

Cautionary Tales

in Organ Donation and Transplantation

NHS

Blood and Transplant

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Introduction

Cautionary Tales aims to provide insight into some of the clinical incidents reported to ODT. The aim is to share learning from incidents and so improve outcomes for patients.

Good clinical governance depends on many factors but reporting of incidents with appropriate investigation, remediation and, above all learning, is essential. Organ donation and transplantation presents challenges in that the whole process involves many people with different skills, often working in unfamiliar environments, making complex decisions, on often inadequate information under a tight time frame. Thus it is not surprising that errors occur.

We ask all those involved to report all incidents that did or could result in harm using the online electronic process (<http://www.odt.nhs.uk/odt/governance-and-quality/incident-reporting/>)

Occurrences and Incidents reported

Within ODT, the electronic Incident Reporting System has been in effect since November 2012; this allows us to give a full year of incident data to review.

Adverse events reported to ODT are initially recorded as an 'Occurrence' and reviewed within 24 hours. The majority are then accepted as incidents for investigation.

- All urgent incidents that have potential impact on recipients must be reported to the ODT Duty Office in the first instance, before being submitted via the online reporting system – Contact Number 0117 9757580
- If a report fulfils the criteria for a serious adverse event or reaction, the Human Tissue Authority will be informed by us, in accordance with our legislative agreement.
- If a report fulfils the criteria of a Serious Untoward Incident, a near miss or a Never Event, then appropriate action is taken.
- Anything reported that is not accepted as an incident for investigation by ODT is monitored. If a trend is observed ODT will then take further action as appropriate.
- If an incident could affect the welfare of others (such as an infection or malignancy that could be transferred with the organ or tissue), then ODT will take immediate action to inform the relevant personnel or transplant centres.
- All Incidents are risk-assessed and classified according to actual rather than potential risk (ranging from Green as the lowest risk to Red as the highest risk). This is done on both impact and probability, so an incident of moderate or major impact may still have a low risk rating if the probability is very low.
- The incident investigation should be completed within 90 days. Complex investigations can exceed this but ODT recognise the importance of completing investigations in a timely manner for corrective actions to be implemented where appropriate and for shared learning across the donation, retrieval and transplantation community.

- For the last year NHSBT has been talking to colleagues in the organ donation and transplantation community and our stakeholders about a new UK strategy to achieve world class performance in organ donation and transplantation. Reporting adverse events through incident reporting will further help save and improve lives by enabling risks to be identified and actions put in place to minimise risk within the donation and transplantation process.

The number of reported incidents remains constant about 40 per month but we are sure that there is significant under-reporting.

Overview of Incidents Reported to ODT

Donation:

The majority of incidents happen within the theatre aspect of the donation process, often when multiple SNODs are involved, sometimes leading to a lack of clear responsibility for completing tasks. Typically these incidents report incomplete labelling or packaging of vessels / organs, or transcription errors within the documentation such as incorrect blood group on the HOT A form.

ODT has also seen an increase in 'ad hoc' verbal communication errors, such as organs being accepted by two centres. Communication errors often result when staff make assumptions about the understanding of information given verbally. This is particularly evident when SNODs are communicating with multiple recipient centres during a complex donor process. The learning point is to check the correct message is received when communicating verbally.

Retrieval:

Within the incidents reporting retrieval damage, there is often a discrepancy between organ assessment at retrieval and organ assessment at the transplant centre. The important message is to report any damage or discrepancy so there can be shared learning amongst teams to improve the retrieval and transplantation process. A number of incidents also report incorrect packaging of organs and the absence of lymph and spleen samples. These often relate to kidneys which have been declined on assessment at a transplant centre and then offered on.

Transplant Support Services:

This sub group captures incidents relating to transport issues, IT errors and Duty Office incidents. On a positive note there has been a reduction in transcription errors within the Duty Office, possibly as a consequence of the changes made to reduce verbal reporting and in increasing points of identification before donor and recipient information is communicated.

Transplantation:

Has seen an increase in incidents which report delays by transplant centres in accepting organs, particularly cardio-thoracic organs. This then impacts on the time of an already lengthy donation process. There has also been an increase in reports of delays to donor retrieval, particularly at the request of cardio-thoracic teams.

Learning point

- **Report all adverse events promptly- even if there has been no consequence from the event. This will enable potential risks to be identified to make the donation and transplantation process safer.**

Learning from Incidents

As transplanted organs are associated with risk, all clinicians must consider the risk benefit balance and the possibility of transferring not only infectious and malignancy, but also immune mediated and metabolic disease. In all these cases, the risk factors were identified and the surgeons made a balanced and informed decision.

Transmission of fatal encephalitis:

A donor living alone presented with diarrhoea and fever, became confused and encephalo-meningitis was diagnosed. No organism was identified. He donated two kidneys and both recipients developed a similar illness starting 10 days after transplantation. This is being investigated but a nematode is suspected.

Transmission of other infections

A donor who had lived and recently visited South America donated liver, kidneys and tissues for transplantation. The travel history was known and available on EOS at the time of offering. Testing for tissue donation showed the donor had been exposed to T Cruzi (the causative organism for Chagas' Disease) and malaria. NHSBT advised the recipient centre teams on the appropriate the monitoring and prophylaxis. To-date, the recipients are all well.

Transmission of autoimmune disease

A donor died from the consequences of documented idiopathic thrombocytopenia and donated kidneys and liver. The liver recipient developed severe thrombocytopenia but the kidney recipients were unaffected. The donor had antibodies against a functional platelet glycoprotein that may have been transferred by the liver as a consequence of extra-medullary haemopoiesis.

Transmission of metabolic disease

Following brain death, a donor donated liver, kidneys and pancreas. The liver recipient, a female, developed neurological problems that resulted in significant incapacity. This was diagnosed as donor acquired porphyria. The other organ recipients were unaffected. It later transpired that there was a distant family history of porphyria that neither the family, the family doctor or the attending staff were aware of.

Learning points

- **Organ transplantation is associated with risk and surgeons must make a balanced decision.**
- **NHSBT has published guidelines with the BTS to support surgeons in reaching a decision.** (http://odt.nhs.uk/pdf/nhsbt_responsibilities_acceptance_organ_deceased_donors.pdf)
- **SaBTO publishes advice.** (<https://www.gov.uk/government/publications/guidance-on-the-microbiological-safety-of-human-organs-tissues-and-cells-used-in-transplantation>)
- **NHSBT is looking at improving transferring of information from SNOD to recipient point of contact, availability of out of hours expert advice and improving donor characterisation.**

Clinical updates onto EOS

Now electronic offering is in place using EOS, the possibility of errors in verbal communication of critical information is minimised. Although the ideal situation is that all information is documented on EOS at the time of offering, it is often the case that new information becomes available once the centre has been contacted. Good communication between the SNOD and recipient centre is always vitally important; however recent cases highlight the importance of SNODs informing recipient centres when new information is added to EOS, to allow the surgeons to make a fully informed decision regarding transplantation.

Transcription of information onto EOS

The importance of good communication was highlighted recently when information regarding the suspicions of metastasis was not fully transcribed onto EOS at the time of organ offering. Although EOS was later updated, this was not communicated to the recipient centres. Organs were therefore accepted for transplant on incomplete donor history. This led to an organ with carcinoma inadvertently being transplanted.

Learning point

- Ensure all updates to EOS are communicated to recipient centres and that these updates are always checked by recipient centres.

NORS delays

Organ donation rates in the UK are increasing. On most occasions a retrieval team is able to mobilise in a timely way to facilitate donation. There are occasions however when, because of the increasing numbers of donations, multiple retrieval teams are simultaneously required. There have recently been a number of incidents where donation was delayed, and in one case did not proceed, due to both delays in mustering a retrieval team and delays requested by recipient centres. It is appreciated by all that everyone involved in the donation, retrieval and transplantation process are working hard to facilitate all donations.

Late mobilisation

In a recent case a NORs team were set to mobilise but then attended a local donor who had become unstable. Although this was understandable, the SNOD had not been informed of this change in a timely way. The donor family anticipated an agreed theatre time so a second NORS team was mobilised. Again the second team needed to attend a local donor first. Because of the distances involved and location of donor hospital, the next available team would have been required to fly. The time scales involved, and the lack of clear communication led to the withdrawal of consent by the family and donation did not proceed.

Learning point

- Ensure clear communication between SNODs, retrieval teams and recipient centres to ensure that retrievals proceed in a timely way, and where delays are required, due to any potential impact, this is discussed with all those involved.

Perfusion of the organ with the wrong fluid

A kidney intended for transplant was perfused with sterile water rather than preservation fluid at a recipient centre. The error was recognised when the kidney was found to not be responding as expected. Upon inspection in the 4 bags of fluid placed in theatre for perfusion, 3 were perfusion fluid and 1 was sterile water. This was after bench perfusion had been delivered. The organ was discarded because of real fears that the osmotic damage would make the kidney not function. The error was simply due to mixing bags of fluid which can look very similar.

Learning point

- Follow national guidelines and ensure similar looking fluids are kept separately. Always check the type of fluid being used to ensure the correct perfusate is used.