

In a 5 month Period, April – August 2016, there were 25 Incidents categorized under the key-word “Lung” This is slightly up from the 21 in the previous 6 month period

In addition, there were 4 damage to pulmonary valves Incidents, categorized as “Heart” Incidents, but related to lung retrieval. In one, the PA was left on the lungs to facilitate EVLP, but it was previously agreed that a length of the aorta would be used.

There were two pulmonary valves not used because a suture was found on the anterior wall of the pulmonary artery. Tissue banks will be informed that this is normal, and of no consequence, when the lungs have been used

Of the 25 Incidents, there were 11 where the mention of the lung was coincidental. These relate to issues such as wrong information on EOS in a non-proceeding DCD donor

13 Incidents relate directly to aspects of lung transplantation:

Donation – 4

The NORS team was mobilised very early on two occasions resulting in 4 and 7 hour waits at the donor hospital. All of these will be collated and discussed at the National Retrieval Group meeting in November. Both were a function of the new NORS arrangements

One delay was because of poor communication between the SNOD and the recipient coordinator about availability of a retrieval team

Retrieval – 4

One lung tear, probably caused by the edge of a fractured sternum, was not appreciate by the retrieval surgeon but required extensive repair at the recipient hospital. Said to have prolonged surgery by 3 hours! (?)

There were some teething problems with shadowing arrangements north of the border, and with trainee perfusionists.

1 NORS team refused to mobilise 1 hour before the handover time, after a week on call

A patient with previous cardiac surgery became a potential DCD lung donor. Both the retrieval and implanting surgeon felt that the additional warm ischaemic time would rule out DCD retrieval

This was discussed with a number of senior surgeons. The conclusion was that the warm tolerance of an inflated DCD lung was at least 60 minutes, and that lungs should have been used from this donor. The opinion was forwarded to the two centres

Transplantation – 5

There was a 2 hour delay in decision making. But the centre requested repeat gases, and a view of the X-ray image, which the SNOD was initially unhappy to transmit

A centre declined after the NORS team had arrived:

Hospital declined on no apparent new information when retrieval team mobilised and at donor hospital

Reported that lungs were declined on function by accepting centre after review and discussion of radiological images by NORS Registrar. Reported that this was no new information.

Clinical information on EOS at the time of offer acceptance was reviewed and compared this with assessment of the donor at the time of retrieval. Whilst the SNOD has clearly documented on EOS that the local medical review of the donor chest X-Ray demonstrated bibasal atelectasis, when the NORS surgeon reviewed the imaging they additionally noted a general haziness throughout and total left lower lobe collapse.

Furthermore at offering the PO₂ on 1.0 FiO₂ documented on EOS was 37.9kPa so somewhat borderline. The PO₂ on 1.0 FiO₂ further deteriorated, with a reading of 30.9 kPa recorded at time of retrieval assessment. The accepting centre then declined the lungs based upon updated clinical information as donor respiratory function had deteriorated since time of acceptance.

The Radiology was available to the Recipient Centre if they had taken the trouble to ask for it

Perhaps disappointing that the lungs were not examined even though the donor team were present

There was a similar example:

Lungs were accepted by Cardiothoracic Centre and then subsequently declined once lungs ready for transport. Lungs fast tracked, another centre would have accepted however due to CIT and logistics all centres declined and lungs returned to the body.

This has been reviewed by the transplant centre that accepted and then declined the lungs for transplantation and discussed with those involved. The lungs had been accepted by the transplant surgeon on call, with the knowledge of the previous smoking history and the good arterial blood gasses. The transplant centre were also the retrieving centre.

A new consultant surgeon took over and reviewed the potential recipient and felt that the transplant should only go ahead if the lungs were pristine as the recipient was well. A discussion was held between the consultant and the retrieval surgeon and it was felt that the lungs were transplantable but not pristine therefore the decision was made not to go ahead with the transplant. Unfortunately this occurred late on in the retrieval process and could not be ascertained until this time.