|  |  |
| --- | --- |
| **TITLE:** Emory Transplant Center Kidney/Pancreas Sickle Cell Procedure | |
| **APPLICABLE FACILITIES:** (check all that apply)  □EUH **□**EUOSH □EWWH □EUHM □EJCH □ESJH □TEC □ESA □ERH | |
| **EFFECTIVE DATE:** | **ORIGINATION DATE:** |

**SCOPE:**

The Emory Transplant Center Kidney and Pancreas Transplant Program.

**PURPOSE:** The Emory Kidney Transplant Program is committed to caring for patients with kidney/pancreas failure and sickle cell disease.

**GUIDELINES:**

Patients with sickle cell disease will undergo our standard practice for pre-transplant evaluation & testing, wait listing management, healthcare maintenance testing and post-transplant management (as described in the relevant kidney/pancreas protocols & procedures), with the following exceptions:

* Day One: Blood tests for red cell phenotype, Hg electrophoresis, BNP, ferritin level will be drawn.
* Day Two Consultations:
  + Cardiology Consult (if known history of coronary artery disease which has required intervention such as CABG or angioplasty/stent placement or history of severe cardiomyopathy).
  + Mental Health Specialist Consult (if known history of depression, bipolar disorder, schizophrenia, eating disorder, noncompliance or any other mental illness).
  + Hepatology Consult (if known history of hepatitis B or C or other liver disease)
  + Pulmonary Consult (if known history of COPD or sleep apnea).
  + Hematology Consult with Dr. McLemore/Dr. El Rassi at Grady Memorial Hospital (Contact Chris Terry Carter at (404) 778-1350 for appointments)

Peri-Transplant Procedure for deceased donor renal transplantation:

1. The Hematology consult will be in the patient’s medical record to assist the team.

2. Call Transfusion services consult on admission.

3. Call Emory Hematology consult on admission:

a. OR Management Guidelines

i. Transfuse for a goal hemoglobin of 10.

ii. If Hg 10 do not transfuse.

b. POD#1 or 2

i. Exchange transfusion, exceptions will be based on the discretion of the hematology service. The goal percentage of hemoglobin S should be 30% or less post-transplant.

Peri-Transplant Procedure for living donor renal transplantation:

1. The Grady group Hematology consult will be obtained as an outpatient for planned optimization prior to living donor renal transplant (Contact Chris Terry Carter at (404) 778-1350 for appointments). Consider admission to EUH 1-2 days prior to transplantation for possible elective exchange transfusion.

2. Call Transfusion services consult on admission.

3. Call Emory Hematology consult on admission:

a. OR Management Guidelines

i. Transfuse for a goal hemoglobin of 10.

ii. If Hg 10 do not transfuse.

b. POD#1 or 2

i. Exchange transfusion, exceptions will be based on the discretion of the hematology service. The goal percentage of hemoglobin S should be 30% or less post-transplant.

Maintenance Procedure:

1. Avoid GCSF (all colony stimulating factors can precipitate massive sickling) in sickle cell anemia patients
2. Maintain Hg of 10 x 3 months.

3. Exchange transfusion monthly to maintain Hg of 10 for 3 months at EUH. Leave dialysis access in place for exchange transfusion.

4. Hg Electropheresis at Grady Memorial Hospital after first exchange performed.

5. Monthly Hematology appointments at Grady Memorial Hospital x 6 months, who will consider hydroxyurea at approximately 6 months after transplant.

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

Add protocols:

Evaluation and Testing

Waitlist Maintenance

Post-transplant management

**DEFINITIONS:** *(If applicable)*

BMI – Body Mass Index

IV-intravenous

**REFERENCES AND SOURCES OF EVIDENCE:**

1. Kasiske, B.L. and D. Klinger, Cigarette smoking in renal transplant recipients. J Am Soc Nephrol, 2000. 11(4): p. 753-9.

2. Biesenbach, G., et al., Impact of smoking on progression of vascular diseases and patient survival in type-1 diabetic patients after simultaneous kidney-pancreas transplantation in a single centre. Transpl Int, 2008. 21(4): p. 357-63.

3. Penno, G., et al., Independent correlates of urinary albumin excretion within the normoalbuminuric range in patients with type 2 diabetes: The Renal Insufficiency And Cardiovascular Events (RIACE) Italian Multicentre Study. Acta Diabetol, 2015. 52(5): p. 971-81.

**KEY WORDS:**

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