

Affix Patient Addressograph

Renal Transplant Pathway

Revision: 0

CONTENTS

1. Aim of renal transplant pathway.....	Error! Bookmark not defined.
2. Admission process.....	Error! Bookmark not defined.
3. Pre transplant bloods guide.....	5
4. Day 0 of transplant.....	Error! Bookmark not defined.
5. Recovery checklist.....	Error! Bookmark not defined.
6. Day 1 post-transplant.....	Error! Bookmark not defined.
7. Day 2 post-transplant.....	Error! Bookmark not defined.
8. Day 3-7 post-transplant.....	Error! Bookmark not defined.
9. Transplant discharge checklist.....	Error! Bookmark not defined.
10. Blood sampling schedule.....	12

1. AIM OF RENAL TRANSPLANT PATHWAY

This renal transplant pathway outlines the key components of pre-operative and post-operative nursing care of the child receiving renal transplantation in the nephrology department of CHI at Temple Street. The pathway outlines days 0-7 of renal transplantation care.

The aim for this guideline is to improve the management of patients receiving a kidney transplant by providing clear and standardised guidelines for all staff to meet the patients' needs throughout the first seven days post operatively.

This document should be utilised in conjunction with the renal transplant guidelines (PP-CLIN-NEPH-5) and relevant care plans.

ADMISSION: DATE _____	LIVE RELATED DONOR (LRD) <input type="checkbox"/>	CADAVERIC DONOR <input type="checkbox"/>
<i>SIGNATURE / GRADE / NMBI PIN & DATE</i>		

<p>Inform all relevant parties by verbally contacting:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Nursing Site Manager. <input type="checkbox"/> Medical Registrar. <input type="checkbox"/> Haemodialysis Nurses (if required). <input type="checkbox"/> Laboratories - Biochemistry, Haematology, Microbiology. <input type="checkbox"/> Pharmacy. 	
<p>Investigations</p> <ul style="list-style-type: none"> <input type="checkbox"/> Patient assessment and observations recorded on PEWS chart. <input type="checkbox"/> Ensure all bloods are completed as per renal transplant guideline (PP-CLIN-NEPH-5). Print results for theatre. Link with transplant nurse (blood samples guide on page 3 of this document). <p>*Out of hours ensure HLA antibodies sent to Beaumont in taxi urgently.</p> <p>Swabs & Samples</p> <ul style="list-style-type: none"> <input type="checkbox"/> COVID swab – contact microbiologist if rapid swab is required. <input type="checkbox"/> MRSA screen (swabs of nose, throat, groin, axilla, rectal). <input type="checkbox"/> If applicable send swab from PD exit site, gastrostomy and /or permcath exit site for MRSA and cultures. <input type="checkbox"/> Rectal swabs for VRE <input type="checkbox"/> , CRE <input type="checkbox"/> & MRGNB <input type="checkbox"/> <input type="checkbox"/> Urine sample for urgent C & S microscopy (if child still passes urine). <input type="checkbox"/> Urine sample for pregnancy test for menstruating girls (if passing urine), if not blood HCG sample to be reserved. Consent from patient by medical team required. <input type="checkbox"/> PD sample for urgent C & S microscopy (if applicable). <input type="checkbox"/> Chest X-Ray (ensure x-ray completed in the last 6 months. Details will be in Hemodialysis patients Red folder). 	
<p>Dialysis</p> <ul style="list-style-type: none"> <input type="checkbox"/> Liaise with Haemodialysis Clinical Nurse Specialist or PD trained nurse/parents to complete dialysis as directed by Consultant Nephrologist. <p>Time of last dialysis session: _____ (24 hr clock).</p>	
<p>Theatre Prep</p> <ul style="list-style-type: none"> <input type="checkbox"/> Commence pre-operative checklist for theatre. <input type="checkbox"/> Hibiscrub wash to ensure abdomen is thoroughly clean. <input type="checkbox"/> Patient assessment and observations recorded on PEWS record; weight and height recorded on medication kardex, and weight record chart. <input type="checkbox"/> Ensure 2 units of CMV negative blood are cross-matched. 	

2. ADMISSION PROCESS

3. Pre-Transplant Blood Sampling Guide

Pre- Transplant Blood Sampling Guide

In Live Related Donor transplants, these bloods will be completed in the days prior to theatre; liaise with Transplant CNS.
In Cadaveric renal transplants, **it is the senior nurse on duty's responsibility to ensure all urgent bloods are sent.**

- Ensure an IV cannula is inserted while peripheral bloods are being obtained.

*Need **a minimum of 18 mls** for all the blood samples required pre renal transplantation.

Urgent samples

- HLA Antibody Screening **3-5mls clotted** – Write **HLA antibody URGENT.**
- Bottle to be hand-written & sent to Beaumont hospital. Out of hours, send in a taxi to Beaumont. Liaise with Haematology on call.
- Coag **1.4 mls in green bottle.**
- U&E, Albumin, LFT, Bone Profile, Mg **1.3 mls in orange lithium bottle.**
- Venous blood gas **0.5 mls arterial blood gas syringe.**
- Istat in HD with cartridges in the HD fridge if instant gas required.
- Glucose **1.3mls in yellow glucose bottle.**
- FBC **1.3mls in red EDTA bottle.**
- Group & Crossmatch **4.5mls in blood transfusion bottle**

Blood bottles must be labelled using a Blood Track PDA preferably or handwritten using patient's full name, Chart number, Date of birth, Date and signature of the person taking the sample. Request form should be completed for 2 units of CMV negative red cells with the date of the procedure stated on the request form.

Note: Refer to Transplant protocol for Group and Hold requirements for both Crumlin and Temple Street patients.

Non-urgent samples to also be taken

- Virology – EBV, CMV, Hep B, Hep C, HIV. **5 mls in white topped serology bottle.**
- Requires hospital consent form.
Serology samples only PCR virology samples not required pre-operatively.
Do not need to await results to proceed with the transplant.

All blood forms are pre- written in the red transplant box at the nursing station in St Michael's C ward.

4. DAY 0 PRE-TRANSPLANT

Day 0 Transplant (Preoperatively) Refer to Pre-Operative Renal Transplant Nursing Care Plan (RF-NUR-94)	Signature / Grade, NMBI PIN & Date / time
<input type="checkbox"/> Give medications as per the renal transplantation guidelines (PP-CLIN-NEPH-5) and as per prescribed following Consultant Nephrologist's directions. <input type="checkbox"/> Oral Tacrolimus. <input type="checkbox"/> IV Methylprednisolone. <input type="checkbox"/> IV/PO Esomeprazole. <input type="checkbox"/> IV Basiliximab (once final antibody cross-match with donor is negative for antibodies/consult with Nephrologists). <input type="checkbox"/> IV Co-Amoxiclav (stat dose to be administered in theatre)	
<input type="checkbox"/> Pre-operative IV fluids as per Consultant Nephrologist's instructions. <input type="checkbox"/> Fast as per hospital preoperative fasting policy (PP-CLIN-THEA-28).	
<input type="checkbox"/> Consultant to link with PICU and Bed Management department regarding post-operative bed if ICU bed needed (i.e patient < 20kg or other clinical indications). Tick if N/A <input type="checkbox"/>	
<input type="checkbox"/> Complete pre-operative checklist for theatre. Ensure all urgent bloods, swabs and samples are resulted on and printed for theatre.	
<input type="checkbox"/> Peritoneal dialysis patients: ensure abdominal cavity is emptied. No last bag fill should be left in the peritoneum. <input type="checkbox"/> Haemodialysis patients: ensure final session complete if requested by the Consultant Nephrologist. Receive handover from HD clinical nurse specialist.	
<input type="checkbox"/> Dressed in theatre gown and TED stockings with name band on	
<input type="checkbox"/> Consult arterial line policy (PP-CLIN-NUR-60) for care of an arterial line post-operatively. Consult transplant folder for post-operative standard concentration infusions and policies for Dopamine and Labetelol infusions.	
Other patient specific requests: 	

5. RECOVERY PICK UP CHECKLIST

***Bring portable saturations monitor and appropriate sized bag valve mask for collection.**

***If carrying out a set of observations this must be documented on the PEWS chart.**

Tick N/A if child transferred to PICU immediately post-operatively.

Airway

- O₂ Requirement

Breathing

- Sats (%):
- Resp Rate (per minute):
- Respiratory effort:

Circulation

- Heart Rate (per min):
- Blood Pressure:
- Latest bloods:
- Fluids infusing:
- Urine output:
- Types of catheter/drains in place:
- Pallor:

Disability/Exposure:

- Ultrasound complete: Yes No
- Transplant site assessed- dressing insitu: Yes No
- Staples present: Yes No
- Access plan in place if CVC in situ (x-rayed and approved use): Yes No
- Morphine pump dopamine IV fluids double checked:

Fluid given in theatre:

Meds signed on intraoperative record sheet:

Signature / Grade / NMBI No:

Date:

6. DAY 1 POST-TRANSPLANT

Day 1 Transplant Day: Date _____	Signature / Grade / NMBI PIN Date & Time
<p>Discuss with Consultant Nephrologist acceptable parameters and frequency of interventions:</p> <p>Blood pressure aim (mmHg) _____</p> <p>Is dopamine required? (infusion second checked and dopamine checklist in use) Yes <input type="checkbox"/> N/A <input type="checkbox"/></p> <p>Rate of infusion: _____</p> <p>Urine output aim : _____</p> <p>Daily urinalysis if applicable e.g. history of Nephrotic Syndrome Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/></p> <p>Frequency of bloods: _____</p>	
<p>Consult arterial line policy (PP-CLIN-NUR-60) Arterial line still required: Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/></p>	
<p>Pain Team review changes:</p>	
<p>Wound review (Refer to operative note)</p> <p>Dressing dry and intact <input type="checkbox"/></p> <p>Small ooze <input type="checkbox"/></p> <p>Large ooze <input type="checkbox"/></p> <p>Dressing changed Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>Wound drain in situ <input type="checkbox"/></p>	

7. DAY 2 POST-TRANSPLANT

Day 2 Post Transplant: Date _____	<i>Signature / Grade / NMBI PIN Date & Time</i>
<p>Discuss with Consultant Nephrologist acceptable parameters and frequency of interventions:</p> <p>Blood pressure aim (mmHg): _____</p> <p>Is dopamine required? (infusion second checked and dopamine checklist in use) Yes <input type="checkbox"/> N/A <input type="checkbox"/></p> <p>Rate of infusion: _____</p> <p>Urine output aim : _____ Daily urinalysis if applicable eg FSGS</p> <p>Fluid balance aim: _____</p> <p>Frequency of bloods: _____ HLA antibodies due and completed <input type="checkbox"/></p>	
<p>Consult arterial line policy (PP-CLIN-NUR-60) Arterial line still required: Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/></p>	
Pain Team review changes	
Mobilise +/- physio (weigh on sitting scales)	
Encourage oral intake post surgical/ nephrology team review	

8. DAY 3-7 POST-TRANSPLANT

Day 3	<ul style="list-style-type: none">•Blood sampling regimen:•Fluid Target aim: Fluid balance aim:•Bowel motion: Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>•Weaning prednisolone plan:•Additional changes made:•Signed by: (NMBI)
Day 4	<ul style="list-style-type: none">•Blood sampling regimen:•Fluid Target aim: Fluid balance aim:•Commence Medication competency Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>•IV Basiliximab due : <input type="checkbox"/>•Dietician review: Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>•Update PHN (if applicable) : Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>•Bowel motion: Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>•Signed by: (NMBI)
Day 5	<ul style="list-style-type: none">•Blood sampling regimen:•Fluid Target aim: Fluid balance aim:•Query removal of Urethral catheter (as per nephrology)•Assess wound site and document on woundcare chart (as per surgeons) Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>•Signed by: (NMBI)
Day 6	<ul style="list-style-type: none">•Blood sampling regimen:•Fluid Target aim: Fluid balance aim:•HLA Bloods due today and completed <input type="checkbox"/>•Complete parental medication competency:•Signed by: (NMBI)
Day 7	<ul style="list-style-type: none">•Blood rsampling regimen:•Fluid Target aim: Fluid balance aim:•Remove non tunnelled CVC unless otherwise specified by team•Script faxed to community pharmacy•Urology plan for discharge documented: Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>•Transplant CNS met with family : Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>•Signed by: (NMBI)

9. Transplant discharge checklist

Transplant discharge checklist	Expected date of Discharge: _____
Communication	Signature / Grade / NMBI
Transplant CNS Review (Handover given)	
PHN referral sent/update given	
Education	
Post-transplant advice provided	
Education session with pharmacist	
Medication competency completed	
Dietitian review (if applicable)	
Other (e.g. urinalysis, NG):	
Follow up	
Date next due in clinic:	
Urology follow up appointment (if applicable):	
Removal of JJ stent to be booked (if applicable):	
Removal of Central line to be booked (if applicable):	
Urology plan on discharge	
Type of catheter:	
Daily regimen:	
Fluid plan on discharge	
Fluid target:	
PO/NGT/Gastrostomy (Circle)	
Feed plan (if applicable)	
Dressings	
Dressings in place:	
Date dressing last changed:	
Other:	
<ul style="list-style-type: none"> • PD catheter insitu: Yes <input type="checkbox"/> No <input type="checkbox"/> • Central venous line insitu: Yes <input type="checkbox"/> No <input type="checkbox"/> • JJ Stent insitu: Yes <input type="checkbox"/> No <input type="checkbox"/> 	

10. Blood sampling schedule

Week Post Transplant	Day Post Transplant	HLA Antibodies	EBV PCR	CMV PCR	BKV PCR	MMF Level	PTH	Vitamin D
Week 1	2	X						
	6	X						
Week 2	9	X	X	X				
	13	X						
Week 3	16	X	X	X				
	20							
Week 4	23	X	X	X	X	X	X	X
	27							
Week 5	30		X	X				
Week 6			X	X				
Week 7			X	X				
Week 8		X	X	X	X			
Week 9			X	X				
Week 10			X	X				
Week 12		X	X	X	X	X		
Week 14			X	X				
Week 16		X	X	X	X			
Week 18			X	X				
Week 20		X	X	X	X			
Week 22			X	X				
Week 24		X	X	X	X	X		
Week 28		X	X	X	X			
Week 32		X	X	X	X			
Week 36		X	X	X	X			
Week 40		X	X	X	X			
Week 44		X	X	X	X			
Week 48		X	X	X	X			
Week 52		X	X	X	X			