

Pancreas Transplant Recipient Care Plan

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

Recipients of Pancreas or Simultaneous Kidney and Pancreas Allografts

Projected Length of Stay: 7 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.

Pancreas or Simultaneous Kidney Pancreas Recipient Key Clinical Care Goals

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

1. Patient Care:

- a. Remove foley catheter by POD#2 if solitary pancreas txp; POD#3 if SPK

2. Patient Education:

- a. Adequately educate patient and family prior to discharge
- b. Patient education is the responsibility of all team members, and should address:
 - i. Immunosuppressant medication teaching
 - ii. Wound care management

3. Discharge Readiness Assessment and Planning:

- a. Transplant PA/NP coordinates with ambulatory pharmacy to order discharge medications
- b. Recognize obstacles to early ambulation and initiate appropriate intervention (PT, OT, alternative discharge plan as appropriate)
- c. Assess collaboratively patient safety and readiness for discharge
- d. Ensure that the patient has resources to obtain adequate nutrition, access to medications, access to physician follow-up appointments
- e. Ensure that patient support system is in place (rehabilitation facility, visiting nurse, transportation)

4. Communication:

- a. Ongoing, daily discharge plan communication between inpatient/outpatient transplant team
- b. Timely, detailed communication between team members and at change of shifts to ensure patient safety, and facilitate discharge planning

Pre-Operative Area

Orders: “Pancreas/SKP/PAK Preop Admission” order set

- All orders should be STAT
- Order periop antibiotics per protocol
- Order all other meds in order set including mycophenolate (Cellcept), methylprednisolone, anti-thymocyte globulin (and premeds), fluconazole (Diflucan)
- PIV placement (do not allow placement to delay labs)
- All patients will get fluconazole (Diflucan) per protocol
- Order all labs listed on order set
- CXR can be portable
- STAT glucose q2hrs. DO NOT administer sliding scale insulin within 6 hours of last administration unless instructed by MD.
- If patient on insulin pump prior to admission, ensure hospital insulin pump contract signed, order pump using “Insulin Pump; Non-OB Pt Self Admin” orderset, consult diabetes educator (during day) or page endocrinology fellow (during night) if need assistance with basal rate specifics and continue insulin pump until SDS. If not on an insulin pump, continue 1/2 dose of medium-acting or long-acting insulin at their usual time and start on low dose sliding scale insulin.

***Order blood products on hold to OR (2UPRBC)**

***Order necessary home meds**

***Consents (behind 8CCP HUC)**

- Operative Consent
- PHS High Risk Consent PRN

Nursing (STAT):

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

NO PERI-OP ANTIBIOTIC, FLUCONAZOLE, ASPIRIN, CELLCEPT, METHYLPREDNISOLONE, ANTI-THYMOCYTE GLOBULIN SHOULD BE GIVEN ON 8CCP or in 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.

POD#0: (Transfer to SICU)

Orders: “Pancreas/SKP/PAK Post op Admission” order set

- Labs daily: CBC, differential, renal panel, magnesium
- NPO
- NG remains in 3 days or until return of bowel function
- Glucose q 1 hr x 24 hours, q 2 hr x 24 hours, q 4 hr x 24 hours, qAC & HS or q 6 hr if NPO

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
- No IVF/medications with dextrose if possible
- **DO NOT ORDER INSULIN. DISCONTINUE ANY PRIOR INSULIN OR ANTIDIABETIC MEDICATIONS.**
- Heparin drip at 500 units/hour without bolus started 6 hours after surgery and continued x 48 hours, then baby ASA daily
- Perioperative prophylactic antibiotics continue x 48 hrs post-op
- Initiate PCA once extubated and off sedation
- Continue Anti-thymocyte globulin dose #1 x 24hrs
- Mycophenolate (Cellcept)
- Methylprednisolone/prednisone taper as per orderset
- Fluconazole (Diflucan) for anti-fungal prophylaxis per protocol
- Pantoprazole (Protonix)

Goals/parameters:

- CVP ~10-12 (if <5, treat with IVF or albumin bolus)
- SBP>130

Lines/Drains:

- TLC x 1; Arterial line
- JP x 1; Foley
- ETT - Wean vent to extubation
- NG suction to low intermittent suction

Nursing:

- Line/Foley/JP care
- NG tube care
- Strict I&Os
- SCDs
- Vital signs per unit routine

- Daily standing weights
- IS 10 times/hour while awake

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

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

POD#1

Discharge Planning: Update outpatient team.

Orders:

- Labs daily: CBC, differential, renal panel, magnesium
- Glucose q 2hr x 24hr
- NPO
- NG remains in 3 days or until return of bowel function

Medications:

- D/C replacements after 24hrs and adjust maintenance IV fluids
- No IVF/medications with dextrose if possible
- **DO NOT ORDER INSULIN**
- Continue heparin drip x 48 hrs post op
- Perioperative prophylactic antibiotics continue x 48 hrs post-op
- Continue PCA
- Anti-thymocyte globulin-dose per high risk ISP protocol
- Initiate Tacrolimus (Prograf) per Deceased Donor Kidney Transplant High Risk Immunosuppression Protocol
- Mycophenolate (Cellcept) and methylprednisolone/prednisone taper
- Fluconazole (Diflucan) prophylaxis
- Pantoprazole (Protonix)

Lines/Drains:

- TLC
- Arterial line- D/C
- JP x 1
- Foley
- ETT - Wean vent to extubation
- NG suction to low intermittent suction until bowel function

Nursing:

- Line/Foley/JP care
- NG tube care
- Strict I&Os
- SCDs
- OOB –ambulate TID
- Vitals per unit routine

- Daily standing weights
- IS 10 times/hour while awake

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

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

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

POD#2

Orders:

- Labs daily: daily CBC, renal panel, magnesium, AM Tacrolimus (prograf) troughs (8am for SICU; 6am for 8CCP)
- NPO
- NG remains in until return of bowel function, ~3days
- Glucose q4hr x 24hr
- Pend to floor and initiate telemetry (if pended)

Medications:

- No IVF/medications with dextrose if possible
- Maintenance IVF
- **DO NOT ORDER INSULIN**
- Continue heparin drip x 48 hrs post-op, then starts ASA 81mg daily and SQH
- When tolerating clears, D/C PCA. Transition to tylenol/gabapentin/tramadol prn (unless on opioid for chronic pain pre-tpx). Add IV dilaudid prn if patient experiencing breakthrough pain.
- Anti-thymocyte globulin-dose per ISP protocol
- Tacrolimus, adjust dose per level
- Mycophenolate (Cellcept)
- Methylprednisolone/prednisone taper
- Fluconazole (Diflucan) prophylaxis
- Initiate other ID prophylaxis (CMV, PJP) - need CMV status of donor/recipient
- Pantoprazole (Protonix)
- Restart necessary home meds as appropriate

Lines/Drains:

- JP x1; Foley
- TLC x1
- NG suction to low intermittent suction until bowel function

Nursing:

- Line/JP/Foley/NG care

- Strict I&Os
- SCDs
- OOB-ambulate TID
- Dressing change
- Vitals per unit routine
- Daily standing weights
- IS 10 times/hour while awake
- Telemetry

Education: Responsibility of all members of team to make sure all questions from family/patient answered to their satisfaction. Coordinator teaching. Pharmacist self-med teaching (arrival on 8CCP).

POD#3

Discharge Planning: Follow up with ambulatory pharmacy regarding medication status. Review placement/home care needs w/ social work.

Orders:

- Labs daily: CBC, differential, renal panel, magnesium, tacrolimus level
- Glucose qAC/HS (q6hr while NPO)
- Remove NG (if return of bowel function)
- Clear diet if NG removed

Medications:

- No IVF/medications with dextrose if possible
- **DO NOT ORDER INSULIN**
- Maintenance IVF
- ASA 81mg daily and SQH
- When tolerating clears, 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. Consider switching to oxycodone if patient still requiring IV dilaudid prn x 24hr.
- Anti-thymocyte globulin-dose per ISP protocol
- Tacrolimus, adjust dose per level
- Mycophenolate (Cellcept) and methylprednisolone/prednisone taper
- Fluconazole (Diflucan) prophylaxis
- Initiate or continue other ID prophylaxis (CMV, PJP)- need CMV status of donor/recipient
- Pantoprazole (Protonix)
- Restart necessary home meds as appropriate

Lines/Drains:

- TLC x1
- JP x1 (check drain amylase and lipase and compare to serum amylase and lipase after patient has been on regular diet and before removing drain)
- Foley- D/C by 8 AM with attending/fellow approval. Void check and PVR (page txp1 if

PVR>150. Double void and re-check PVR).

- NG suction to low intermittent suction until bowel function

Nursing:

- Line/JP/Foley/NG Care
- Strict I&Os
- SCDs; OOB-ambulate TID
- Dressing change
- Vitals per unit routine
- Daily standing weights
- ID 10 times/hour while awake
- Telemetry- D/C if no cardiac or hypoxic events

Education: Responsibility of all members of team to make sure all questions from family/patient answered to their satisfaction. Coordinator teaching. Pharmacist self-med teaching (on 8CCP).

POD#4

Discharge Planning: Follow up with ambulatory pharmacy regarding medication status. Review placement/home care needs w/ social work.

Orders:

- Labs daily: CBC, differential, renal panel, magnesium, tacrolimus level
- Glucose qAC/HS (q6hr while NPO)
- Remove NG (if return of bowel function)
- Clear diet if NG removed. Advance to regular if tolerates clears x24hrs.

Medications:

- No IVF/medications with dextrose if possible
- **DO NOT ORDER INSULIN**
- D/C IVF when tolerating clears
- ASA 81mg daily and SQH
- When tolerating clears, 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. Consider switching to oxycodone if patient still requiring IV dilaudid prn x 24hr.
- Anti-thymocyte globulin-dose per ISP protocol
- Tacrolimus, adjust dose per level
- Mycophenolate (cellcept) and methylprednisolone/ prednisone taper
- ID prophylaxis (Acyclovir/Valcyte, Bactrim, Fluconazole)
- Pantoprazole (Protonix)
- Restart necessary home meds as appropriate

Lines/Drains:

- TLC x 1
- NG suction to low intermittent suction until bowel function
- JP x1 (check drain amylase and lipase and compare to serum amylase and lipase after

patient has been on regular diet and before removing drain)

Nursing:

- Line/JP care
- Strict I&Os
- SCDs; OOB-ambulate TID
- Dressing change
- Vitals per unit routine
- Daily weights (standing preferred)
- IS 10 times/day while awake

Education: Responsibility of all members of team to make sure all questions from family/patient answered to their satisfaction. Coordinator teaching. Pharmacist self-med teaching (on 8CCP).

Discharge Planning: Follow up with ambulatory pharmacy regarding medication status. Review placement/home care needs w/ social work.

POD#5 (or later)

Orders:

- Labs daily: CBC, renal panel, magnesium, tacrolimus level
- Glucose qAC/HS (q6hr while NPO)
- Remove NG (if return of bowel function)
- Clear diet if NG removed. Advance to regular if tolerates clears x24hrs.

Medications:

- No IVF/medications with dextrose if possible
- **DO NOT ORDER INSULIN**
- D/C IVF when tolerating clears
- ASA 81mg daily and SQH
- Tylenol/gabapentin/tramadol prn (unless on opioid for chronic pain pre-txp). Add IV dilaudid prn if patient experiencing breakthrough pain. Consider switching to oxycodone if patient still requiring IV dilaudid prn x 24hr.
- Tacrolimus, adjust dose per level
- Mycophenolate (cellcept) and methylprednisolone/ prednisone taper
- ID prophylaxis (CMV, PJP, Fluconazole)
- Pantoprazole (Protonix)
- Restart necessary home meds as appropriate

Lines/Drains:

- TLC x 1 –D/C when thymo administrations done and off fluids
- NG suction to low intermittent suction until bowel function

- JP x1- (check drain amylase and lipase and compare to serum amylase and lipase after patient has been on regular diet and before removing drain)

Nursing:

- Line/JP Care
- Strict I&Os
- SCDs; OOB - ambulate TID
- Dressing Change
- Vitals per unit routine
- Daily weights (standing preferred)
- IS 10 times/day while awake

Education: Responsibility of all members of team to make sure all questions from family/patient answered to their satisfaction. Coordinator teaching. Pharmacist self-med teaching.

Discharge Planning: Update outpatient team. Review placement/home care needs w/ social work – complete COC note if placement or HHC note if home. Med rec completed. Discharge instructions. Pharmacist pack pill box. Arrange f/u with outpatient team and other services involved in patient care.