

Appendix 1

Criteria for Acceptance for Heart Transplantation

The Canadian Cardiac Transplant Group and the American Society of Transplantation recently reviewed the minimal listing criteria for cardiac transplantation. Ideally these criteria are designed to identify those patients who are at the greatest risk and will derive the greatest benefit from transplantation.

- Advanced functional class
- Poor 1-year survival – All ambulatory patients should undergo cardiopulmonary testing.
- A patient with a $VO_2 < 15$ ml/kg/min or 55% predicted for age and gender is considered to have severe cardiac dysfunction and warrant further evaluation for transplantation
- Failed maximal medical therapy
- No surgical options - high risk revascularization should be considered
- All patients should exhibit the capacity for rehabilitation after transplantation
- Absence of contraindications

The following represent a list of co-morbidities that represent relative or absolute contraindications to transplantation.

1. Fixed pulmonary hypertension:

The following measurements after aggressive challenge with 1-2 inotropic or vasodilator agent and a SBP of 85mmHg should be considered a relative contraindication:

- Transpulmonary gradient > 15
- Systolic pulmonary artery pressure > 50 mmHg
- Pulmonary vascular resistance > 4 wood units
- Pulmonary vascular resistance index > 6 .

2. Primary systemic disease that may limit the long-term survival e.g., hepatic, pulmonary disease, renal insufficiency (creatinine > 200 μ mol/l).

3. Active infection.

4. Technical issues as well as psychosocial issues, drug or alcohol abuse, and documented non-compliance.

5. Recent malignancy (non basal cell carcinoma type).

6. Morbid obesity ($> 140\%$ ideal body weight) or marked cachexia ($< 60\%$ ideal body weight).

7. Osteoporosis, vascular disease (cerebral or peripheral) and diabetes mellitus with evidence of end organ damage.

Increased age is associated with a poorer outcome after transplant.

Appendix 2

TO ALL PATIENTS/FAMILY MEMBERS/SIGNIFICANT OTHERS:

Every effort will be made to help our patients supported on left ventricular assist devices (LVAD) to improve to the point where they meet the criteria to receive a heart transplant, or are stable enough to be discharged from the hospital on the LVAD device. However, if despite all our efforts a patient has no reasonable chance of receiving a heart transplant or of surviving to leave the hospital or continued use will no longer be serving the purpose for which it was originally place, we will discontinue the LVAD device. In such a case, the LVAD device will be turned off or removed, this will almost certainly result in death. This will occur only after the physicians caring for the patient are in agreement that the goals for the LVAD cannot be met, and after consulting with the patient or if the patient is too ill, with the family or substitute decision maker.

My signature herewith confirms that I have read and understood the contents of this message and I voluntarily agree to be bound by its terms. I also acknowledge that I have been afforded an opportunity to ask any questions I might have related to the use of the ventricular assist device and that _____ has answered all my questions to my satisfaction.

Patient Signature: _____

Substitute Decision Maker: _____

Witnessed by: _____

Adapted from Columbia-Presbyterian Medical Center