RINTAG

2nd October, 2018

DCD Heart Working Group - Report to RINTAG/ CTAG

1. Status - Public

2. Executive Summary

In 2017 NHSBT submitted a business case to the four UK Health Departments to support substantive funding and delivery of a UK wide DCD Heart Retrieval Service. It was unanimously agreed that this service development could not be funded at the time. The business case was of a high standard, but, due to the financial restraints across the NHS, the high costs of consumables could not be justified.

3 centres in the UK, have established DCD heart programmes. The remaining centres are in the process of progressing DCD heart programmes.

Since June 2017 ongoing work in relation to DCD Heart Retrieval has been monitored through RINTAG (Research, Innovation and Novel Technologies Advisory. Group). In 2018 a DCD Heart Working Group was established as a sub group of RINTAG. The DCD Heart Working Group will report and make recommendations to RINTAG.

3. Action Requested

Note the contents of the DCD Heart Working Group Report

4. Background

The inaugural DCD Heart working group meeting took place in June 2018. Terms of reference of the group were agreed and include the purpose/ role of the group:

- Advise RINTAG on DCD heart transplantation developments
- To support Cardiothoracic Transplant Units wishing to develop a DCD heart transplantation programme
- Share experience with DCD heart transplantation
- To ensure DCD heart retrieval and transplantation governance
- Consider research, innovation and other service developments that may impact on DCD heart transplantation in order to coordinate the smooth implementation of these developments, reduce duplication, avoid potential conflicts and ensure a sustained commitment to developing DCD heart transplantation.
- Explore and develop a strategy for long term funding pending technological developments and procedural cost changes
- Evaluation of operational, governance and financial impacts of any proposed developments put forward by the Group for consideration by RINTAG/SMT

<u>Individual Centre Updates – DCD Heart Transplantation Programmes</u>

Wythenshawe Hospital

- Total number of transplants since commencement of programme: 6
- Concerns raised that the increased costs of a DCD heart programme (retrieval/ transplant) is not recognised in current funding provided by NHS England
- Consumables funded by charitable donations, 3 remaining

Harefield Hospital

- Total number of transplants since commencement of programme: 11
- Some small/ female potential donors are declined as the majority of patients on waiting list are large/ males

Papworth Hospital

- Total number of transplants since commencement of programme: 45
- 2 retrievals (Papworth Hospital), have been performed without the use of the Organ Care System (OCS), NRP alone. Short ischaemic times given the co – location of donor and recipient
- Consumables in the past have been funded by charitable donations, charities have now advised this programme can no longer be classed as research

Individual Centre Updates – Developing DCD Heart Transplantation Programmes

University Hospital Birmingham

- Team have undertaken OCS training
- 0 retrievals using the OCS machine

Golden Jubilee Hospital

- Team have undertaken OCS training
- 3 DBD retrievals using the OCS machine
- Will present at NRG, October 2018

Freeman Hospital

- Team have undertaken OCS training
- DBD retrievals undertaken with OCS
- DCD protocol presented to NRG (2017), updated proposal ready for re submission to NRG
- Newcastle have performed 1 DCD heart transplant with a heart imported from Papworth

Great Ormond Street Hospital

Early discussions underway with Papworth to retrieve DCD hearts from Paediatric Donors in the future. Noted by the group that the current OCS machine is not suitable for small heart perfusion and this is currently a limiting factor in establishing a paediatric DCD heart retrieval/ transplant programme. At present the team have

been advised that there is no funding for the OCS to be used. Until such time as funding is available GOSH will not be able to start a DCD programme.

Heart Retrieval Governance

In October 2017, a paper was presented to RINTAG providing an overview of the DCD heart process that a NORS Team should follow if they wished to establish a DCD heart retrieval programme. The paper identified 3 areas of governance that required further discussion including:

- The evidence required that competence has been reached
- The process of signing off surgeons and teams
- The process of maintaining competence

A process to achieve the above was agreed by the DCD heart working group and consists of the completion of an on line survey by surgeons training for DCD heart retrieval using an OCS machine after at least three proctored retrievals. Competency subsequently is confirmed with the proctor.

Discussions around the costs of proctoring resulted in an action for a paper to be produced outlining an operational proctoring process, identifying costs for the proctoring of the 3 remaining teams to be submitted to RINTAG/ SMT for consideration.

TA - NRP Protocol

Following discussion, draft TA – NRP protocol to be finalised and presented at NRG, October 2018. Agreed a DPP protocol would also be supportive, all units with a DCD heart retrieval programme have a DPP protocol however agreed a core DPP protocol would be of value.

Cardiothoracic DCD Heart Activity (1st February 2015 – 28th February 2018)

Key points:

- 65 DCD hearts retrieved in the period
- 57 hearts successfully transplanted
- 8 DCD hearts retrieved but not used.
- Of the 65 DCD heart donors, all but two donated at least one other organ, 11 donated lungs and at least one abdominal organ, 52 donated at least one abdominal organ but not their lungs.
- More data is needed on the effect of DCD heart retrieval on donor lungs (separately for NRP and DPP protocols).

Commissioning Update

Current position

NHS has agreed to support DCD hearts by covering the cost of donation, referral, retrieval by a signed off NORS team, road transport and transplant costs. At present Centres must find alternative funds to cover the cost of consumables and any additional staffing over and above the NORS Team but this is not a sustainable position.

Process for NORS Teams to become approved DCD heart retrieval team

As previously agreed, it should be noted that there are only three cardiothoracic retrieval teams on-call at any one time and there is potential for DCD transplantation to impact on commissioned retrieval services.

Allocation of DCD hearts

On occasions when a potential DCD heart donor is identified and there are no suitable recipients at the DCD 'Zonal Team' centre, the remaining 2 DCD centres are contacted to advise as to whether there are suitable recipients. There have been occasions whereby there have been no suitable recipients at all 3 centres and other centres have been contacted to discuss if there are suitable recipients for the potential DCD heart.

The DCD Heart Working Group agreed that a centre developing a DCD Heart Transplantation Programme could be offered these hearts if they had previously consented patients for the procedure. It was also acknowledged that should DCD hearts be retrieved by a centre and transplanted in another centre there may be additional costs associated that need to be considered. An action as a result of discussions was agreed to devise a process to be undertaken in the event of Centres with a DCD Heart Programme not having a suitable recipient for a potential DCD heart donor, to be presented at next DCD Heart Working group meeting in December for discussion.

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