Guideline or Pathway: Left Ventricular Assist Device (LVAD) Implantation to Hospital Discharge

Updated: December 13, 2021

Clinical algorithm:

LVAD CLINICAL PATHWAY: Master Algorithm

- Patient undergoes durable LVAD placement

- SMHC Charge RN is notified of patient preparation to leave the OR & sends Vadaline group text

- Patient admission to ICU

- Postoperative Team Huddle
  - AHF Physician documents VADICUADMIT

- ICU Algorithm (management informed by RV failure assessment)

- Non-ICU floor Algorithm

- Continuous Discharge Planning

- Patient Discharged
Clinical pathway summary

CLINICAL PATHWAY NAME: LVAD Implantation to Hospital Discharge

PATIENT POPULATION AND DIAGNOSIS: Adult inpatient with advanced heart failure requiring implantation of durable LVAD; EXCLUDES patients who exit the OR on BiVAD support

APPLICABLE TO: Spectrum Health Meijer Heart Center

BRIEF DESCRIPTION: This clinical pathway serves as a tool to guide care of patients upon their admission to the ICU following implantation of durable LVAD until time of hospital discharge. The goals of this pathway are to achieve a shorter overall length of stay and to decrease time to ICU liberation.

OVERSIGHT TEAM LEADER(S): Dr. Sangjin Lee, Dr. Brian Trethowan, Dr. Marzia Leacche

OWNING EXPERT IMPROVEMENT TEAM (EIT): VAD & Transplant System-Wide EIT

MANAGING CLINICAL PRACTICE COUNCIL (CPC): Cardiovascular Health

CPC APPROVAL DATE: 12/13/21

OTHER TEAM(S) IMPACTED: CTS, CTCC, Advanced Heart Failure, Anesthesia, Nursing, Respiratory Therapy, Pharmacy, Care Management, Rehabilitation Services, VAD Multidisciplinary Team (MSW, Dietician, VAD Coordinator, Financial Coordinator)

IMPLEMENTATION DATE: 12/15/21

LAST REVISED: 12/13/21

FOR MORE INFORMATION, CONTACT: Kelli Britten, Dr. Sangjin Lee

Clinical pathways clinical approach

TREATMENT AND MANAGEMENT:

This clinical pathway will serve as a tool to guide patient care following implantation of a durable LVAD. After implantation, patient management is individualized by clinical presentation. This is impacted greatly by each patient’s risk for developing early right ventricular (RV) dysfunction or failure. RV failure contributes to morbidity and mortality following implantation of LVAD, and therefore must be addressed specifically to manage these complications and continue working toward hospital discharge.

Patient transition from the OR to the ICU is a critical time for patient safety and interdisciplinary handoff ensures an accurate understanding amongst all care team members of intraoperative issues that may impact patient care in the initial ICU stay. Standardized handoff is supported by literature. Additionally, the decision to transfer out of the ICU to the non-ICU floor can be better guided by objective criteria to improve the timeline to ICU liberation.
References:


Wever-Pinzon et al. (2016). Cardiac recovery during long-term left ventricular assist device support. Journal of American College of Cardiology, 68(14), 1540-1553.


