

LVAD in A Non-Transplant Center: a Good Destination

Joseph Cleveland¹

¹University of Colorado

July 12, 2022

George and colleagues report their experience with a non-transplant left ventricular assist device program (1). This manuscript spans a decade's experience with LVADs and clearly demonstrates that LVAD therapy is possible in centers without a heart transplant program. 100 LVADs were placed during this period. The positive findings from this report include that as volume increased, the complications of right heart dysfunction and bleeding decreased. Noteworthy is that 85 of the 100 patients were implanted with a fully magnetically levitated ventricular assist device. Given the superior performance of a fully magnetically levitated device to a rotary pump (2) these findings are relevant for all contemporary centers with LVAD programs.

The authors importantly sought the resources of a transplant center to ensure that patients who were offered LVAD in their non-transplant center were indeed not candidates for cardiac transplantation. In addition to this fundamental necessity, three features are necessary for a successful non-transplant LVAD program. Firstly, the institution must offer robust infrastructure and support. Secondly there must be a strong surgeon-leader dedicated to overseeing the program. Lastly, cardiologists who are dedicated to heart failure are essential to guide patients to this therapy.

The extension of LVAD therapy to patients in non-transplant centers is essential for durable mechanical circulatory support to remain as a vital part of advanced therapies for heart failure. VADs will continue to play an important role in the management of end-stage heart failure for patients who are not eligible for cardiac transplantation. The 2020 Society of Thoracic Surgeons INTERMACs report now offers patients a 5-year survival of 45%(3). The survival of patients with LVADs continues to increase. The data in this current report offer a new perspective and increased access to LVAD therapy for patients with end stage heart failure.

References

1. George TJ, Aldrich A, Smith III RL, et al. Development of a Non-Transplant Left Ventricular Assist Device Program. J Card Surg
2. Mehra MR, Uriel Y, Naka Y, et al. A Fully Magnetically Levitated Left Ventricular Assist Device – Final report. N Engl J Med 2019;380:1618-27.
3. Molina EJ, Shah P, Kierman MS, et al. The Society of Thoracic Surgeons Intermacs 202 Annual Report. Ann Thorac Surg 2021;111:778-92.

Hosted file

Title Page - Cleveland Invited Commentary.docx available at <https://authorea.com/users/494771/articles/576735-lvad-in-a-non-transplant-center-a-good-destination>