RENAL TRANSPLANT – QUICK GUIDE

(This does not replace the Renal Transplant Protocol. This can be found on the intranet under Policies and Guidelines library :
Renal Transplant Adult Recipient: Post-Op Care in DCCM

A period of post-operative observation and assessment of the function of the graft in DCCM is usually appropriate. It is expected that most patients will have excellent immediate graft function. Most patients should be admitted in the afternoon, spend one night in DCCM and transfer to the transplant ward (71) next morning after agreement from the transplant service (either the operating surgeon or the transplant nephrologist). This may be via radiology for an ultrasound.

1. **Take handover** from OR team. The surgeon will usually provide a handover including ischaemic time and any unusual or problematic features and any anticipated difficulty in the early post-operative period.
2. **Examine the patient**
   Include an examination of the patency of the fistula if present
3. **Initial investigations** should include :
   - *CXR (in PACU) and 12 lead ECG*
   - *ABG*
   - *Extended biochem, FBC, Full coag*
   - *CHECK ALL RESULTS and write up on the 24 hour chart*
4. **Airway and Breathing**
   - Patients arrive extubated and supplemental oxygen should be given (usually by mask) to all patients as needed to maintain *SpO2 above 95%.*
5. Circulation
   - Routine fluid orders are for *0.45% saline in water* (no dextrose) *at a rate of the previous hour's urine output*.
   - Unless otherwise stated by the operating surgeon, all patients may eat and drink as tolerated as soon as they are fully alert.
   - *Aims : HR 60 to 120/min, MAP 80 to 120mmHg, temp 36 - 38°C.*
   - The aims of post operative fluid therapy are to maintain good renal graft perfusion and if possible ensure good function while accepting a relatively low central venous pressure and minimising the extent of extracellular water expansion.
   - Red cells should only be given for anaemia to keep haemoglobin > 80g/L
   - Oliguria : Patients who are not polyuric (> 125ml/hr) should have volume expansion (crystalloid) and MAP support with noradrenaline to 80mmHg. Check catheter is patent. If ongoing (i.e >4hours) discuss with transplant nephrologist
6. **Analgesia** in the form of a *fentanyl PCA*.
7. **Medications**
   - **All patients**
     i. *Paracetamol 1g PO/NG 6hrly*

- **Immunosuppression**
    i. *prednisone 30mg PO daily, starting at 0800 hours next morning*
    ii. *mycophenolate mofetil 1g 12-hourly PO*
    iii. *Cyclosporin at a dose of 5mg/kg PO 12 hourly (at 2000 and 0800 hours, starting at the first such post-operative time)or tacrolimus 0.05mg/kg PO 12 hourly (at 2200 and 1000 hours, starting at the first such post-operative time)*

    Trial immunosuppression

    The transplant nephrologist should inform DCCM if the patient is in a trial and provide the appropriate protocol.
- **Antimicrobials**
    i. *Cefuroxime 750mg IV 8hrly x2 post-operative doses*

8. **Bleeding**

    Evident bleeding (either as loss from drains or as transfusion requirement) of more than 200ml/hour should be replaced as required, coagulation should be measured and corrected and the situation discussed within 2 hours with the transplant surgeon. Re-operation may be required. Sudden massive bleeding usually indicates vascular anastomotic failure and immediate re-operation is required without other investigations such as imaging.
9. **Hyperkalaemia**

    K+ 6.0 – 6.4mmol/L should be treated with the following:
    - 50ml of IV 50% dextrose bolus
    - 10 units of IV insulin bolus
    - re-check serum potassium in 2 hours
    - consider calcium resonium 30g PO/PR 6hrly

    K+ ≥ 6.5 mmol/L can be a life threatening emergency
    - Discuss the patient immediately with the transplant nephrologist. Haemodialysis may be needed and this is preferred in this circumstance over continuous veno-venous haemodiafiltration (CVVHDF)
    - 50ml of IV 50% dextrose bolus
    - 10 units of IV insulin bolus
    - Start 20ml/hr 50% dextrose IV infusion immediately
    - Start 2 units/hr insulin infusion immediately – adjust as necessary to keep blood glucose 7 - 12mmol/L
    - Give salbutamol 10mg by nebuliser immediately

THIS QUICK GUIDE DOES NOT REPLACE THE RENAL TRANSPLANT PROTOCOL AVAILABLE ON THE INTRANET AND THE FULL PROTOCOL SHOULD BE REFERRED TO WITH ANY QUERIES AND FOR FULL INFORMATION