

Clinical Governance report - CTAGH(17)02**April 2017**

In a 6 month period, September 2016 to March 2017, there were 49 reported Incidents where the Heart was mentioned as one of the Key words. This is completely in line with other recent reports– in the previous equivalent *six* months there were 49 Incidents, and in the 5 months leading up to October 2016 there were 45.

32 of the Incidents actually involved the heart – in the other 17, the heart was a bystander for an issue with another organ

Heart Valves

6 Incidents were related to problems with heart valves, either when the lungs alone were being retrieved, or when the heart itself was being taken for tissue only. There were two instances of the pulmonary artery being cut short when lungs but not heart were retrieved. There were also two complaints from a valve bank about sutures in pulmonary arteries

Recipient teams are reminded of the agreement to divide the pulmonary artery distally when the lungs but not the heart are retrieved – see Appendix, a documented shared with every CTAG since the last century

Tissue banks have also been reminded that from time to time, a pulmonary artery will have a sutured cannulation site, and this should not bar subsequent use; it does not represent damage.

Of the remaining **26** real “**Heart**” Incidents:

Donation - 6 There were two early mobilization of retrieval teams with waiting times of 3 and 4 hours. This issue should recede as NORS teams are mobilized by the Duty Office. There were two instances of suboptimal communication, but with no eventual impact.

Retrieval - 11 A number consistent with previous periods. There were no particular themes, but a couple of issues worth raising. A Scout team was sent inappropriately to a paediatric donor, and on another occasion, the local team had to place a central line when the CT retrieval surgeon could not use the echo device to locate the jugular vein. There were two complaints that a retrieval team could not perform TOE, but this is not a part of the NORS standards and should not be expected.

One heart was barely covered in saline and another spent more than 45 minutes between cross clamp and being placed in the ice-box. The forthcoming NORS standard will say 90% of hearts have to leave theatre within 30 minutes of cross-clamp

One heart was lost due to overheating of an OCS machine; no cause could be found. In a DCD heart retrieval there were over 30 people in theatre, making,

according to the Reporter, safe communication impossible. All the DCD Incidents have been discussed at the DCD steering group.

On one occasion, a different team mobilised to their a donor hospital local to them, because the recipient was a very complex congenital patient. The original team had already left base before this was resolved.

Transplantation 5 There were three delayed acceptance or excessively delayed retrieval. None of these were related to complex recipients.

There was confusion over the acceptance arrangement for an out of UK fast-track offer. One centre contacted the local SNOD, another accepted through the Duty Office, resulting in confusion. It has should be agreed that all these offers should be accepted only through the Duty Office

Transplant Support – 4

A paediatric donor, turned down by the paed centres, was about to be offered “automatically” to all the adult centre urgent patients, before a regional manager made the decision not to allow offering. As offering increasingly becomes automated, it will be essential to have size ranges when recipient-specific offers are to be made. When the offer is to the centre, again the DO needs to have at least a lower size cut-off

None of the others were of any impact, and there were no particular themes

Appendix:

Heart Valve Damage

Retrieval of Heart Valves

If neither the heart or lungs are retrieved from a multi-organ donor, the heart and importantly aortic and pulmonary valves will often be removed by the NORS team. There is a standard set of instructions for how this should be done (INF 195-1doc)

When the lungs alone are removed, in either a DCD or DBD donation, there is clearly scope for retrieval of both valves. The aortic valve is obviously not a problem. But there are regular complaints from the valve banks that the pulmonary artery is too short for the valve to be used.

For most applications involving pulmonary valve implantation, only the artery up to the bifurcation is required. (Complex reconstructions involving main pulmonary arteries cannot be performed with the valve if the lungs are being retrieved.)

It is proposed that when lungs are taken from the donor, the division of the pulmonary artery is at the level of the bifurcation, leaving only the superior part of the main pulmonary artery in continuity



The cannulation site will obviously be included in the specimen, but this is unavoidable. However, I hope we can agree that the implantation of the lungs will not be jeopardized by this distal division, but more usable pulmonary valves will be supplied to tissue banks