Guidelines for Referral for Advanced Heart Failure Therapy
Ventricular Assist Device Therapy (VAD) and/or Heart Transplantation

Note: Candidacy for heart transplantation not required for consideration for VAD. VAD therapy is also available for Destination Indication (permanent use).

Patients should have:
- At least Class III Heart Failure symptoms
- LVEF ≤ 35% (This guideline is not necessary for patients with diastolic heart failure secondary and preserved left ventricular function that is due to restrictive cardiomyopathies; e.g. hypertrophic cardiomyopathy)

And, any of the following criteria:
- Early End Stage Organ Dysfunction
  - BUN ≥ 45
  - Cr ≥ 1.6 mg/dl or CrCl ≤ 45 cc/min
- Serum sodium < 135 mEq/L
- Hemodynamic Instability
  - Ventricular Arrhythmias
  - Hypotension
  - Low cardiac output
- Hospitalization for Heart Failure in the past 6 months
- Intolerance/withdrawal of evidence-based heart failure oral agents
- Non-responsive to CRT/BiV pacing
- Being considered for or currently on Inotropes
- Cardiac cachexia
- Diuretic Dose
  - furosemide ≥ 160 mg/day
  - torsemide ≥ 80 mg/day
  - bumetanide ≥ 4 mg/day
- Seattle Heart Failure Score ≥ 1.5 or 1 year mortality estimate > 15%
- Peak exercise oxygen consumption ≤ 55% of predicted or absolute number (≤ 14 ml/kg/min for women or ≤ 16 ml/kg/min for men)
- 6 Minute Walk Test (distance of ≤ 350 meters)
Recommended Testing Prior to Evaluation (within 3 months):
- Echocardiogram
- Right Heart Catheterization (if available)
- Peak VO2 and 6 MWT Distance (if available)
- Chemistries and Complete Blood Count
- Chest Radiograph
- ECG
- Pulmonary Function Test
- Ankle-Brachial Index Test
- Carotid Duplex Scan
- Abdominal Ultrasound (to evaluate for AAA and hepatic disease)
- Noncontrast CT Scan of the Thorax (if history of prior cardiac surgery)

For further information regarding VAD therapy or to refer/transfer a patient:
University of Michigan Center for Circulatory Support
734-615-3068
M-LINE - 800-962-3555
Hospital Paging Operator - 734-936-6267
Request to speak with one of the following VAD Team members.

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