

Guidelines for Kidney Transplantation- Deceased Donor Criteria

Cadaveric Transplant involves removal of organs from a brain dead donor (DBD) with a functional circulation, or from patients with sudden cardiac death (DCD).

However, since the vast majority of organs are harvested from brain dead donors (DBD), the donor criteria pertain to both.

Most organ donors are victims of sudden illness or accident. The medical and nursing teams who have cared for the patient and assist the family also play a major role in obtaining permission for organ donation.

Notifying the Transplant centre as soon as possible helps ensure the best possible donor maintenance and permits more time for the identification of suitable recipients. Early notification allows the Transplant Centre to determine the suitability of the potential donor, even before the next of kin become finally committed to organ donation. It also helps in mobilizing the retrieval team and possible recipients in good time.

The criteria for an Deceased organ donor are:-

1. Normal Renal Function
2. No Hypertension Requiring Treatment
3. No Diabetes Mellitus
4. No Malignancy other than a primary brain tumor or treated superficial skin cancer
5. No Generalized viral or bacterial infection
6. Acceptable urinalysis
7. Negative assays for syphilis, hepatitis, HIV, & human T Lympho proliferative virus.

In order to meet the increasing demand of Cadaveric kidneys, some exceptions can be made in above listed criteria, resulting in the adoption of “Expanded Criteria Donors”(ECD).

ECD INCLUDES

- Donor less than 6 yrs of age
- Donor with age more than 60years; can be accepted if other parameters are normal.
- Donors 51 to59 years old with any two of the following risk factors
 - Cerebrovascular death
 - HTN
 - Serum Creatinine >1.5mg/dl

KIDNEY DONORS

Elevated Creatinine (up to 3 mg/dl) is not a contraindication, especially if the Creatinine level is falling and if the donor is known to have normal renal function in the recent past.

CONTRAINDICATIONS:-

- Chronic Renal Disease
- Age > 70 years; can be accepted if other parameters are normal.
- Potential metastasizing malignancy
- Severe Hypertension
- Current intravenous abuse
- HIV positive
- Oliguric Acute Renal Failure
- Untreated bacterial Sepsis
- Juvenile onset diabetes

*Apart from consent taken routinely from recipient, an additional informed consent must be taken for donors from Expanded Criteria.

Once the brain –dead donor is found to be within the criteria for organ donation, management is aimed at accomplishing the following goals:-

1. Maintenance of systolic BP of above 90 mm Hg with mean arterial pressure of 60 mmHG: give Hemaccel(or Normal Saline) rapidly, if BP fails to respond , initiate a Dopamine infusion(800mg in 500 ml of NS).
2. Maintain a urine output of >50ml/hour. If it can not be achieved with fluid replacement ,give 100ml of 20% mannitol or 100mg frusemide.
3. Maintain body temperature between 34° C & 36° C.
4. Insulin or/ and atropine may be required in presence of hyper glycemia & bradycardia respectively.

OPERATIVE AND RECOVERY PROCEDURES

The harvesting of the organs takes place at hospitals which have been licensed to do so by Appropriate Authority.

INTRAOPERATIVE DONOR MANAGEMENT

1. Maintain blood pressure, central venous pressure and urine output as previously described. Notify the surgeon of significant fluctuations.
2. Maintain a vigorous diuresis greater than 100 ml/hr immediately prior to aortic clamping. This may require 1-2 Liters of Ringer's Lactate for every hour that the abdomen is open.

3. The following drugs, provided by the recovery team, are administered via the i.v. infusion prior to hepatectomy at the request of the surgeon -300 units/ kg of body weight Heparin and 100 ml of 20% Mannitol.

POTENTIAL DONOR INFORMATION

When calling about a potential donor, the following information is very helpful:

DONOR HOSPITAL

Tel No.

Ward

ATTENDING CONSULTANT

DONOR INFORMATION

Name:

Blood Group (including Rh):

Age:

Sex:

Admission Diagnosis:

PAST MEDICAL HISTORY

- ? Renal disease
- ? Liver disease
- ? Hypertension
- ? Diabetes
- ? Alcoholism
- ? Drug addiction
- ? Surgery

PAST MEDICAL HISTORY AND PHYSICAL STATUS

Temperature:

Pulse:

Spontaneous respiration:

Ventilator:

How long:

BP:

Lowest Value:

How long:

Urine output:

Catheter:

Last Hour:

Last 24 hours:

Period of oliguria or anuria:

Episodes of cardiac arrest:

Other injuries:

CURRENT MEDICATIONS

Steroids
Antibiotics
Vasopressors
Transfusions
I.V fluids
Others

LABORATORY DATA

ABO Blood group:	Blood Urea:	S. creatinine:
Surface hepatitis B Antigen (HBs Ag):	HCV:	HIV:
Liver function tests:		
Bilirubin:	SGPT:, SGOT:	Aikaline phosphatase:
Blood gases:		
pH:	PCO 2: ,PO 2:	Bicarb:
	Total CO 2:	Base excess:
Electrolytes:		
Microbiological data:		

HAS THE DIAGNOSIS OF BRAIN DEATH BEEN ENTERTAINED?

Yes / No	Time
Family approached?	Yes /No
Permission granted?	Yes / No