Title

Missing the beat: underutilization of palliative care in heart failure ends in overutilization of advanced therapies

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Story from the front lines

A woman in her 70s with a history of atrial fibrillation and ischemic congestive heart failure was transferred to the intensive care unit of academic medical center for atrial fibrillation with rapid ventricular response now causing cardiogenic shock. She had been hospitalized several times in recent months. Her physicians planned to conduct an atrial fibrillation ablation and placement of a cardiac resynchronization therapy defibrillator in order to regulate her arrhythmia, believed to be the driving force of her shock. After many days in the intensive care unit, one right heart catheterization, two thoracenteses, three nosocomial infection and many nights of delirium her family requested a palliative care meeting. The next day she was discharged with home hospice and died several days later.

Teachable Moment

Despite evidence that heart failure is more 'malignant' than cancer (accruing greater morbidity and mortality),[1,5] patients with this terminal illness spend a high proportion of end-of-life care pursuing aggressive therapies. As with this case, the one year mortality and readmissions rates for patients hospitalized with advanced heart failure are 53% and 68% respectively.[2] Evidence shows that physical discomfort, depression and spiritual distress are more taxing in heart failure than malignant illnesses.[1,5] Beyond patients', these costs are compounded by the social and emotional expense to caregivers compounds and the delivery of heart failure management totals $39 billion per year in the United States.[5] Moreover, the aging population and advancements in cardiac therapies will continue to inflate the physical, mental and fiscal tolls of heart failure for patients, caregivers and the healthcare system.[1,3,5]

Regardless of these burdens, patients with heart failure continue to undergo aggressive treatments even at end-stages of illness. Contrary to the wish of 90% of people to die at home, 58% of patients with heart failure die in the hospital where unmet end-of-life needs are highest.[5] During this terminal hospitalization, 50% of patients with advanced heart failure receive life-sustaining treatments such as intensive care unit admission, cardiopulmonary resuscitation, intubation, dialysis or non-invasive ventilation.[3] Similarly, in spite of limited benefit, 77% of patients with heart failure still wish to receive cardiopulmonary resuscitation and intubation.[5]

Palliative care, as a specialty focused on refining symptom control and clarifying goals of care, is ideally positioned to address this discrepancy between the intensity and utility of treatment near the end-of-life. Growing evidence shows that palliative care improves both healthcare and hospice utilization,[4] thereby reducing undesired hospitalizations and intensive therapies. To this end, the guidelines for heart

failure management from all the cardiology governing bodies recommend incorporating palliative care with traditional therapies.[5]

Unfortunately, these services are underutilized in patients with heart failure.[2,3,5] Palliative care and hospice referral for patients with heart failure is as low as 21%[3] and 5%[2] respectively. Even when palliative care consultation occurs it is late. The average time from palliative care consultation to death in these patients is less than a week,[3] despite clinically meaningful quality-of-life benefits of palliative care extending to at least three months.[4] Underappreciation of palliative care arises in part insufficient sensitivity to the distress of advanced heart failure.[5] Another part is the problematic prognostication for heart failure. In addition to well documented overestimation by physicians, existing tools are limited given the undulating course of heart failure with periods of stability interrupted by intermittent decompensations before an eventual but unpredictable progressive decline[1,5] Finally, commission bias, the tendency to treat, underlies scarcity of palliative care while 120 thousand defibrillators are placed each year.[5]

In conclusion, there is an imperative for more timely initiation of palliative care in order to counterbalance the expanding, and already ample, burden of heart failure. Although the need is clear, there is a paucity of research on how best to integrate palliative care into heart failure management.[5] One solution to this issue is to place palliative care into the bundle of guideline-directed medical therapy for heart failure making these services as essential as beta blockers.

References

1. Stewart S, MacIntyre K, Hole DJ, et. al. More 'Malignant' Than Cancer? Five Year Survival Following First Admission for Heart Failure. *Eur J Heart Fail*. 2001 Jun;3:315-22.
2. Warraich HJ, Xu H, DeVore AD, et al. Trends in Hospice Discharge and Relative Outcomes Among Medicare Patients in the Get With The Guidelines–Heart Failure Registry. *JAMA Cardiol.* Published online August 29, 2018.
3. Nazim A, Demers C, Nicolas B, et. al. Patterns of Care During the Terminal Hospital Admission for Patients with Advanced Heart Failure: A Retrospective Cohort Study. *Can J Cardiol*. 2018 Sep;34:1215-1218.
4. Kavalieratos D, Corbelli J, Zhang D, et. al. Association Between Palliative Care and Patient and Caregiver Outcomes: a Systematic Review and Meta-analysis. *JAMA*. 2016 Nov;316:2104-2114.
5. Lemond L, Allen LA. Palliative care and hospice in advanced heart failure. *Prog Cardiovasc Dis*. 2011;54(2):168-78.