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# Right Ventricular Lead Dysfunction Post LVAD Implantation

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**Conclusion:** CPM and QM set by ACC/AHA are not always met during care of post-AMI patients. One common barrier is documenting contraindications to recommended therapies. Quality improvement projects should be implemented to optimize the rate of CPM and QM met. ■

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## Right Ventricular Lead Dysfunction Post LVAD Implantation

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**Program:** Internal Medicine, Division of Cardiovascular Disease

**Type:** Original Research

**Background:** The use of left ventricular assist devices (LVAD), both as bridge to cardiac transplantation as well as destination therapy, has increased significantly over the last few years. The vast majority of these patients are eligible for electrical implantable devices (including single, dual chamber, and biventricular defibrillators). There is scarcity of data on the impact of LVAD placement on the right ventricular lead integrity in these devices

**Methods:** We studied a total of 50 patients who had implantable cardioverter device (single, dual chamber and biventricular device) prior to LVAD placement at the University of Nebraska between 2017 and 2019, a chart review was done to identify patients with right ventricular lead dysfunction that was diagnosed post LVAD implantation.

**Results:** The mean age of patients at the time of LVAD was 54 (+/-14) years, the study included 41 males (82%). Forty-two patients had Heartmate III, four had Heartmate II and four patients had Heartware LVAD. Twenty seven patients had single or dual chamber ICD (54%) while 23 patients had a biventricular ICD (46%). Right ventricular lead malfunction was reported in 18 patients (36%) within 6 months of LVAD implantation. The type of left ventricular assist devices and electrical devices were not significantly different in the RV lead malfunction group compared to the rest of the patients.

**Conclusion:** There is a high incidence of right ventricular lead dysfunction post implantation of left ventricular assist devices. ■

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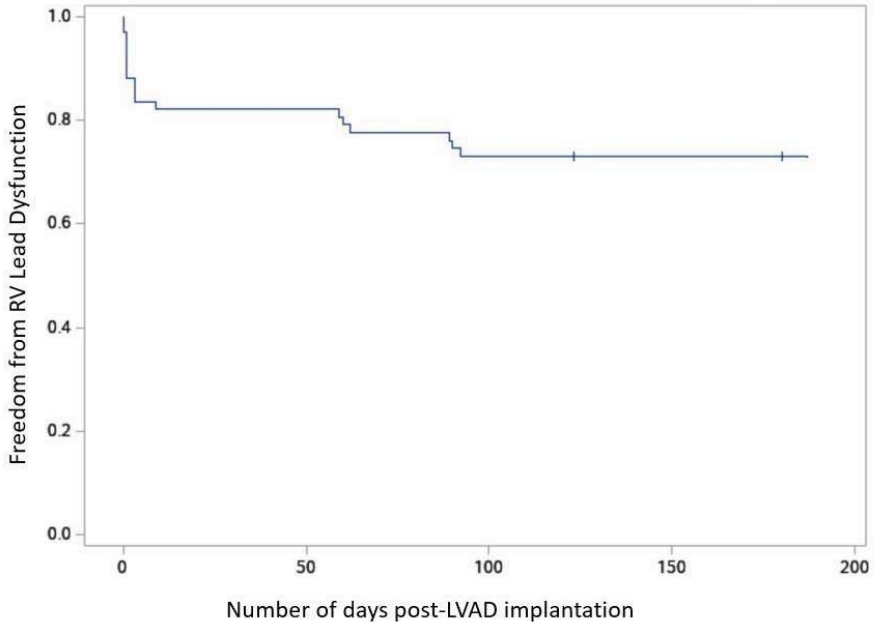


**Figure 1.** ICD* lead malfunction in first 6 months after LVAD* implant.
*ICD: Implantable Cardioverter Defibrillator; LVAD: Left Ventricular Assist Device.

## Are We Missing Vitamin Deficiencies in Parkinson's Disease?

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**Type:** Case Report

**Background:** Parkinson's disease (PD) management focuses on quality of life, including adequate nutrition. Extensive literature has correlated nutritional deficiencies and PD, but they are still commonly missed. Many new neurological symptoms are attributed to disease progression without ruling out these treatable conditions.

**Methods:** We present three cases of PD patients with diverse neurological symptoms whose workup showed reversible vitamin deficiencies.

**Results:** Case 1 This 81-year-old male physician with PD developed weight loss, irritability, and dementia attributed to advanced disease. Workup revealed low thiamine (B1) of 30 nmol/L (70-180), pyridoxine (B6) of 5.2 nmol/L (20.0-125.0), cobalamin (B12) of 72 pg/mL (180-914), and 25-hydroxyvitamin D of 14 ng/mL (30-80). He was noncompliant with replacement and passed away. Case 2 This 90-year-old woman