are being considered.

## **11 Transplant listing criteria**

- 11.1 In the light of potential judicial review and for compliance with current and proposed legislation, NHSBT has sought legal advice on its patient selection and organ allocation policies. Work is underway to rewrite these policies and there is a requirement for a revision of transplant listing criteria for all types of organ transplantation, in conjunction with the BTS, to prevent inequity between centres. The framework and revised policies will need to establish the clinical basis for any differences in the way in which different groups may be treated.

The selection and allocation policies are also being discussed with patients' support groups for all solid organ transplants in order to ensure that their views are taken into consideration.

NHSBT will be presenting an update on the review of selection and allocation policies from a legal point of view at the forthcoming BTS Annual Congress.

## **12 Any other business**

- 12.1 There were no further items of business.