UNIVERSITY OF Cincinnati

Kidney Transplant Recipient Care Plan

(This document may be accessed on the kidney transplant wiki page)

Recipients of Deceased Donor Kidney Allografts

Projected Length of Stay: 3-5 days

The Care Plan addresses key steps in patient care from the period through hospital discharge to home or transfer to a rehabilitation facility. It is expected that some patients may have more complicated clinical courses that may warrant changes in the Care Plan.

Kidney Transplant Recipient Key Clinical Care Goals

Begin discharge planning by POD#1, with all team members involved in the process.

1. **Patient Care:**
   - Remove central line after patient has 2 PIVs (or document clear need for ongoing CVC)
   - Remove foley catheter by POD#3 unless otherwise specified by the surgeon or there are appropriate, documented indications for continued use
2. **Patient Education:**
   - Responsibility of all team members to make sure all questions from family/patient answered to their satisfaction
   - Pharmacy: patient self-administration & specific teaching: meds, regimen and pillbox packing
3. **Discharge Readiness Assessment and Planning:**
   - Transplant PA/NP coordinates with ambulatory pharmacy to order discharge medications
   - Recognize obstacles to early ambulation and initiate appropriate intervention (PT, OT, alternative discharge plan as appropriate)
   - Assess collaboratively patient safety and readiness for discharge
   - Ensure that the patient has resources to obtain adequate nutrition, access to medications, access to physician follow-up appointments
   - Ensure that patient support system is in place (rehabilitation facility, visiting nurse, transportation)
4. **Communication:**
   - Ongoing, daily discharge plan communication between inpatient/outpatient transplant team
   - Timely, detailed communication between team members and at change of shifts to ensure patient safety, and facilitate discharge planning

Pre-Operative Area

Orders:
*Patients receiving **DECEASED DONOR** transplant will arrive at 8CCP on day of transplant and all of following must be performed prior to transplant

"Kidney TXP Preop Admission" order set:

- All orders should be STAT
- Select peri-op antibiotics
- Confirm peri-op immunosuppression and required labs with surgeon/transplant nephrologist/ transplant pharmacist
- Order all other meds in order set (as per immunosuppression regimen)
- Peripheral IV placement
- Order all labs listed on order set
- CXR can be portable

Consents:

- Operative consent
- PHS increased risk consent PRN

Nursing (STAT):

- Call transplant resident/fellow as soon as patient arrives
- Vitals/Standing weight
- Labs (call phlebotomy as soon as patient arrives)
- EKG
- PIV
- Hibiclens shower
- Pregnancy test

NO PERI-OP ANTIBIOTIC, IMMUNOSUPPRESSION MEDICATION SHOULD BE GIVEN ON 8CCP/SICU (SHOULD GO TO SDS WITH PATIENT OR WILL BE SENT DIRECTLY TO SDS FROM PHARMACY)

Education: Responsibility of all members of team to make sure all questions from family/patient answered to their satisfaction.

Discharge Planning: Update outpatient team.

POD#0: (Transfer to SICU)

Orders:

"Kidney TXP Post Op Admission" order set:

- Labs: daily CBC, differential, renal panel, magnesium
- Glucose qAC/HS (or q6hr if NPO)
- Start diet 6 hours out of OR unless peritoneum opened

Medications:

- Fluids:
  - When urine output is less than 50ml/hr, run 0.9 % NaCl infusion at rate of 50ml/hr
  - When urine output is between 50-150ml/hr, run 0.9 % NaCl infusion at rate of 100ml/hr
  - When urine output is greater than 150ml/hr, run 0.9 % NaCl infusion at 150ml/hr and replace 2/3 last hour urine output with 0.45 % NaCl
- SubQ heparin initiated in evening of POD#0 (unless bleeding concerns or IV heparin also ordered)
- IV antibiotics x 24 hrs post-op
- Initiate PCA once extubated and off sedation
- Continue Anti-thymocyte globulin dose #1x24hr (run at 20.8ml/hr unless otherwise directed by transplant surgeon)
- Mycophenolate (Cellcept)
- PRN Dopamine – continue as instructed/start if instructed by transplant surgeon; parameters per transplant surgeon

Goals/parameters/targets:

- CVP ~8-12 (if <5, treat with IVF or albumin bolus)
- SBP>110
- Keep I>O for at least 24 hours

Lines/Drains:

- PIV x 2 or TLC x1
- Arterial line
- JP x1 (surgeon/case dependent)
- Foley
- ETT - Wean vent to extubation (if not extubated in OR)

Nursing:

- Line/Foley/JP care
- Strict I&Os
- SCDs
- Vitals per unit routine
- Daily standing weights
- IS 10 times/hour while awake

****Do not change initial surgical site dressing for 48 hours unless saturated**

Education: Responsibility of all members of team to make sure all questions from family/patient answered to their satisfaction.

Discharge Planning: Update outpatient team.

POD#1

Orders:

- Labs: daily CBC, differential, renal panel, magnesium, Tacrolimus level - 8am for SICU/6am for 8CCP; Glucose qAC/HS (or q6hr if NPO)
- Advance diet
- Pend to floor (Modify labs to 6AM on 8CCP)

Medications:

- D/C replacements and set maintenance NS IVF at rate based on fluid protocol seen above
- D/C IVF if anuric
- Restart appropriate home meds
- SQH
- IV antibiotics x24 hours post-op
- D/C PCA. Transition to tylenol/gabapentin/tramadol prn (unless on opioid for chronic pain pre-txp). Add IV dilaudid prn if patient experiencing breakthrough pain
- Bowel regimen – Miralax and colace
- Anti-thymocyte globulin dose #2 x6hrs (ensure within ANC/PLT parameter prior to order)
- Initiate Tacrolimus (prograf) per deceased donor kidney transplant immunosuppression protocol
- Mycophenolate (Cellcept) 1000 mg BID
- Methylprednisolone/prednisone taper per protocol
- Pantoprazole

Goals/parameters:

- Keep I>O for at least 48 hours

Lines/Drains:

- PIV x2 or TLC x 1
- A-line- DC if no insulin gtt and when no longer indicated for close hemodynamic monitoring
- Foley; JP

Nursing:

- Line/Foley/JP care
- Strict I&Os
- SCDs
- Vitals per unit routine
- Daily standing weights
- IS 10 times/hour while awake
- Up in chair
- OOB TID
- Telemetry (8CCP)

****Do not change initial surgical site dressing for 48 hours**

Education: Responsibility of all team members to make sure all questions from family/patient

answered to their satisfaction. Coordinator teaching. Pharmacist medication self-administration teaching (arrival on 8CCP). Nurse teaching.

Discharge Planning: Routine transplant medications ordered through Hoxworth pharmacy. Update outpatient team. Review placement/home care needs w/ social work.

POD#2

Orders:

- Labs: daily CBC, differential, renal, magnesium, Tacrolimus level; glucose qAC/HS (or q6hr if NPO)
- Advance diet

Medications:

- D/C IVF
- SQH
- Oral pain medications: Tylenol, gabapentin, and tramadol prn (unless on opioid for chronic pain pre-txp). Consider switching to oxycodone if patient still requiring IV dilaudid prn
- Bowel regimen - Miralax and colace
- Anti-thymocyte globulin if indicated based on immunosuppression protocol
- Tacrolimus, adjust per level
- Mycophenolate (Cellcept) 1000 mg BID
- Methylprednisolone/prednisone taper per protocol
- Consider ID prophylaxis (CMV/PJP) –based on CMV status of donor/recipient
- Pantoprazole

Goals/parameters:

- Keep I>O for at least 48 hours

Lines/Drains:

- PIV x 2 or TLC x 1
- Foley; JP

Nursing:

- Line/Foley/JP care
- Strict I&Os
- SCDs
- Dressing change
- Vitals per unit routine
- Daily standing weights
- IS 10 times/hour while awake
- Up in chair
- OOB TID
- Telemetry (8CCP)

Education: Completed prior to transplant. Responsibility of all team members to make sure all questions from family/patient answered to their satisfaction. Coordinator teaching. Diabetes/Insulin teaching if new to insulin regimen. Pharmacist medication self-administration teaching. Nurse

teaching.

Discharge Planning: Follow up with Hoxworth pharmacy regarding medication status. Update outpatient team. Review placement/home care needs w/ social work – complete COC or H H C form. Pharmacist pack pill box.

POD#3

Orders:

- Labs: daily CBC, differential, renal, magnesium, Tacrolimus level
- Glucose qAC/HS (or q6hr if NPO)
- Advance diet

Medications:

- SQH
- Oral pain medications
- Bowel regimen -Miralax and colace
- Anti-thymocyte globulin if indicated based on immunosuppression protocol
- Tacrolimus, adjust per level
- Mycophenolate (Cellcept) 1000 mg BID
- Methylprednisolone/prednisone taper per protocol
- Consider ID prophylaxis (CMV/PJP) – need CMV status of donor/recipient
- Pantoprazole

Lines/Drains:

- PIV x 2 or TLC x1
- Foley - D/C by 8 AM with attending/fellow approval. Check PVR (page txp1 if PVR>150. Double void and re-check PVR.)
- JP x 1 - D/C 6 hours after Foley out (monitor for increase in or change in color of JP output)

Nursing:

- Line care
- Foley care
- JP care
- Strict I&Os
- SCDs
- Dressing change
- Vitals per unit routine
- Daily standing weights
- IS 10 times/hour while awake
- Up in chair
- OOB TID
- D/C Telemetry (8CCP)
- Check PVR/record

Education: Completed prior to transplant. Responsibility of all team members to make sure all questions from family/patient answered to their satisfaction. Coordinator teaching. Diabetes/Insulin

education if new to insulin regimen. Pharmacist medication self-administration teaching. Nurse teaching.

Discharge Planning: Review placement/home care needs w/ social work – complete COC or HHC note. Med reconciliation completed. Order pain med Rx and any other new Rx on day of discharge. Pharmacist pack pill box. Discharge instructions. Schedule ureteral stent removal in 4 weeks following transplant date. Arrange follow-up with outpatient team and other services involved in patient care.

POD#4-7

Orders:

- Labs: daily CBC, differential, renal panel, magnesium, tacrolimus level
- Glucose qAC/HS (or q6hr if NPO)
- Advance diet
- Consider renal transplant biopsy if DGF by POD#7

Medications:

- SQH
- Oral pain medications
- Bowel regimen - Miralax and colace
- Thymocyte globulin if indicated based on immunosuppression protocol
- Tacrolimus, adjust per level
- Mycophenolate (Cellcept) 1000 mg BID
- Methylprednisolone/prednisone taper per protocol
- Consider ID prophylaxis (CMV/PJP) – need CMV of donor/recipient
- Pantoprazole

Lines/Drains:

- PIV x2 or TLC x1

Nursing:

- Line care
- Strict I&Os
- SCDs
- Dressing change
- Vitals per unit routine
- Daily standing weights
- IS 10 times/hour while awake
- Up in chair
- OOB TID
- D/C Telemetry (8CCP)

Education: Same as POD#3.

Discharge Planning: Same as POD#3.