Long Term Outcomes of Destination Therapy Left Ventricular Assist Devices

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Introduction

• LVAD effective therapy for patients with AHF

• Goals of Therapy
  • Bridge to Transplant
  • Destination Therapy for Non-Heart Tx candidates
    • Age
    • Comorbidities
    • Sensitization
Study Purpose

• Evaluate outcomes of LVAD DT
  • Duration of support (death / pump explant)
  • Development of major complications

• Study period: 2009 - 2017
LVAD Strategy

Implant Strategy = BTT vs DT

- Destination Therapy: 65%
- Bridge to Transplant: 35%
LVAD Strategy – Demographics - Device Type

Device Type:
Heart Mate II 100%

Demographic data:
• Age= 61 (20 – 86)
• Male Sex = 77 (81%)
INTERMACS at Time of LVAD Implant

N° Patients

I: 15
II: 19
III: 57
IV: 4

N = 95

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Hospital Mortality by INTERMACS at Implant

Hospital Survival 84%
Hospital Mortality by INTERMACS at Implant

% Death

Hospital Survival 84%

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Long Term Outcomes

LVAD DT discharged = 80

• **Time on support = 718 days**
  • Range = 41 – 2,600 days

• Became eligible and received heart transplant = 13 patients
Long Term Outcomes

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• **Total Readmissions = 93**

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Major Long Term Complications

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### Incidence of Complications (%)

- Driveline Infection: 51%
- Pump Thrombosis: 15%
- Stroke: 20%
- GI Bleeding: 9%
- No Readmission: 5%
Conclusions

• LVAD implantation for patients with advanced HF not eligible for heart transplant can be done with acceptable operative mortality.

• Indication on stable patients is recommended as operative risks are higher for Intermacs 1 & 2 patients.

• LVAD Destination Therapy presents relative low rate of major complications up to 2 years on support.

• Successful support can be achieved beyond 5 years.
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Long Term Complications

- GI Bleeding
- Driveline Infection
- Stroke
- Pump Thrombosis