Cautionary Tales
in Organ Donation and Transplantation

NHS Blood and Transplant

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Introduction

We are all too aware of the challenges that NHS staff are currently facing.

In the midst of juggling numerous things in a busy health care system, it is easy to brush it off when something isn't quite right or something almost went wrong or when something did go wrong. We know that patient safety can be improved by learning from incidents and near misses, rather than not reporting and pretending they have not happened.

Thank you for continuing to report to us. There are some teams that report frequently to us and those that rarely report, we would encourage you to do so via the link below:

https://safe.nhsbt.nhs.uk/IncidentSubmission/Pages/IncidentSubmissionForm.aspx

If you wish to share any learning from your unit or get involved with the next bulletin please contact: clinical.governance@nhsbt.nhs.uk

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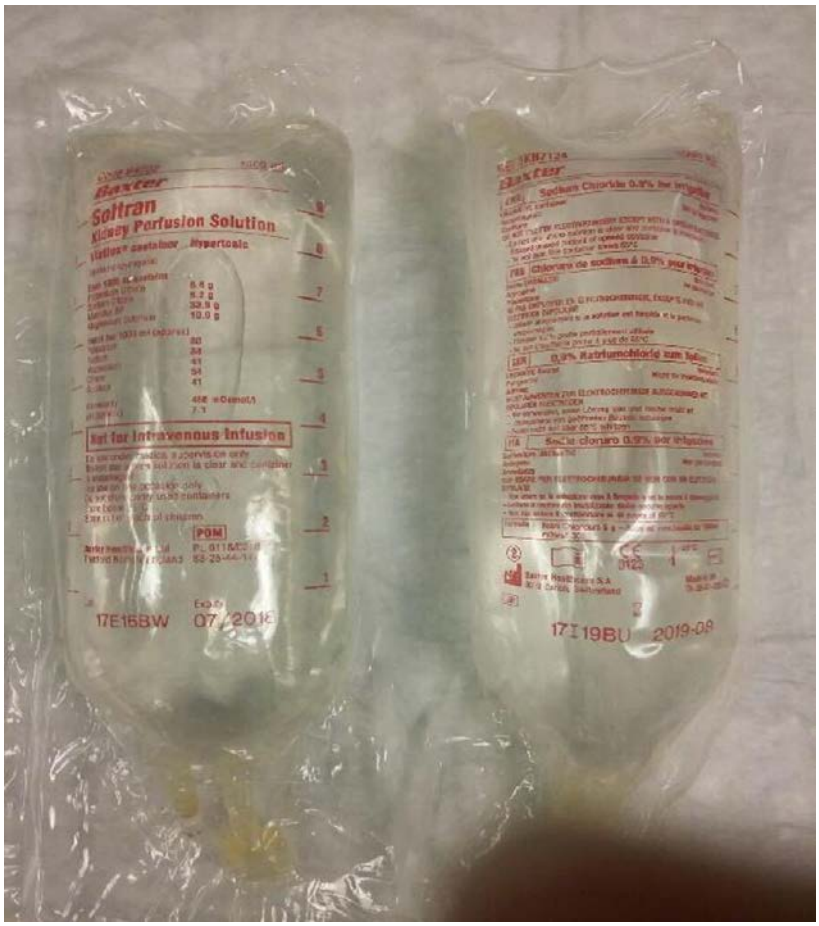
Spot the difference… Safety Alert



As you can see from the attached photo, Soltran and NaCl/water for irrigation bags are strikingly similar and this increases the risks of selecting and administering the wrong fluids. There are a number of anecdotes around near misses where NaCl or water for irrigation has been selected for administration instead of Soltran or where Soltran has been frozen to make ice in error.

Recently NHSBT were notified of a case involving a near miss in a living donor kidney transplant.

As usual practice in this unit, the heparin for the preservation solution (Soltran) had already been drawn up by the theatre staff and added to the preservation solution. This then remained in an ice box until the time at which the vessels in the donor were just about to be divided.

When the bag of fluid was removed from the ice the surgeon was shown the heparin vial and asked to check it, at which point they also asked to check the bag of preservation solution. They noticed that it was a litre bag of sterile water for irrigation rather than Soltran; as seen in the photo above the two bags look strikingly similar. This was promptly discarded and a fresh bag of Soltran was retrieved, heparin added and made ready for use prior to dividing of the vessels.

After investigation it transpired that by mistake a stock of sterile water had been placed in the fridge in which the preservations solution was stored, and due to the similarities between the two bags it had not been noticed prior to this point.

Learning point

There are some key points to raise immediately…

- Staff involved with perfusion should routinely check the preservation solutions that are being used to perfuse organs
- Preservation solutions should always be stored separately from other solutions
- To prevent any accidental mixing of fluids in areas that do not utilise Soltran, NORS teams should ensure that they do not leave any unopened bags behind in donor hospitals
- A Patient Safety Warning Alert is due to be issued by NHS Improvement

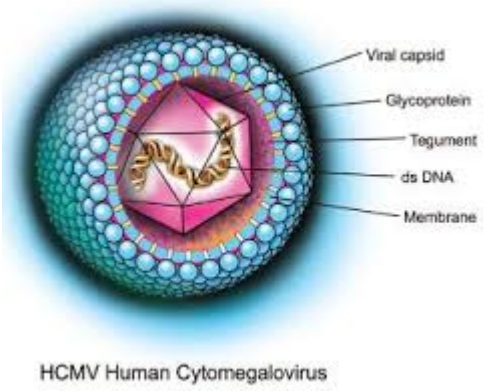
However, this does not solve the root cause of the labelling. As such …

- The Chartered Institute of Human Factors and Ergonomics (CIEHF) Pharmaceutical Special Interest Group are running a workshop for all interested parties on how to tackle issues of medication packaging and labelling, that will include the packaging and labelling of organ preservation solutions
- Packaging has been raised with the manufacturers to highlight the importance of easy distinction

Discrepant Donor Microbiology Result

Donor microbiology screening is always completed as part of donor characterisation, usually long before retrieval takes place. These results are then communicated via EOS to centres, along with the information of whether the results were from a pre or post transfusion sample, if post; what blood products had been given prior, and also the haemodilution calculation if required; allowing the results to be reviewed in context.

Currently it is routine to send a blood sample inside the organ box with each organ. This sample is often taken around the time of retrieval, so may be a post transfusion sample dependent of the products transfused. What happens to this sample varies significantly from different centres; some simply dispose of it, some store and some repeat the microbiology screen. The results of these repeat tests can cause confusion.



HCMV Human Cytomegalovirus

We have had a number of incidents where by the repeat microbiology tests have been different to those completed at the time of donation and patient treatment altered accordingly. These results are almost all related to Cytomegalovirus (CMV). Whilst clearly a discrepant result cannot be ignored, it also needs to be reviewed in the same context as the original result.

On a number of occasions, it has been found that the repeat result has been tested on a post transfusion sample; on one occasion the donor had received 6 ‘transfusions’ as documented clearly on EOS. After further investigation it was found that the most likely cause of the discrepant result was due to the passively acquired antibodies, as the discrepant positive result was tested on a post transfusion sample. As the Laboratory were not aware of the clinical context, they were unable to interpret the results accordingly.

Learning point

- If the donor sample is retested at the Transplant Centre, the Laboratory must be informed of the context of the sample; such as whether it was pre or post transfusion
- They should also be provided with the prior results to enable clear clinical interpretation
- If discrepancies are highlighted these should be reported to the ODT online reporting system: https://safe.nhsbt.nhs.uk/IncidentSubmission/Pages/IncidentSubmissionForm.aspx as soon as possible to allow for full investigation and communication to other centres as required

Check your phone number…

There have been a very small number of incidents when clinical staff has tried to contact the Hub Operations and rather than connecting through the number has rang and rang. On investigation it has been found that the number being called was in fact ODT reception and not the ODT Hub.

During the day this is not a problem as the reception team redirect the call, and out of hours it is not normally a concern as the phone is diverted. However, on these occasions, as 'switching on' the divert is manual, this was not done. Whilst on these occasions it just led to frustration, which in itself is significant when busy, no real harm was done. It does have potential to delay relaying clinical information or responding to organ offers.

Learning point

- When contacting Hub Operations, always use the direct dial number which is:
  01179 757580
- IT are reviewing the possibility of automating the divert at a certain time to prevent the likelihood of this being forgotten

Histopathology – Some positive news

There have been a number of problems around histopathology where the issue is one of potential disease transmission rather than organ quality. The difficulties have been around providing the right information to the histopathologists, dissemination of findings and the ability to contact the relevant people in a timely manner. ODT has worked with key individuals within the pathway to develop both a standard process and request form.

The request form will accompany biopsies of donor lesions to ensure the pathologist has all the relevant clinical information required to assess the lesion and provide contact details of the retrieving surgeon if there are any further details required. In addition, this form will ensure that all appropriate patient identifiers are supplied to the laboratories to allow accurate booking in of the case and safe dissemination of the report to other accepting centres.

This is the start of a process to establish a more robust national out of hour's histopathology service to support organ transplantation. We hope to ultimately minimise individuals' on-call commitments and develop a specialist on-call service rather than more "general" local on-calls which are becoming increasing non-viable with the increasing subspecialisation. NHSBT will be working with the Royal College of Pathologists, Institute of Biomedical Scientists and NHS England to develop the national service.

Learning point

- Reporting incidents really does impact on change
- The new process and form can be found here: https://www.odt.nhs.uk/transplantation/tools-policies-and-guidance/policies-and-guidance/#additional