LIVER ADVISORY GROUP MEETING

Governance Report for LAG, May 2018

All Incidents in a 6 month period from, reported to ODT where “Liver” was identified on a key-word search were identified and viewed. There were 96 in all, but only 43 were directly pertinent to the liver. This is a figure a distinctly higher than for the last 6 month period, when the numbers were 63 and 29 respectively. The change seems to revolve around more reports of problems with offering and with NORES delays. A lower threshold to report these problems has been noted in other advisory groups

Incidents included under the “liver” category but not directly related included, for instance, problems with other organs when the liver was also being retrieved, minor HLA transcription errors, dissemination of transport fluid culture results and incorrect family letters.

There were 12 Incidents relating to problems with offering, and an additional 3 where there were complaints about prolonged cardiothoracic offering. There have undoubtedly been frustrations with Hub operations, perhaps leading to a lower threshold to report an Incident. An example from March of this year is:

Offering process - concern over volume of calls and lack of flight availability to transport liver.

Reported time taken for Hub Operations to answer telephone, lack of co-ordination of pages with offers and via which medium. Also reported centre had to decline liver due to lack of flight availability.

The issues with prolonged offering of CT organs will be raised at CTAG in late April.

There were 12 reports of delays or logistic problems with NORS teams, which again seems to represent a lower threshold for this reporting. Few, if any, had. A real impact beyond frustrating those involved. To give an example:

NORS mobilisation - delayed - no impact.

Delay to retrieval around 1hr 30minutes, due to team informing the SNOD they were allowed 2 hours to mobilise overnight and a 30 minute delay due to weather conditions.

An awareness email has been sent to the abdominal NORS team to highlight that this has been reported and they have been reminded that the agreed mobilisation time is 1 hour irrespective of the time of day as per the NORS standards.

This was also highlighted to the Commissioning Team.

Comments received by retrieval team post investigation closure. An agreement that the RCPoC was incorrect regarding the mobilisation time and this has been reiterated to all RCPoCs.

Two livers were damaged at retrieval and not used. As an example of the investigation process, here are the details of one:

Damage to liver - not transplanted.

Transplant centre assessment of liver revealed extensive intimal dissection of common hepatic artery extending to left and right hepatic arteries and clots within arteries. Flush with fluid failed to achieve good arterial flow. Opening the artery at the level of the gastro-duodenal artery showed intimal damage extent. Two consultants deemed that risk of arterial thrombosis was too high so transplant abandoned.

Details of the retrieval investigated with the respective NORS team. The NORS centre clinical lead agrees that ultimately the damage was caused by traction during the retrieval procedure. They identified that there was also a degree of friable donor vascular tissue.

The NORS clinical lead has discussed the donor details, the retrieval technique and the photographic findings with the retrieval surgeons. The retrieval surgeon has reflected on this and feels that in retrospect having identified an issue with friable vascular tissue they should have been more careful during the portal dissection. The NORS clinical lead believes this to be an isolated event with respect to the retrieval surgeon's prior retrievals. The learning outcomes from this event will be shared with the wider organ retrieval team as per their local governance arrangements.

In addition, a marginal liver was lost because of malfunction of the Liver assist device.

It has been reported that a marginal liver was placed on a liver assist normothermic perfusion machine to evaluate before transplantation, there was a device failure immediately after perfusion commenced. Due to the uncertainty of organ quality, warm ischaemic injury due to machine failure and additional cold ischaemic time to get recipient ready, the organ was declined.

Investigated by reporter and manufacturer and it was identified the error was due to user error as two pressure sensors being switched around - portal sensor was reading arterial cannula pressure and vice versa. The company and investigator have been able to replicate the problem to confirm this was the correct issue.

The reporter highlighted this incident with the manufacturer suggesting that the pressure connectors for the portal and hepatic artery are difference in appearance, so that in future the connectors will be easily distinguishable between the two.

Another marginal DCD liver was lost, at the end of March, because the NORS team did not have the equipment for NRP.

NORS abdominal team arrived at donor hospital without NRP circuit. Due to the time it would have taken to transport the equipment it was decided to not use NRP. Liver accepting centre then declined as it had accepted the organ based on the use of NRP. No centres interested in fast track offer.

A further retrieval Incident was highlighted by the Governance team, and has already been discussed at NRG.

Liver transplanting centre reported that common bile duct and gall bladder had not been flushed according to protocols.

Comments from the respective NORS team. Liver HTA-A form which recorded the common bile duct as being flushed with 0.25 litres UW. Perfusion was recorded as 'good.'

The NORS centre have responded that the event was discussed with the retrieval surgeon who confirmed that the common bile duct was divided and the gall bladder was flushed with copious amounts of saline during the initial stages of the warm dissection during the retrieval. The gall bladder was closed with a suture to prevent the continuous spillage of bile during the retrieval.

The NORS centre have commented that it can be seen that the gall bladder is full of bile. They presume that the bile recollected during the retrieval process. This has not been noted to have been a problem before and the NORS centre thank the reporting surgeons for highlighting this. Furthermore, they have commented that they will make sure that in the future the gall bladder will be left opened to ensure that the bile drains.

Further email conversations with NORS Lead who investigated the incident - has been shared with the whole NORS surgical team. R Ploeg has confirmed with NORS Lead that he will put it on the next NRG agenda.

NHSBT National Lead for Governance emailed 04.04.2018 to make aware and also for LAG to gain their views from a transplant perspective.

Issues at the transplant centre; end of the process revolve around registration errors, and judgement difficulties when accepting organs. A particular Incident was again highlighted, because it resulted in the potential loss of an organ. It also underlined the resource issues of which we are all aware:

Reported that a centre had received an offer and liver transferred to the centre, however they then declined a significant time later due to logistics. Offered to another centre who would have accepted if they had received the offer earlier and the CIT had been shorter.

The centre have reviewed the second offer received 6 hours following cross clamp and confirmed that following acceptance, due to the livers reported size of 2.5kg they wished to visualise prior to making the final decision to transplant. On arrival at the transplant centre at around 10 am it was visualised and a decision made to proceed with the transplant. At 10.30 am the team were informed that the bed situation had become difficult and there was a significant demand on level 3 beds, and at 12 midday a decision was made the cancel the transplant. At this point the liver was offered on.

Whilst the centre have reported that they do usually offer on livers due to lack of beds in a timely way, on this occasion they accept that they should have started this process at 10.30 am when they were first informed of the bed problems. The Lead will reinforce to the team that even if a final decision is pending, if there is the slightest indication that there is a resource problem, they should provisionally offer the liver at the earliest opportunity.

Whilst provisional offers in themselves can be problematic, we will monitor any reports related to late declines based on bed capacity and raise at the Advisory Groups for peer awareness as appropriate.

Conclusions

The Incident reporting system enables NHSBT to fulfill its legal responsibilities to the HTA. But more importantly, it is a robust mechanism for reporting problems back to transplant centres, SNOD teams and NORS teams, to improve local learning. It also allows us to identify trends, and arrange feed-back, as we have done for the Retrieval problems, and more recently the Offering issue.