Standard Operating Procedure for Pre Transplant Care

On arrival to the ward:

- Admit the child to ward 3C the day before the planned transplant, liase with Sr King with regards to the patients personal transplant plan.
- The patients detailed personalised transplant plan on the renal share drive.
- The plan may include starting the immunosuppression a day or two before the transplant.
- The patient should be clerked in by the most senior of the junior medical staff on call.
- Much of the past medical history will be documented in the transplant plan.
- Up date the past medical especially if there is any history of hypertension, asthma or seizures. Attention should be paid to recent infections including peritonitis in PD patients and HD line infections, and any contact with infectious diseases.
- If the child is unwell or there are concerns, please discuss with the consultant.

Investigations to be obtained:

Haematology:	FBC and coagulation
Blood Bank:	Cross-match leuco-depleted packed red cells[i] <20 kg: 2 units 20-40 kg: 3 untis >40Kg: 4 units
Biochemistry:	U+E, LFTs, Bone, Mg, Glucose, CRP
Virology:	Serology (10mls clotted blood) :CMV, EBV, VZV, Hep B, Hep C, HTLV1 ; send to South Sector Microbiology PCR (3-5mls EDTA) EBV, CMV, adenovirus, BK; send to South Sector Microbiology
Bacteriology:	PD fluid (in sterile universal) and urine (in boric acid container) for culture
Tissue Typing:	5-10ml clotted blood sent to the H&I Laboratory at Gartnavel General Hospital.

Other investigations as clinically indicated e.g. CXR, ECG, ultrasound of kidney

If the child is a known Dialysis patient to the team:

- **Haemodialysis**: children on haemodialysis will require dialysis pre-transplant unless they have had a satisfactory dialysis session within the previous 24 hours.

- Minimal anticoagulation should be used, and the line should be capped with heparin only.

- Fluid removal should be minimal unless fluid overloaded. Discuss with consultant on call.

- **Peritoneal Dialysis**: children should receive their usual overnight dialysis. Depending on the time of transplantation and biochemistry results, further cycles may be required.

- When going to theatre, the abdomen should be empty (no last fill), and the catheter capped prior to transfer to theatre.

- Fluid removal should be minimal unless fluid overloaded. Aim to leave child at or above their dry weight i.e. limit the UF or allow time to catch up with iv fluids if fluid removal greater than expected.

On the day:

- Fast for 6 hours pre-operatively

- IV fluids should be in place while the child is fasting to cover measured urinary losses and insensible losses of 400ml/m^2. Use 0.45% saline/5% dextrose unless otherwise indicated. Children should be well hydrated at the time of operation.

- **Document BP.** Withhold long-acting anti-hypertensives. If BP elevated, discuss with consultant nephrologist.

The donor nephrectomy takes place in the Queen Elizabeth university theatres. As soon as the retrieving surgeon is happy that the kidney is suitable for use, they will phone ward 3c to say the transplant is going ahead. Nursing staff on Ward 3c will then phone theatre to inform them that the operation is proceeding. The Basiliximab will be given promptly to the patient who will then go to theatre as soon as the infusion is complete.

Immunosuppression:

- The intended immunosuppressive regimen will be documented in the transplant plan. Basiliximab is generally the only immunosuppressant given pre-operatively

- methylprednisolone is given during surgery and the rest start after theatre. This will be documented in the transplant plan.

Antibiotic cover:

- Give Cefotaxime 50mg/kg at induction, to a maximum dose of 1.5g bd. This is for surgical prophylaxis and should be for a minimum of 24 hours or longer if indicated.

Gastroprotection:

- Commence on omerazole for gastroprotection

Aspirin is started on the day of transplant and is given prior to going to theatre:

- Any child deemed at increased risk of thrombosis will have a plan for low molecular weight heparin.
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Medication plan for pre transplant patients:

Prednisolone:

- Day 0 Methyl prednisolone 600mg/m^2 max 1 gm given in theatre prior to the release of the vascular clamps

Basiliximab:

- Give first dose on day 0 when it is known that the transplant is going ahead. Basiliximab to be made up in the ward and administered prior to transfer to theatre.
- < 35 kg 10mg each dose
  ≥ 35 kg 20 mg each dose

Cefotaxime:

- 50 mg/kg at induction

Omeprazole:

- Pre operative - 10-20 kg 10mg once daily
  >20kg 20mg once daily

Aspirin:

- <25kg 37.5 mg po in the morning
  ≥25kg 75 mg po in the morning

Medication	Dosage
Prednisolone	Day 0 Methyl prednisolone 600mg/m^2 max 1 gm given in theatre prior to the release of the vascular clamps Day 1 60 mg/m^2/day po (0800) maximum dose 80mg Day 2 40 mg/m^2/day po Day 3 30 mg/m^2/day po Day 4 20 mg/m^2/day po then stop.
Tacrolimus	0.15 mg/kg po bd (1000 & 2200) maximum dose of 5mg bd Specify Prograf® or Modigraf® (powder)
Mycophenolate Mofetil	600 mg/m^2 po bd (0800 and 2000) max dose 1 gm bd
Basiliximab	< 35 kg 10mg each dose ≥ 35 kg 20 mg each dose Give first dose on day 0 when it is known that the transplant is going ahead. Basiliximab to be made up in the ward and administered prior to transfer to theatre. A second dose is given on Day 4.
Cefotaxime	50 mg/kg iv bd (1000 and 2200) to maximum of 1.5gm bd - adjust dose for GFR
Omeprazole	**iv:** 1-12 years: start at 500mcg/kg (max 20mg) once daily increasing to 2 mg/kg/day (max 40mg) if necessary >12 yrs: max 40mg daily **po:** 10-20 kg 10mg once daily >20kg 20mg once daily
Valganciclovir	520 mg/m^2 po daily when tolerating oral fluids, if required – adjust dose for GFR
Aspirin	<25kg 37.5 mg po in the morning ≥25kg 75 mg po in the morning Continue for 3 months