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Percutaneous gastrostomy (PEG) tube placement in patients with continuous flow left ventricular assist device (LVAD)

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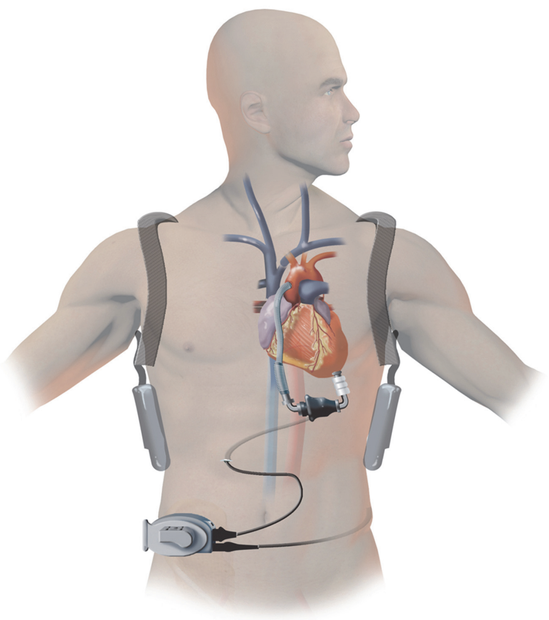
Introduction

Inadequate nutritional support after LVAD placement is known to increase postoperative infections and to decrease survival.

The LVAD patients with complicated postoperative recovery requiring prolonged mechanical ventilation may require long-term tube feedings.

Placement of a PEG requires knowledge of the location of the LVAD pocket and driveline to avoid device infection and injury.

HeartMate II



Methods

Study period: August 2008 -December 2011

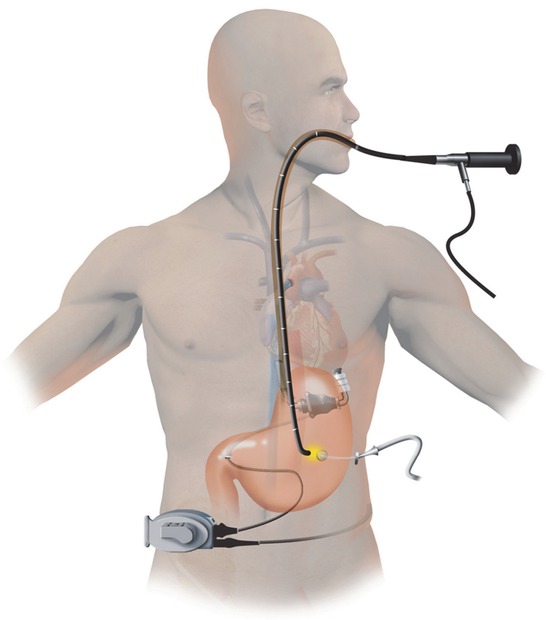
Total Number of Hearmate II LAVD: 39
for either bridge to transplant or destination therapy.

PEG placement after LVAD: 5 patients

Procedure management:
- Cessation of anticoagulation at midnight
- Correction of abnormal coagulation profiles
- Monitoring of VAD during PEG with
  - a cardiothoracic surgeon or intensivist
  - a pefusionist or VAD cordinator

  in the operating room.

PEG procedure on HM II



Results

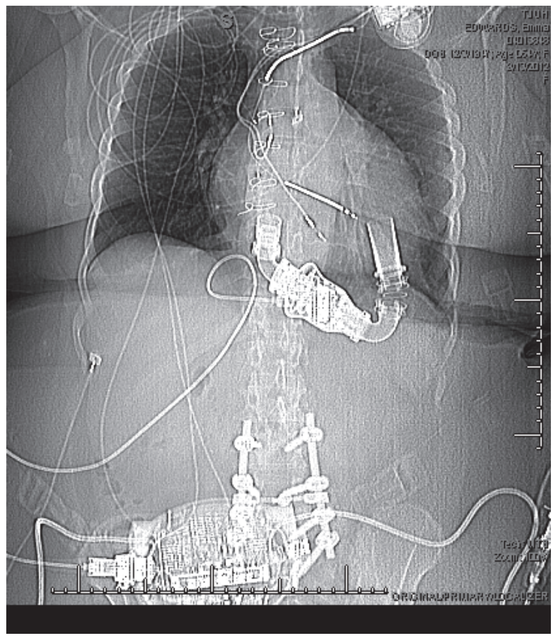
PEG placement after LVAD: 5 patients
- 3 males and 2 females
- Age of 58 +/- 5.0
- Interval of LVAD to PEG : 21 +/- 8.8 d.

PEG was successfully performed in the operating room in all patients.

There were no LVAD device or driveline injuries related to the PEG procedure.

There were no postoperative short-term or long-term PEG related complications such as acute gastric bleeding or dislodgement of the PEG tube.

CT scan of the patient



Key points of Peg Procedure

Appropriate monitoring

Knowledge of the VAD and drive line
- Avoid L upper quadrant
- Avoid drive line

Chest and ABD x-ray prior to procedure

Conclusions

PEG placement for Heartmate II LVAD patients can be done without increasing the risk of device or intraabdominal organ injury.

Careful coordination efforts from both the mechanical support team and surgical services is important.

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