Management and use of Soltran during kidney perfusion

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**Purpose**

To provide the surgeon, nurse specialist and theatre staff with the appropriate information and guidance for back bench kidney perfusion.

**Who should read this document?**

Surgeon, Specialist Nurse, Theatre Staff

**Key Messages**

Safe perfusion of a kidney prior to transplantation on the back bench

**Core accountabilities**

- **Owner**: Sister Sarah Stacey: Live donor Transplant Coordinator
- **Review**: Surgical Clinical Governance
- **Ratification**: Surgical Clinical Governance Lead
- **Dissemination**: Senior Matron – Theatres and Anaesthetics
- **Compliance**: Surgical Clinical Governance

**Version History**

- V1 11/2009

The Trust is committed to creating a fully inclusive and accessible service. Making equality and diversity an integral part of the business will enable us to enhance the services we deliver and better meet the needs of patients and staff. We will treat people with dignity and respect, promote equality and diversity and eliminate all forms of discrimination, regardless of (but not limited to) age, disability, gender reassignment, race, religion or belief, sex, sexual orientation, marriage/civil partnership and pregnancy/maternity.

An electronic version of this document is available on Trust Documents on StaffNET. Larger text, Braille and Audio versions can be made available upon request.
Standard Operating Procedures are designed to promote consistency in delivery, to the required quality standards, across the Trust. They should be regarded as a key element of the training provision for staff to help them to deliver their roles and responsibilities.

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Standard Operating Procedure (SOP)


1 Purpose and Scope

Introduction

Kidney perfusion is the process of perfusing a kidney from a donor (living or deceased) safely once removed in the theatre during the kidney donor retrieval process. This process is undertaken on the back bench as directed by the Transplant Surgeon and assisted by the nurse specialist.

The nurse specialist works under the guidance and advice of the Transplant Surgeon.

2 Definitions

Back Bench: This is an area away from the patient, established specifically to undertake the process of perfusing the kidney.

3 Key Duties

The transplant surgeon is responsible for the kidney perfusion on the back bench with the support of the Nurse Specialist to ensure the safe and efficient retrieval of the organ for transplantation.

The Nurse Specialist must ensure that the equipment and perfusion fluid are ready for the Transplant Surgeon prior to the kidney being removed onto the back bench, away from the donor.

The retrieval surgeon is responsible for ensuring that the name of the perfusion fluid and batch number(s) is recorded on the Kidney Living Donor Assessment Pre and Post-Operative Form (FRM4190/4150).

A copy of page 1 of the Kidney Living Donor Assessment Pre and Post-Operative Form (FRM4190/4150) must be returned to NHSBT within 7 days. Once returned NHSBT are responsible for the storage of the data for 30 years.
4 Monitoring and assurance

The Implanting Surgeon (living and deceased donation and transplantation) – must ensure that:

- The perfusion solution name and batch number(s) are recorded if the organ is re-perfused following retrieval.
- The HTA B Form is completed and returned to NHSBT within 7 days following transplantation of an organ, or if received organ is used for research or is disposed of.

The Retrieval Surgeon (living/deceased donor) – must ensure:

- Relevant NHSBT organ specific forms (HTA A Forms) are completed.
- Sign relevant NHSBT organ specific forms (HTA A Forms).

Retrieval Surgeon (living donor) – must ensure:

- the relevant NHSBT living donor assessment pre and post-operative form is completed.
- sign relevant NHSBT living donor assessment pre and post-operative form.
- Records perfusion fluid coming into contact with an organ. At a minimum, this will include the product name and batch number.

All of the above records are held and stored within the Renal Transplant Team as well as held nationally at NHSBT (Bristol)

Any Nurse Specialist will complete the relevant competency under the supervision and guidance of the Transplant Surgeons.

5 Procedure to Follow

1. Confirm with the Transplant Surgeon the fluid and volume required for the back bench kidney perfusion.

2. The perfusion fluid will be checked by the Transplant Surgeon and the Nurse Specialist to ensure it is correct.

3. The Nurse specialist prepares: the kidney perfusion kit, crushed ice, perfusion fluid, giving set and venflon, ensuring this is a sterile process.

4. The kidney perfusion fluid must be cold and within a pressure bag, away from the donor as directed by the Transplant Surgeon.

5. Commence perfusion as directed by the Transplant Surgeon on the back bench.
6. The Nurse specialist will inform the Transplant Surgeon when the perfusion fluid has run through and how the kidney is perfusing.

7. The Nurse specialist will stop or slow down the perfusion fluid as directed by the Transplant Surgeon.

8. A record of the exact time and type of perfusion fluid used to include the Batch Number is made on the NHSBT documentation and on the Theatre Whiteboard.

9. Once the kidney perfusion is completed unused perfusion fluid must be discarded.

10. The Nurse Specialist will record the perfusion fluid batch number and type of fluid perfused on to the HTA form to be signed by the Transplant Surgeon.

N.B.: Data to ensure the quality and safety of organs must be kept for 30 years after donation. This will include:

- The traceability data from HTA A and B forms

### Document Ratification Process

The design and process of review and revision of this procedural document will comply with The Development and Management of Trust Wide Documents. The review period for this document is set as default of three years from the date it was last ratified, or earlier if developments within or external to the Trust indicate the need for a significant revision to the procedures described. This document will be approved by the Theatre Governance Committee and ratified by the Theatre Central Clinical Director. Non-significant amendments to this document may be made, under delegated authority from the by Theatre Central Clinical Director. Or the nominated author. These must be ratified by the Theatre Central Clinical Director and should be reported, retrospectively, to the Theatre Governance Committee. Significant reviews and revisions to this document will include a consultation with named groups, or grades across the Trust. For non-significant amendments, informal consultation will be restricted to named groups, or grades who are directly affected by the proposed changes.
7 **Dissemination and Implementation**

Following approval and ratification, this procedural document will be published in the Trust’s formal documents library and all staff will be notified through the Trust’s normal notification process, currently the ‘Vital Signs’ electronic newsletter. Document control arrangements will be in accordance with The Development and Management of Trust Wide Documents.

The document author(s) will be responsible for agreeing the training requirements associated with the newly ratified document with the Surgical Clinical Governance Lead and for working with the Trust’s training function, if required, to arrange for the required training to be delivered.

8 **Reference Material**

- FRM4190 Kidney Living Donor Assessment Pre and Post Operative Form
- FRM4195 HTA B Form
- NOP001 Donor and Organ Characterisation, Assessment and Allocation in Deceased and Living Donation and Transplantation
- NOP002 Verification of Donor Identity, Consent/Authorisation and Organ and Donor Characterisation in Deceased and Living Donation
- NOP003 Packaging, Labelling and Transport of Organs for Transplantation in Deceased and Living Donation