

Spousal support does not affect outcomes in patients with continuous flow left ventricular assist device

Alicia Topoll, Andrew Althouse, Kathy Lockard, Elizabeth Dunn, Nicole Kunz, Mary Amanda Dew, Arman Kilic, Chris Sciortino, Robert Kormos, Gavin Hickey

University of Pittsburgh Medical Center Heart and Vascular Institute

Introduction

Social support is a key component of evaluating patients prior to left ventricular assist device (LVAD) implantation. Prior studies have shown that caregiver support affects outcomes in transplant recipients.

Objective

To investigate the relationship between primary caregiver, social support, and clinical outcomes after LVAD implantation.

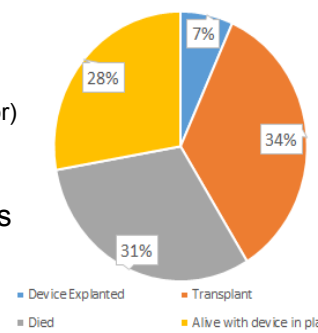
Methods

- Retrospective
- Single-center study
- All patients who received continuous flow LVAD between 2006–2017
- N = 255
- Evaluated:
 - Primary caregiver
 - Quality of social support (Excellent, Good, Fair, or Poor)
 - Survival and clinical outcomes related to LVAD

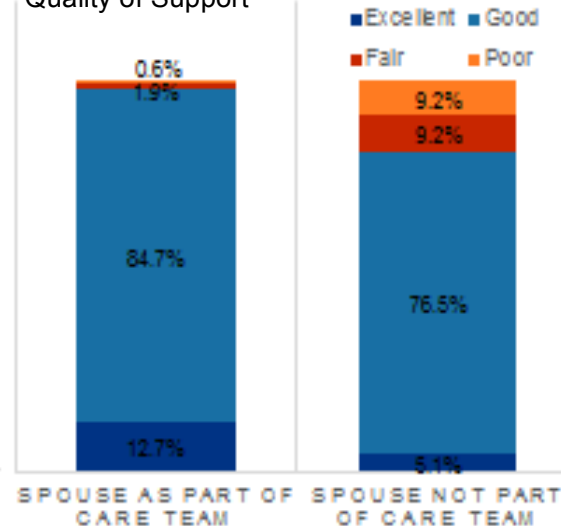
Results

- Patients were followed for a mean of 483 days with device in place.
- Survival and freedom from major adverse events were **no different** between LVAD patients with spouse as the primary caregiver when compared to no-spouse.
- There was **no difference in outcomes** based upon quality of social support or spousal support.

Outcomes of LVAD Therapy



Quality of Support



Incidence of Adverse Events, Overall and By Spousal Support

	Spouse Involved (n=157)			Spouse Not Involved (n=98)			P-Value
	# Pts w/ AE (%)	#AE's (# per pt)	# Per 100 Pt-Mths	# Pts w/ AE (%)	#AE's (# per pt)	# Per 100 Pt-Mths	
Infection	76 (48.4%)	142 (0.90)	5.28	44 (44.9%)	81 (0.83)	5.7	0.549
Bleeding	45 (28.7%)	64 (0.41)	2.38	23 (23.5%)	33 (0.34)	2.32	0.654
Reoperation	38 (24.2%)	56 (0.36)	2.08	20 (20.4%)	38 (0.39)	2.68	0.373
Respiratory Failure	29 (18.5%)	49 (0.31)	1.82	22 (22.4%)	36 (0.37)	2.54	0.685
Renal Failure	27 (17.2%)	31 (0.20)	1.15	17 (17.3%)	21 (0.21)	1.48	0.599
Hepatic Failure	3 (1.91%)	3 (0.02)	0.11	5 (5.10%)	5 (0.05)	0.35	0.93
Neurological Event	37 (23.6%)	48 (0.31)	1.78	19 (19.4%)	29 (0.30)	2.04	0.188
RV Failure	22 (14.0%)	24 (0.15)	0.89	12 (12.2%)	13 (0.13)	0.92	0.944
Arrhythmia	61 (38.9%)	104 (0.66)	3.86	31 (31.6%)	45 (0.46)	3.17	0.462
Mechanical Failure	22 (14.0%)	27 (0.17)	1	15 (15.3%)	25 (0.26)	1.76	0.406
Tamponade	22 (14.0%)	25 (0.16)	0.93	11 (11.2%)	13 (0.13)	0.92	0.603
Hemolysis	11 (7.01%)	17 (0.11)	0.63	4 (4.08%)	4 (0.04)	0.28	0.19
Thrombotic Event	7 (4.46%)	7 (0.04)	0.26	5 (5.10%)	6 (0.06)	0.42	0.433
GI Event	2 (1.27%)	2 (0.01)	0.07	0 (0.00%)	0 (0.00)	0	0.999

Conclusions

- Involvement of the spouse was related to **better social support**.
- Outcomes were no different** between LVAD patients with or without spouse as primary caregiver.
- Larger and more diverse studies are needed to determine the importance of social support in evaluating potential LVAD patients pre-implantation.

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No off label use and/or investigational use of the continuous flow LVADs will be discussed.

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