

ALLOCATION CRITERIA FOR DECEASED DONOR KIDNEY TRANSPLANT (GUIDELINES)

Preamble

Organ transplant has two sources: living donor and deceased donor. In case of living donor source, donor is already decided for a specific recipient. For deceased donor source, recipient needs to be selected out of a large recipients' pool. The allocation of organ is a complex process, influenced by a number of factors including medical urgency and donor & recipient matching. Following facts need to be kept in mind for organ allocation for kidney transplantation.

CERTAIN FACTS FOR END STAGE RENAL DISEASE (ESRD)

1. There is disparity between number of recipients requiring kidney transplant and the deceased organs available for kidney transplantation.
2. Some patients need kidney transplant on priority basis because of their medical condition, as delay in transplant may lead to mortality.
3. For End Stage Renal Disease (ESRD), maintenance dialysis is an acceptable and reasonably good alternate therapy so for majority of ESRD patients, renal transplant is not an emergency procedure.

RECIPIENT REGISTRATION, LISTING AND SCORING SYSTEM IN THE WAITING LIST (Before deceased donor availability)

1. Patient is to be registered by the concerned hospital through online registration form on website www.notto.mohfw.gov.in
2. A kidney advisory committee will approve registration and urgency criteria, if any.

The kidney advisory committee will confirm need for renal transplant of every newly registered patient. Once approved, ONLY then patient will be put on active list in the system and ALLOCATION SCORING for that patient will be done based on the guidelines formed.

3. Patient should be a case of End Stage Renal Disease on Maintenance dialysis for more than three months on regular basis.
4. Patient should not have an absolute contraindication for renal transplant, as given under:
 - a. Advanced untreatable cardiovascular disease
 - b. Irreversible cerebrovascular accident
 - c. Inoperable malignancy
 - d. Untreatable major psychiatric illness (to be certified by a psychiatrist)

5. Patient should be registered ONLY in ONE hospital registered under the Transplantation of Human Organs and Tissues Act (THOTA) with State authority.
However, he/she can change the hospital at any stage and his allocation scoring and seniority in central waiting list will not change. However, his/her seniority in the waiting list of locally available kidney, with the new Hospital will be applicable one month after date of change.
6. Patient can be registered for deceased donor even though patient is waiting for living donor transplant.
7. Status of patient must be updated regularly by the hospital in one of the following status:
- Active
 - **Unfit**
 - Suspended
 - Lost to follow-up
 - Transplant done
 - Death

SCORING SYSTEM FOR MAKING PRIORITY

Sl. No.	Criteria for scoring	Points allotted
1	Time on dialysis	(+1) for each month on dialysis
2	Previous immunological graft failure within 3 months of transplantation	(+3) for each graft failure
3	Age of recipient	(+3) for less than 6 years (+2) for 6 to less than 12 years (+1) for 12 to less than 18 years
4	Patient on temporary Vascular access	
(a)	With Failed all AV Fistula sites	(+ 2)
(b)	With Failed AV Graft after all failed AVF sites	(+ 4)
5	PRA (Panel Reactive Antibody)	(+ 0.5) for every 10% above 20%
6	Previous Living donor now requiring Kidney Transplant	(+5)
7	Near relative (as per definition of THOTA) of Previous deceased donor now requiring kidney transplant	(+5)

Note: Patients with the same score, priority will be decided based on the seniority in the waiting list

ALLOCATION PRINCIPLES

1. Allocation will be done first based on city waiting list. If no recipient eligible in city waiting list then allocation will be done to state and then to other States in the ROTTO and then to other ROTTO nationally.

In order to minimize cold ischemia time, most donated organs should be allocated within the city or at the most state, where retrieval has been done.

2. Kidney from Pediatric donor (less than 18 years) first will go to pediatric patient. If no pediatric patient eligible, then to adult patient.
3. Blood group O kidney will be allocated to recipient with group O, then to next available on waiting list of other compatible blood groups i.e. first group A, then group B and lastly group AB in that sequence.
4. In case of blood group A or B, the organ will be allocated to same blood group failing which to blood group AB. AB will be allocated to AB only.

ALLOCATION ALGORITHM

Once there is a call for possible deceased donor

STEP-1: Check Blood Group of available deceased donor to follow principle of allocation based on blood group as above.

STEP-2: If there is recipient in "urgent list" as per accepted criteria and approved by the appropriate committee, then one of the two available kidneys will go to the urgent case.

If there are two recipients in the urgent list, then allocation will be done to one patient with urgent criteria having more points in the scoring system.

Criteria of urgent Listing

In case of kidney transplant, urgent list is basically for a patient on following two principles

1. Patient who no longer has dialysis access and thus cannot be maintained on dialysis
 2. Patients with ESRD who is unlikely to get a donor with a negative cross-match.
 - > 90% Panel Reactive Antibody (PRA)
- Priority/urgent list should be reviewed every 3 monthly by the SOTTO Kidney Transplant Advisory Committee

STEP-3: Recipient requiring multi-organ transplant will get priority.

If there are more than two recipients in the multi-organ recipient list, then allocation will be done to patient having more points in the scoring system.

STEP-4: If NO urgent case and NO multi-organ recipient, then allocation will be done to patient registered for 'Kidney alone' transplantation based on the status of hospital doing retrieval of kidneys means whether it is transplant hospital or retrieval only hospital

If Transplant Hospital

- One kidney be used locally and other will be allocated. It is expected that the scoring system will also be followed by the hospital for local allocation of kidney.

If Retrieval Hospital

- Both will be allocated

STEP-5: See Kidneys retrieval hospital, whether it is government hospital or private hospital

1. Kidney retrieved from a government hospital will be allocated as follows

- First patients listed in Government ONLY hospitals list, then
- Patients listed out of combined government and private hospital list, then
- Patient listed out of private ONLY hospital list

2. Kidney retrieved from a private hospital will be allocated as follows:

- First patients listed in private hospitals list, then
- Patients listed out of combined government and private hospital list, then
- Patient listed out of government hospital list

INTER-STATE ISSUES

1. It is expected that all SOTTOs will broadly follow the same guidelines /protocols for organ allocation.
2. The appropriate authority of state government in consultation with SOTTOs will approve the inter-state transport of organs for transplantation.