MINUTES of
DCD HEARTS WORKING GROUP MEETING
Held on Wednesday 5 December 2018

Attendees

Jayan Parameshwar (JP)  Co-Chair
Elizabeth Murphy (EM)  Co-Chair
Nawwar Al-Attar (NAA)  Golden Jubilee Hospital
Liz Armstrong (LA)  Service Development NHSBT
Chris Bowles (CB)  Harefield Hospital
Tanveer Butt (TB)  Freeman Hospital
Pedro Catarino (PC)  Royal Papworth Hospital
John Dark (JD)  Senior NHSBT Clinician
Jeanette Foley (JFo)  Clinical Governance, NHSBT
John Forsythe (JF)  Associate Medical Director NHSBT
Dale Gardiner (DG)  National Clinical Lead Organ Donation
Diana Garcia-Saez (DGS)  Harefield Hospital
Stephen Large (SL)  Royal Papworth Hospital (by invitation)
Debbie Macklam (DM)  Commissioning, NHSBT
Simon Messer (SM)  Royal Papworth Hospital (by invitation)
Gavin Pettigrew (GP)  Abdominal Representative
B.C. Ramesh (BCR)  Freeman Hospital
Sally Rushton (SR)  Statistics & Clinical Studies NHSBT
Marian Ryan (MR)  Regional Manager NHSBT
Jacob Simmonds (JS)  Great Ormond Street Hospital
Angus Vincent (AV)  Regional Clinical Lead Organ Donation
Rajamiyer Venkateswaren (RV)  Wythenshawe Hospital

Apologies

Asif Hasan  Freeman Hospital
Jorge Mascaro  University Hospital Birmingham
Hannah Tolley (HT)  RINTAG Secretariat
Sarah Watson (SW)  NHS England

In attendance

Heather Crocombe (HC)  Clinical Support Services NHSBT
Lizzie Abbot-Davies (LAD)  Clinical Support Services NHSBT

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<tr>
<th>No.</th>
<th>Subject</th>
<th>Action</th>
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<tr>
<td>1</td>
<td>Welcome and Introductions</td>
<td>JP welcomed everyone to the meeting. Introductions were made around the table. A couple of changes need to be made to the DCD Hearts representatives list to ensure the correct people are invited to meetings and receive papers:</td>
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1
• Andre Simon will no longer be attending meetings, Diana Garcia-Saez is the Harefield representative for future meetings, and Chris Bowles will also attend some meetings.
• Asif Hasan’s name should be left on the membership list, but he will gradually hand over membership to Tanveer Butt and B C Ramesh

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<th>HC to amend list</th>
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2 Terms of Reference of the Group
The description of the first item in “Purpose and Role of the DCD Hearts Working Group” section is “To advise on DCD heart transplantation developments”. Group agreed this should stay as is.

Data collection from Centres is currently still quite patchy. Centres need to send data back to DCD Hearts Group meetings, after which we can decide how data is collated and presented.

3 Minutes of the last Meeting and matters arising
The Minutes of the last meeting were deemed to be a true and accurate reflection of that Meeting. No changes required.

4 Update on National DCD Heart Activity
SR presented a paper providing a national picture on DCD heart activity and patient outcomes from 1 February 2015 to 30 September 2018. Members were asked to review the contents of the paper.

Key Results:
• 118 DCD heart retrieval attendances took place
• 79 were proceeding
• 71 hearts successfully transplanted
• Activity varied throughout period
• Transplants performed by four centres
• Retrieved but not transplanted rate for DCD hearts was 10% (significantly higher than the retrieved but not transplanted rate for hearts from DBDs aged 16-50 which was 4%)

Post-Transplant Outcomes
• 10 recorded deaths overall (one within 30 days, 8 between 30 days and one year, one after first year post-transplant)
• One-year transplant survival rate 83.9% calculated by Kaplan-Meier patient survival function
Offering Data

- In the last financial year, offering information recorded by ODT Hub Operations suggests that 122 DCD hearts had been offered from 8 out of 12 SNOD regions.
- After 118 retrieval runs we have a lot of data to be collated. DCD Hearts Working Group now needs to look at how DCD retrieval impacts on other organs.
- SR stressed that participating Centres must submit a DCD Heart Supplementary Record for non-proceeding retrievals as well as proceeding. One form must be completed for each DCD attendance, even if the heart isn’t retrieved. If a heart is offered and centre attends with the intention of retrieving the heart, reports need to be submitted whatever the outcome.

Reasons for Non-Use

**Harefield**
- Continuous ventricular fibrillation after reperfusion on OCS
- Poor function on OCS

**Papworth**
- Rising lactate level
- Function
- Donation ceased due to donor pancreatic tumour histology results
- Heart hypertrophy, enlarged aorta
- Angio performed - coronary artery disease noted

**Manchester**
- Function (wall motion abnormality, poor contractility, poor lactate profile)

JP made the point that figures/activity will fluctuate dependant on funding – charitable funding is not constantly available.

5 Updates since last Meeting:

**Harefield**
15 DCD hearts done, 7 during this financial year. All organs successfully transplanted. Three DCD surgeons now at Harefield, three more surgeons to be signed off as competent in the next 3-6 months.

**Wythenshawe**
One heart retrieved and transplanted. Two visits to potential donors which did not proceed. Problems with logistics, staff shortages, unable to staff a DCD retrieval. RV is currently “the retrieval surgeon” so the
system is reliant on one person. No funding so can’t pay for people to go out when the centres is not “on call”.

**Papworth**
51 heart transplants, 7 in this financial year
Main factor is recipient waiting list
PC advised that many of his team go out without payment
18 NRP at Papworth

**Newcastle**
Final clearance received Oct 2018
System in place, waiting to start. Problems with pool of potential donors. 70 people on waiting list, only 6 have DCD consented.
Funding is secured for next financial year. Staff are fully trained.

**Birmingham**
No progress made yet in starting DCD Heart programme

**Scotland**
Almost there in terms of setting up programme. Once authorised to start DCD programme, NAA said he would like to talk to GO/Edinburgh about a collaboration between Glasgow and Edinburgh.

**Great Ormond Street**
No progress made as they have not been allocated funding by the hospital.

The point was made that there does seem to be a North/South divide when it comes to withdrawals in theatre.

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### 6 Protocols

**TA-NRP**
Clearly, we want to ensure that the TA-NRP protocol is correct and available as an aide for medical staff. The protocol has been revised to ensure there is no cerebral perfusion. Early clamping of the descending aorta should accelerate abdominal retrieval surgery. Once clamp is in place on descending aorta, abdominal team can start.

“Duration” rather than “length” to be used in Donor Pathway. CB to amend.

There was a case in Addenbrookes recently where an aberrant right subclavian artery was identified. The descending aorta was clamped in error resulting in the loss of two kidneys and the heart. Needs to go through usual governance investigation channels. Lessons learned need
to be spread widely. This will be investigated via the ODT Clinical Governance mechanism.

If changes are made to the protocol these must be relayed to the statistics team so that data analysis can take this into account.

Protocol may evolve due to ongoing research, alterations to protocol should only be made after appropriate discussion with the rest of the group involved in agreeing protocols.

There needs to be clarity for the SNODs as to what exactly each hospital is doing with regards to carrying out TA-NRP. There are currently only three hospitals approved for this, all in the Eastern Region. Extending TA-NRP to other hospitals will only be done via Dale Gardiner and the SNOD management.

**DPP + NRP**
One case of abdominal DPP and NRP performed together by DGS and Chris Watson. No mechanical support required, good patient recovery at 6 months

**DPP**
We are world leaders in DCD heart transplants, we should define language. Maybe move away from “procurement” and use “retrieval” or “recovery”.

GO: Organ “recovery” is beginning to be more commonly used but may be slightly misleading.

Protocols were only circulated shortly ahead of today’s meeting, so members may not have had chance to read them thoroughly. JP asked attendees to read protocols and come back with any comments or amendments.

Three proctored retrievals are still required for competency. There is nothing to stop any teams going to watch retrievals and to be part of a retrieval run but these will not constitute proctored runs.

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7 Developing Programmes Updates

Freeman
Golden Jubilee
Birmingham
Please see point 5 above.

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<th>Governance Issues</th>
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<td><strong>Allocation of DCD Hearts if the active centres have no suitable recipients</strong></td>
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LA presented a paper to clarify the position surrounding DCD hearts being offered outside zones.

**Key Points:**
- Currently there are three cardiothoracic centres in the UK with competent signed-off surgeons able to undertake DCD heart retrieval (Wythenshawe, Harefield, Papworth). Freeman is currently being proctored whilst competence is achieved.
- DCD heart donors offered to zonal DCD retrieval team followed by two other signed off centres per SOP 5139.
- Queen Elizabeth, Golden Jubilee and Great Ormond Street will not be offered DCD hearts.
- DCD heart retrieval not a commissioned service. NHSBT cover cost of donation, referral, retrieval and road transport.
- No current Protocol is in place for air travel – either for a retrieval team to travel or for the heart to be flown to the team. Protocol states no flights. Can travel by road even if a long journey.
- Centres fund consumables and additional perfusion staff.
- DCD hearts should be retrieved and transplanted to a recipient on the retrieving centre’s waiting list.
- If there is an offer from outside the current zones, whichever team attends needs to be well versed in what exactly they are competent to do, whether it is TA-NRP or DPP, and each team needs to work together for joint retrieval. Needs to be discussed and decided in advance of team heading off.
- NAA made the point that for his team to drive potentially 5 hours to retrieve and 5 hours back would be both unacceptable and unsafe. Restricting his team to road-only travel will cause major issues.
- There is no issue with surgeons from a hospital undergoing training travelling to a proctor’s centre to observe a DCD transplant, but this will be in addition to a full proctored run which involves the whole team. JF has no problem with this in principle.

**Additional comments following presentation of paper:**

DCD hearts
December 2018 Work
**PC:** A donor who has made the brave decision to offer their organ deserves that we do everything possible to ensure that organ is retrieved. Sometimes we create “paper barriers” to donation.

**JF:** Of course, we want to ensure that every possible donation happens, but we need to take care and set up a robust process to avoid problems.

### DCD heart retrieval and transplantation Governance
- One case was discussed, and the Clinical Governance Team are currently investigating and will share findings and learning. It was discussed whether a small sub-group should be set up to investigate incidents, however it was subsequently agreed that any reported incident will be investigated in a standard fashion by the Clinical Governance Team. Any decisions to inform the HTA will be made in the usual way, but early and detailed feedback will be given to the subgroup. The subgroup will then extend sharing to include representation from all active and potentially active centres. This will ensure prompt dissemination of learning from the event yet maintain the standard processes.

### Commissioning Issues
The current agreement is that a team retrieving a DCD heart will also retrieve lungs. Some teams have difficulty fulfilling this requirement when the retrieval team is not on call. RV said that Wythenshawe are unable to mount a full team in an off week and cannot therefore perform a lung retrieval, on two occasions the Birmingham team have retrieved the lungs while he retrieved the heart. There were no problems with the two teams working together. NHSBT are not willing to send two teams out, at present a tariff of £7000 is paid to a team if they retrieve in a week when they are not on call (in addition to transport costs).

**JD:** It may be the case that we do with DCD what we currently do with paediatric retrievals, ie. to have two or three teams with one always available for DCD retrievals. This in theory will reduce the number of DCD retrievals done by inexperienced teams but at least then there would be fewer hearts declined through lack of retrieval resources. However there will be no change till further discussion takes place.

If two teams attend, one for heart and one for lungs, as happens in Europe, would this cause a problem? RV reiterated that he has done two transplants with the Birmingham team retrieving lungs and there were no problems. PC stated that we as a country are very efficient in sending one team to retrieve both organs. RV stressed that in an unfunded system such as DCD hearts, it is almost impossible to keep a
team on standby, if DCD transplants were commissioned and funded the situation would change.

Amendments to NORS, considering ever changing technologies, might be called for. This is beyond the remit of DCD Hearts Working Group and should be discussed in a different forum.

**DCD heart mentoring/proctoring reimbursement**

DM has been working with a group from each of the centres to look at a mentoring proposal and has pulled together a paper following those conversations. DM to take this paper to SMT to see if we can secure any funding for mentoring. It was difficult to agree a price that all parties were happy with. JF advised that he is happy to take this to SMT as a new funding proposal. DM wants feedback from attendees and will then take a succinct paper back to SMT next week.

TransMedics sponsored proctoring at Wythenshawe in the hope that DCD hearts would be commissioned and funded.

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<th>Any Other Business</th>
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<td>JF: There is a standing sub-group of the Board called the Transplant Policy Review Committee – to ensure that there is Board oversight over policies and algorithms within NHSBT. Where organs are declined solely for reasons of resource, TPRC has agreed that this would be communicated to a patient who is thereby denied a transplant. Patient groups always say they would want to know that if an organ for a named patient is not retrieved purely due to problems with resource.</td>
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**Publication of Protocols**

SRL said there many requests nationally and internationally for our Protocols. Where do we stand regarding sharing these? JP advised that he can’t see a problem with sharing protocols with anyone. SRL is keen on getting the protocols published, there was general agreement with this.

**Date of next meeting:** 22 May 2019, QEII Building, Coram Campus, Brunswick Square, London