Heart and Lung Transplant Hospitals Discussion Minutes held on 19/09/2014 at Rajiv Gandhi Government General Hospital

A discussion was held on 19/09/2014 by Cadver Transplant Programme Tamilnadu at " Rajiv Gandhi Government General Hospital, Tower 2, 2nd Floor, Anesthesia Seminar Hall to discuss future Heart and Lung allocation procedures and criteria regarding Urgent listing of Heart and Lung which was followed by High Tea. The meeting was presided by Prof. J.Amalorpavanathan, Convenor, Cadaver Transplant Programme Tamilnadu.

Following members were present at the meeting.

1. Dr Sunder – Consultant Cardiothoracic & Transplant Surgeon – Apollo Hospital
2. Dr.Madan Kumar - Consultant Cardiothoracic & Transplant Surgeon – Apollo Hospital
3. Dr.Balakrishnan – Director Cardiac Sciences – Fortis Malar
4. Dr.Narayanaswamy – Senior Consultant Cardiologist – Frontier Lifeline
5. Dr. Pradeep – Cardiac Surgeon - Frontier Lifeline
6. Dr.Ejaz Sheriff – Senior Consultant Cardiac Surgeon - MMM
7. Dr.Jacob – Cardiothoracic Surgeon - MMM
8. Dr.Govini B – Consultant Cardiothoracic Surgeon - Global
9. Dr.Refai Showkathali – Sr.Consultant Interventional Cardiologist - MIOT
10. Dr.Vijit Cherian – Cardiothoracic Surgeon - MIOT
11. Dr.Periaswamy – Paediatric Cardiac Surgery – SRMC
12. Dr.S.Sivasubramanian – Cardiothoracic Surgeon
13. Dr.J.M.A. Bruno Mascarenhas, – Associate, Cadaver Transplant Programme
14. Dr.Sumana Navin, – Mohan Foundation
15. Thiru C.E.Karunakaran – Trustee, NNOS
16. Mr.Sagayam – Executive Officer Transplantation – MIOT
17. Mr.Jhonson Transplant Coordinator – Frontier Lifeline

Prof. J.Amalorpavanathan, Convenor, Cadaver Transplant Programme opened the discussion by welcoming all the members. A draft proposal of Heart and Lung Allocation, Urgent Listing of Heart and Lung which is to be followed in future was circulated to all member hospitals by email prior this meeting and their consent/suggestion/feedback was obtained.

This draft proposal was discussed in detail and certain changes were incorporated. Additions and deletions were carried out of the draft proposal so that the end protocols would be transparent / robust / verifiable and would be patient centric. A mutual consensus was arrived regarding general allocation and urgent listing. The final proposal would be implemented once required changes in the registry is carried out.

The final proposal which is to be rolled out is as follows :

Criteria for Heart & Lung allocation Guidelines

1. Patients will be prioritized according to the date of registration in TNOS registry waitlist for allocation of Heart and Lung .
2. Heart + Lung transplant & twin lung transplants will be given priority
3. **Pediatric donor heart <12 years will be allotted to pediatric patients (1-12 years) on first priority basis. Second priority will be for 12-18 years. 3rd priority above 18 years.**
4. Heart originating in a Zone will be allocated to that zone first according to waitlist for that zone.

5. Priority will be first given to Indian Nationals in the State. If no patient is found in the State it will be offered to Indian Nationals of other states. If there are no suitable Indian patients in the whole country, only then it has to be offered to a foreign national. This applies to both local and share organ.

6. Local & Share heart and lung are to be allocated to the same blood group within the state. If no patient is available in the State in the same blood group then it can be offered to compatible blood groups within the state. If there are no patients in same blood or compatible group in the State it should be offered first to same blood group and then compatible blood group in other States. Only then it can be offered to foreign nationals of the same blood group, failing which compatible blood groups.

7. Heart and Lung retrieved in Government Hospitals will be allotted to Government Hospitals first on priority basis like all other organs.

8. When a hospital flags an Urgent listing they should fulfill the urgent listing criteria and fill the required urgent listing form and circulate to all heart and Lung transplant hospitals with CC to 'CTP'.

9. Hospitals which receive the Heart and Lung under Urgent Listing should debt return the heart and lung to the transplant hospital from whom the heart and lung was taken, whenever they get a local or share Heart & Lung. If the donor hospital is a non transplant hospital or if the organ was taken from the share pool the recipient hospital should return the debt organ to the share pool for that zone.

Criteria for Urgent Heart Transplant listing:

1. Name -
2. Hospital name -
3. Blood Group -
4. Needing mechanical intubated ventilation -
5. TAH – Total Artificial Heart -
6. Intra aortic balloon pump - yes/no
7. ECMO - yes/no
8. LVAD, RVAD or both - yes/no
9. Primary graft dysfunction -

Following additional hemodynamic criteria can be submitted together with the above 3-9. hemodynamic criteria as below – at the time of urgent listing – Subject to non opposition by other participating hospitals. Continuous infusion of single high dose intravenous inotrope or multiple

intravenous inotropes & require continuous hemodynamic monitoring of left ventricular filling pressures.

A. on inotropes for at least 48 hours
   dobutamine >8 micrograms/kilograms/minute
   milrinone > 0.5mcg/kg/min

B. with above if Cardiac index <1.8L//min with a mixed venous saturation of <55% provided wedge pressure (PCWP) is above 15 (denotes adequate LV preload).

C. pH <7.3 with increasing lactate >6mmol or on CRRT/dialysis for management of acidosis with above hemodynamic criteria

- Urgent listings may be renewed for additional 7 days periods.
- Pediatric patients <12 years with above conditions who has a life expectancy without a heart transplant of less than 14 days will be given first priority, when multiple urgency listing exists.
- by photograph and confirmation by CTP personnel

Criteria for urgent listing for LUNG transplant:

1.Mechanical ventilation: Yes/ no

2. ECMO : Yes / No

3. Primary graft dysfunction.

Photograhic Submission:

It is the responsibility of the transplant team to photograph the patient with identifiable features and then submit to the CTP who would verify the criteria and then allocate special status.

The meeting was concluded with members expressing their agreement on the allocation procedures to be put in force after required changes carried out in the registry.