NHS Blood and Transplant

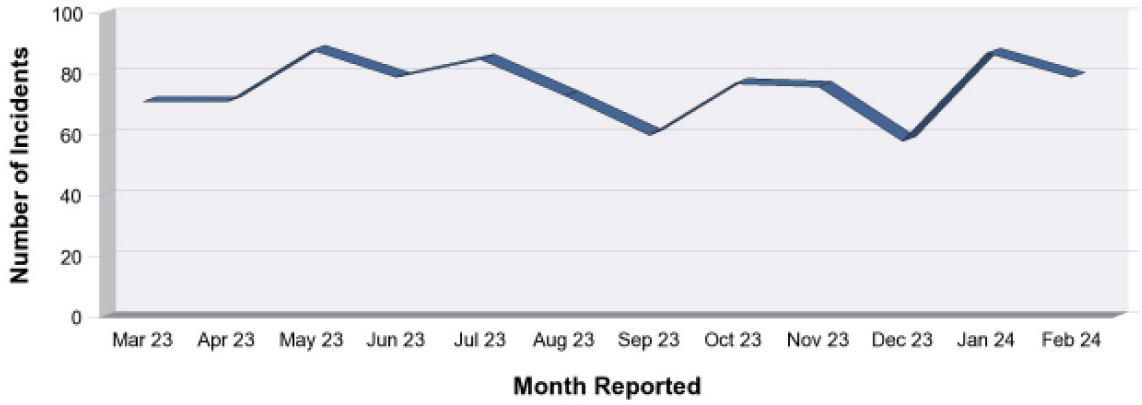
Retrieval Advisory Group (RAG)
ODT Clinical Governance Report May 2024

1. Status – Confidential

2. Action Requested

RAG are requested to note this report and share with colleagues as appropriate.

3. Data



4. Learning from reports

Date reported: 17TH June 2023
Reference: INC 7137

What was reported
Whilst a DBD heart was packaged and in the transport box, there was a delay in it leaving theatres.
Investigation findings
Following this case, it was identified that there was an apparent trend regarding delays to DBD hearts leaving theatres. A review of 7 reported cases over a 5-month period was undertaken. NHSBT Commissioning provide a quality standard target time for retrieval teams to ensure hearts are on ice and in the transport box within 30 minutes of cross-clamp. This timing is not currently monitored. The cases were reviewed, and it was found that in most these timings were adhered to. A deeper review identified that: • There was no common theme with retrieval teams involved, the cases spanned most NORS teams. • In all cases the heart was in the box within 30 minutes of cross-clamp as per the quality standard, however there was additional time waiting

for the hearts to leave theatre.
- The delay to the heart leaving theatre was due to delays in obtaining spleen and lymph samples and/or paperwork completion.
- There are no guidelines for the time it should take for the heart to leave theatre from cross-clamp.

A subsequent audit was undertaken to establish usual timings for hearts to leave theatre from cross-clamp. In most cases this was achieved within 30 minutes.

Learning

Following discussion with NHSBT Commissioning and NHSBT Associate UK Clinical Lead - Organ retrieval, two areas were highlighted for further review:
- Defining an agreed target time for hearts to leave theatre following cross-clamp.
- A review to address delays due to spleen, lymph retrieval and paperwork.

These have taken place with the appropriate stakeholders and the following agreements have been made:
- 30 minutes is the aspirational time for heart to leave theatre following cross-clamp.
- Crossmatch material (lymph nodes and spleen) is not required to accompany the hearts in adult donors. This is to be replaced with a sample of whole blood taken before cross-clamp.

Date reported: 21st August 2023
Reference: ODT-INC 7303

What was reported

Multi-organ DCD retrieval with abdominal insitu normothermic regional perfusion (A-NRP). When the team were midway through the heart excision process, several minutes after blood drainage it was identified that the Organ Care System (OCS) module had been primed incorrectly with approximately 200-300mls of ‘maintenance’ solution instead of the ‘priming’ solution. The DCD heart process was abandoned due to this.

Investigation findings

As soon as the OCS operator became aware that the incorrect fluid had been used, they informed the National Organ Retrieval Service (NORS) cardiothoracic (CT) Lead Retrieval Surgeon. This necessitated careful consideration of the best course of action. The initial inclination was to drain more blood to correct the circuit's priming, however this was unfeasible due to the ongoing A-NRP procedure, which was already in progress. Following the addition of donor blood to the circuit a ‘prime’ blood sample was taken.

The arterial blood gas (ABG) analysis showed elevated calcium and glucose levels. Despite taking advice from the NORS Clinical Lead back at base and trouble-shooting to attempt to lower these abnormal levels, they remained

elevated on subsequent ABGs. The accepting implanting CT surgeon was informed immediately. The heart was subsequently declined for transplant based on the ABG results which was secondary to the OCS module priming solution error. A Duty of Candour letter was sent by NHSBT on behalf of the CT NORS centre to the intended heart recipient via the clinical team at the centre. Under NHSBT's Assisted Function role, this case was reported to the HTA as a Serious Adverse Event (SAE) and a Serious Adverse Reaction (SAR).
Learning
As per usual process there was a timely, detailed debrief of this retrieval with both the abdominal and the CT NORS teams led by the NHSBT Retrieval Leads. There was a wide-ranging discussion with some actions identified by the CT NORS team to mitigate the chances of this scenario occurring again: 1. The CT NORS Team OCS operators are to use colour coded labels to ensure the bags of OCS priming solution and saline are easier to distinguish. 2. The CT NORS Team are liaising with the OCS manufacturer to see if the labelling on the OCS priming solution can be improved. Sharing these actions for wider consideration within CT centres, specifically action 1.

5. Trends noted

There have been a number of reports relating to NORS capacity in relation to DCD heart retrieval. This has been reviewed and shared with the Commissioning team for inclusion as part of a wider DCD Heart service review under DCD HOG and CTAG.

6. For information

January 2024 edition of Cautionary Tales is now available online:
https://www.odt.nhs.uk/odt-structures-and-standards/governance-and-quality/shared-learning/

7. Requirement from RAG

Note the findings within this report.

Author

Jeanette Foley
Deputy Chief Nurse