Policy: Kidney Post Transplant: Delayed Graft Function protocol  
  
Vision Strategy: Patient Care  
  
Policy Statement: The Emory Transplant Center and all the solid organ transplant programs will comply with all applicable federal, state, and local laws, regulations, policies and protocols regarding the management of transplant patients.   
  
Basis: This protocol is necessary for the protection of patients, physicians and staff  
  
Admin Responsibility: All transplant program physicians, practitioners and clinical staff members are responsible for compliance with this clinical protocol.

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| **TITLE:** **Delayed Graft Function Protocol** | |
| **APPLICABLE FACILITIES:** (check all that apply)  □EUH **□**EUOSH □EWWH □EUHM □EJCH □ESJH □TEC □ESA □ERH | |
| **EFFECTIVE DATE:** | **ORIGINATION DATE:** |

**SCOPE:**

Delayed graft function (DGF) is a common and costly complication of kidney transplantation most frequently defined as the need for dialysis during the first post-transplant week. Patients with DGF are medically complex, tend to have a longer hospitalization, and are at risk for early readmission. The presence of delayed graft function can significantly impact both short- and long-term allograft survival. Patients with DGF have a higher risk of rejection and therefore require close monitoring of graft function and immunosuppression.

**PURPOSE:**

The purpose of the DGF protocol is to identify patients with DGF and standardize patient management during discharge and post-discharge for close immunosuppression management, monitoring of graft function, blood pressure/volume management and timely biopsy for screening for rejection.

**PROCEDURE:**

Definition:

DGF = All patients who receive dialysis during the first post-transplant week.

Patient Identification

1. Patient will be identified as a DGF patient during inpatient stay by the transplant surgical and nephrology team. The DGF pathway will be initiated for patients discharged on dialysis.

Inpatient work flow:

1. When patient is deemed ready for discharge the following actions should be taken:
   1. Surgical team
      1. Add DGF (T86.19) to Diagnosis and Problem list
      2. Include DGF data elements in Discharge Summary
         1. Dialysis center
         2. Type of dialysis
         3. Dialysis schedule
         4. Target weight
      3. Communication to Short Term Post Coordinator of discharged DGF patients and notification to schedule first biopsy as clinically indicated, with future biopsies to be scheduled every 1-2 weeks as indicated by persistent dialysis or unacceptable renal function.
   2. Transplant Nephrologist
      1. Establish new dry weight, dialysis schedule, and biopsy dates with surgical team
      2. Communicate with dialysis center nephrologist about patient’s hospital course and new dry weight.
   3. ADT Nurse to provide patient with
      1. Patient Log
      2. Urinal/Hat
      3. Education leaflet (included in Depart Summary)
   4. Pharmacist to ensure necessary medications are prescribed and dosed.
   5. ADT Nurse to follow-up with patients within 48 hours of discharge and notify Short Term Post Coordinator via message center if any issues

Outpatient Clinic work flow:

1. Surgeon to include DGF data elements in Post Renal Visit Note
   1. Last dialysis session
   2. Target dry weight
   3. Current weight
   4. Urine output
2. Ensure DGF patients are biopsied as described above.

The following actions should be taken once the patient is no longer DGF:

1. Surgeon/Nephrologist to inactivate problem from problem list
2. Surgeon/Nephrologist to remove DGF data from Post Renal Visit Note
3. Transplant team to ensure medications are appropriately dosed and adjusted

**RELATED DOCUMENT(S)/LINK(S):**

As part of the QAPI program, policy compliance and DGF rates for the first twelve months post-transplant will be reviewed every six months by the transplant program’s clinical leadership.

**REFERENCES AND SOURCES OF EVIDENCE:**

*Harhay M*, *Lin E*, *Pai A*, et al. *Early rehospitalization after kidney transplantation: Assessing preventability and prognosis*. *Am J Transplant* *2013*; *13*: *3164*–*3172*

*Yarlagadda SG*, *Coca SG*, *Formica RN*, *Poggio ED*, *Parikh CR*. *Association between delayed graft function and allograft and patient survival: A systematic review and meta analysis*. *Nephrol Dial Transplant* *2009*; *24*: *1039*–*1047*

*Kasiske B*, *Zeier M*, *Chapman J*, et al. *KDIGO clinical practice guideline for the care of kidney transplant recipients: A summary*. *Kidney Int* *2010*; *77*: *299*–*311*

**KEY WORDS:**

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| --- | --- |
| **REVIEW/APPROVAL SUMMARY:** | |
| **APPROVAL BODY/BODIES:** | |
| **REVIEW/REVISION DATES:** | **APPROVAL DATE:** |