

ALLOCATION CRITERIA FOR DECEASED DONOR LIVER TRANSPLANTATION IN DELHI/NCR

RECIPIENT REGISTRATION AND LISTING

1. Patient is to be registered by the concerned hospital through online registration form on www.notto.mohfw.gov.in
2. Liver Advisory Committee, comprising of three members from the Apex Technical Committee of National Organ and Tissue Transplant Organization (NOTTO) will approve the registration and urgency criteria. The committee members shall be appointed annually and will periodically review / update the guidelines.
3. Patients with decompensated cirrhosis of liver should meet standard criteria for need for liver transplant with Model for End-stage Liver Disease (MELD) score greater than 15 in patients aged 12 years or more. Those with cirrhosis of liver with hepato-cellular carcinoma should be with-in UCSF criteria;
4. Super-urgent listing can be done in the following situations:-
 - a. Primary Non-Function (PNF) of liver allograft
 - b. Living liver donor who develops life threatening liver failure
 - c. Early Hepatic Artery Thrombosis (HAT) needing re-transplant.
 - d. Fulminant Hepatic Failure (FHF) meeting the King's College Hospital criteria.
5. Patients with metabolic disorders and for those with quality of life issues who do not have the minimum required MELD score e.g. chronic hepatic encephalopathy, intractable pruritus and polycystic liver disease will not be considered for listing for Deceased Donor Liver Transplant (DDLT) for now.
6. Contraindications to listing for liver transplantation:-
 - a. MELD Score <15
 - b. Severe cardiac or pulmonary disease, who is unfit for general anaesthesia
 - c. AIDS
 - d. Hepatocellular carcinoma beyond UCSF criteria
 - e. Uncontrolled sepsis
 - f. Intrahepatic Cholangiocarcinoma
 - g. Extra-hepatic malignancy
7. Patient should be registered only in one hospital registered under THOTA.
8. Patient can be registered for deceased donor even while the patient is waiting for living donor transplant.
9. Status of the listed patient must be updated by the hospital monthly. For Super-urgent patients status update is required daily (and information should go to NOTTO).

ALLOCATION PRINCIPLES

1. Allocation will be done first based on State (NCR of Delhi) waiting list. If no recipient is eligible in the state waiting list then allocation will be done to R&R (in case of Delhi/NCR) and then to nearby state in the Regional Organ and Tissue Transplant Organization (ROTTO) and then to other ROTTO nationally.
2. Liver from Paediatric donor (less than 16 years) first will go to paediatric patient. If no paediatric patient eligible, then to adult patient.
3. Blood group O Liver will be allocated to recipient with group O, then to any other group.

4. Other than O blood group; that is A, B and AB will be preferably allocated to same blood group, failing which to AB group.

ALLOCATION ALGORITHM

Once there is consent for deceased donation

- STEP-1:** Check Blood Group & age of the available deceased donor and then follow principle of allocation based on blood group as above
- STEP-2:** If there is recipient in Super-urgent list as per accepted criteria and registered as such, the available liver will go to that recipient. The priority of allocation in Super-urgent listing will be given to patients with PNF followed by liver donors with liver failure, HAT and FHF based on the criteria mentioned above. If there are more than two recipients in a similar situation, then allocation will be done to patient who has been waiting for a longer time.
- STEP-3:** If there is no Super-urgent patient, then the liver will go to the recipient requiring simultaneous multi-organ transplant i.e., simultaneous liver-kidney transplant. If there are more than two recipients in the simultaneous multi-organ list, then allocation will be done to the patient who has been waiting longer while on the list.
- STEP-4:** If there is no Super-urgent patient and no multi-organ recipient, then allocation will be done based on the status of hospital doing the liver retrieval. Status means whether it is transplant hospital or Non Transplant Organ Retrieval Center (NTORC).
- If Transplant Hospital
- The Liver will be allocated to the local transplant hospital & the hospital will not lose its turn.
- If NTORC
- The liver will go to the common pool from where it will be allocated to the transplant hospital as per the rota.

Note:

- * Each hospital to maintain their own waiting list that should be uploaded on website of NOTTO.
- * Once allocated to a hospital, the organ will be used only in a recipient previously registered with NOTTO at least 48 hours before organ allocation and as per the seniority on the waiting list.

STEP-5: Liver retrieval hospital, could be a government or a private hospital

1. Liver retrieved from a Government hospital will be allocated as follows
 - Government hospitals other than Army Hospital (R & R), by rotation.
 - Army Hospital (R & R), Delhi
 - If there are no takers in the government hospitals, to be offered to private hospitals as per the rota.
2. Liver retrieved from a private hospital will be allocated as follows:
 - Rota of private hospitals
 - If no takers in private hospitals, to be offered to government hospitals other than R & R as per rota
 - Army Hospital (R & R), Delhi

Note:

- * In case a hospital gets a liver for Super-urgent patient, the hospital will forego its turn & go to the bottom of the list in the rota.

- * If there is a marginal donor, that has been refused by other center(s) then the center which agrees to use the organ will not lose its priority in the next round of allocation
- * If a center splits an organ then it is allowed to use for the 2nd recipient at their center & will be counted as one. Further they can share one of the split parts with another center, provided the organ is utilized for a patient registered with NOTTO
- * Foreigners will be the last priority i.e. only after the organ is not used for any Indian patient in the country. This clause will override anycenter specific waiting list)

INTER-STATE ISSUES

1. It is expected that all State Organ and Tissue Transplant Organizations (SOTTOs) will broadly follow the same guidelines / protocols for organ allocation.
2. The respective ROTTO in consultation with concerned SOTTOs will approve the inter-state transport of organs for transplantation.