Cold Pulsatile Perfusion in Asystolic donor Renal Transplantation

Submission date 31/03/2005	Recruitment status No longer recruiting	[X] Prospectively registered [] Protocol
Registration date 10/05/2005	Overall study status Completed	 [] Statistical analysis plan [X] Results
Last Edited 04/02/2016	Condition category Surgery	Individual participant data

Plain English summary of protocol

Background and study aims

Kidneys from deceased organ donors need to be preserved out of the body to allow time for them to be allocated to a recipient, transported to the recipient centre, and for the recipient to be brought in and prepared for surgery. Typically this takes 12 to 18 hours. Traditionally preservation has been achieved by simply flushing the kidneys with a special preservation solution and placing them in a container of ice. An alternative is to put the kidney on a machine to continuously flush preservation fluid through the kidney until it is time to transplant the kidney into a recipient. The aim of this study is to see which method is superior for kidneys donated by deceased organ donors after circulatory death (DCD).

Who can participate?

Patients aged 18 and over undergoing transplantation of a kidney from a deceased organ donor.

What does the study involve?

Donated kidneys are randomly allocated such that one kidney of a pair is placed on the perfusion machine while the other is flushed and stored in ice until transplantation. Both kidneys of a pair are transplanted at the same centre. The transplant recipients are then followed up to see whether the kidney worked immediately or whether there was a delay in it starting normal function – around half of kidneys from DCD donors do not work immediately and the recipient needs to continue on dialysis until it does work.

What are the possible benefits and risks of participating? Not provided at time of registration

Where is the study run from? Addenbrooke's Hospital (UK)

When is the study starting and how long is it expected to run for? August 2006 to February 2009

Who is funding the study? Novartis Pharmaceuticals and Organ Recovery Systems Who is the main contact? Mr Christopher Watson

Contact information

Type(s) Scientific

Contact name Mr Christopher Watson

Contact details Department of Surgery Box 202 Addenbrooke's Hospital Hills Road Cambridge United Kingdom CB2 2QQ

Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers N/A

Study information

Scientific Title

A multicentre randomised controlled study of cold Pulsatile Perfusion in Asystolic donor Renal Transplantation

Acronym PPART

Study objectives

Primary objective: To evaluate the effect of machine perfusion on the incidence of primary function post renal transplantation.

Secondary objective: To evaluate the cost effectiveness of machine perfusion in asystolic donor kidney

transplantation.

Ethics approval required

Old ethics approval format

Ethics approval(s)

The London Research Ethics Committee (REC), 02/02/2006, ref: 05/MRE02/74). Last ethics progress report dated 05/03/2008: favourable ethical opinion given 19/03/2008.

Study design Randomised controlled trial

Primary study design Interventional

Secondary study design Randomised controlled trial

Study setting(s) Hospital

Study type(s) Treatment

Participant information sheet Not available in web format, please use contact details to request a patient information sheet

Health condition(s) or problem(s) studied

Kidney preservation prior to transplantation

Interventions

Machine perfusion of the kidney before transplantation versus simple cold storage

Intervention Type

Procedure/Surgery

Phase Not Applicable

Primary outcome measure

- 1. Incidence of delayed graft function (need for dialysis in the first 7 days)
- 2. Calculated glomerular filtration rate (GFR) (MDRD technique) at 7 days

Secondary outcome measures

- 1. Patient survival
- 2. Graft survival
- 3. Renal function measured using calculated GFR
- 4. Never function rate
- 5. Time to last dialysis post transplant
- 6. Acute rejection incidence
- 7. Cost comparison at one and five years

Overall study start date

18/08/2006

Completion date 28/02/2009

Eligibility

Key inclusion criteria

Subjects (aged 18 years and over, either gender) undergoing transplantation of a kidney from a non-heart-beating (asystolic) cadaver organ donor.

Participant type(s) Patient

Age group Adult

Lower age limit 18 Years

Sex Both

Target number of participants 205

Key exclusion criteria

Added 24/02/2009: 1. Lack of informed consent 2. Positive cross-match 3. Previous recipient of non-renal transplant

Date of first enrolment 18/08/2006

Date of final enrolment 28/02/2009

Locations

Countries of recruitment England

United Kingdom

Study participating centre Addenbrooke's Hospital Cambridge United Kingdom CB2 2QQ

Sponsor information

Organisation Addenbrooke's Hospital (UK)

Sponsor details Hills Road Cambridge England United Kingdom CB2 2QQ

Sponsor type Hospital/treatment centre

Website http://www.cuh.org.uk/addenbrookes/addenbrookes_index.html

ROR https://ror.org/055vbxf86

Funder(s)

Funder type Hospital/treatment centre

Funder Name Addenbrooke's Hospital (UK) - transplant research fund

Results and Publications

Publication and dissemination plan Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

IPD sharing plan summary Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/09/2010		Yes	No