

End-of-Life Care in the Treatment of Heart Failure in Older Adults



John Arthur McClung, MD

KEYWORDS

• Terminal care • Heart failure • Ethical issues • Palliative care • Device therapy

KEY POINTS

- Prognostic uncertainty makes end-stage heart failure a more challenging entity than cancer that requires a more nuanced approach to therapeutic planning.
- Improved communication requires a more robust effort to frankly discuss the disease entity, its therapeutic challenges, patient preferences, and palliative care as early as possible.
- Device therapy and cardiopulmonary resuscitation provide their own complexity when discussing end-of-life issues.
- Palliative sedation requires careful planning and appropriate safeguards to be effective.
- Not all aspects of the dying process can be palliated.

The American Geriatrics Society position statement on the care of dying patients opens by stating that, “providing excellent, humane care to patients near the end of life, when curative means are either no longer possible or, no longer desired by the patient, is an essential part of medicine.”¹ Although the essential nature of this discipline certainly cannot be denied, much of the prior literature dedicated to this topic has revolved around terminal care provided to patients with neoplastic diagnoses. Advanced heart failure presents its own unique challenges to the clinician who desires to make the recommendations of the American Geriatrics Society a tangible reality, the specifics of which have only recently begun to receive the attention that they deserve.^{2–4} This is clearly appropriate because the proportion of patients referred to hospice with a diagnosis of heart disease has increased during the course of the past two decades. The American Geriatrics Society position statement itself is now more than 20 year old and has not been modified despite the major

changes in health care delivery that have occurred since that time. This article focuses on updated specific clinical recommendations and an analysis of some of the ethical issues involved in the provision of care to elderly patients in the terminal stages of heart failure.

HOW DO WE KNOW WE HAVE ARRIVED?

The ability of physicians to accurately predict mortality has been demonstrated to be questionable in advanced heart failure and in cases of advanced malignancy.^{5–7} Attempts to ascertain variables predictive of mortality in patients with heart failure have proven to be significantly difficult. An exhaustive review of the literature conducted in 1998 found few consistently predictive variables. Factors accounting for this included small sample size, differing patient populations, selective acquisition of variables, interrelationship of variables, differing measurement technologies, duration of follow-up, poor reproducibility, and

This is an updated version of an article that appeared in *Heart Failure Clinics*, Volume 3, Issue 4.
Division of Cardiology, Westchester Medical Center, New York Medical College, 100 Woods Road, Valhalla, NY 10595, USA
E-mail address: john.mcclungMD@wmchealth.org

Heart Failure Clin 13 (2017) 633–644
<http://dx.doi.org/10.1016/j.hfc.2017.02.014>
1551-7136/17/© 2017 Elsevier Inc. All rights reserved.

problems with data handling.⁸ Measures that seem to have consistent independent prognostic value include New York Heart Association symptom class, echocardiographic left ventricular dimensions, radionuclide ejection fraction, and ischemic cause. Hyponatremia has been previously documented to be associated with an extremely negative prognosis; however, it is unclear whether or not this remains as significant an indicator in patients treated with angiotensin-converting enzyme (ACE) inhibitors.^{8,9} The Seattle Heart Failure Model, a more robust model for the prediction of mortality in advanced heart failure, incorporates multiple indicators including age, gender, New York Heart Association class, ejection fraction, cause, medication use, laboratory data, and device use that has been demonstrated to provide remarkably accurate 1-, 2-, and 3-year survival rates.¹⁰ Notwithstanding its significantly improved overall accuracy, it remains a less than optimal guide for dealing with individual patients, particularly in patients with devices, in African Americans, and in patients referred for nonurgent transplantation.^{11,12} Two simpler prognostic scoring systems have been developed consisting of seven and four items, respectively; however, when applied to individual patients are presumed to suffer from the same difficulties.^{13,14}

Patients with heart failure present with the additional challenge of sudden death, which makes the generation of prediction models even more difficult. Up to 60% of heart failure patients die suddenly; however, prediction of who is most likely to suffer sudden death remains controversial.^{15,16} Attempts to more precisely determine who is expected to die suddenly include studies of the prognostic efficacy of B-type natriuretic peptide (BNP) and a risk factor assessment that includes ejection fraction, left ventricular end-diastolic diameter, BNP level, presence of nonsustained ventricular tachycardia, and diabetes mellitus.^{17,18} Accurate assessment of sudden death incidence is rendered all the more difficult by the increased prevalence of automatic indwelling cardioverter defibrillator insertion in patients with reduced ejection fraction, which concurrently enhances data collection about the incidence of dysrhythmia in patients with heart failure and decreases the overall mortality caused by dysrhythmia.^{19,20} Further uncertainty is introduced by the use of a left ventricular assist device (LVAD) as destination therapy (see later).

The persistence of this prognostic uncertainty renders a discussion of patient preference difficult at best. Prior work done in patients with cancer diagnoses suggests that even a 10%

probability of not surviving the next 6 months leads patients to consider different treatment options.²¹ In part because of prognostic uncertainty, patients dying with heart failure have been documented to have a poorer understanding of their condition and less involvement in the decision-making process regarding their care.²² A study of 274 dying patients, 26% of which had cardiovascular disease, found that some treatment was withheld or withdrawn in 84% of patients; however, only 35% of these patients were able to participate in the decision-making process.²³ Incorporation of quality of life measures into a prognostic index has demonstrated that a poor quality of life is more likely to be predicted by a low quality of life index, increasing age, and histories of diabetes, stroke, or dysrhythmia, whereas all-cause mortality is more likely to be predicted by BNP, the presence of a β -blocker at discharge, blood-urea-nitrogen, and a low serum sodium.²⁴

Patients dying of heart failure who do not die suddenly deteriorate gradually; however, this gradual process is interrupted by acute episodes that frequently require hospitalization (Fig. 1).²⁵ This process is further complicated by LVAD therapy (Fig. 2).²⁶ The clinical hallmark of patients not presenting with sudden death is a combination of dyspnea and low output symptoms. Other commonly reported symptoms include pain in 78% of patients, depressed mood in 59%, insomnia in 45%, anxiety in 30%, anorexia in 43%, constipation in 37%, and nausea and vomiting in 32%.²⁷

Hence, patients dying of heart failure do so suddenly; suffer a chronic, slow deterioration punctuated by acute episodes; or both. In either case, the physician misses many opportunities to explore patient preferences in this population unless these preferences are addressed early in course of the disease.

IMPROVING COMMUNICATION

Interviews conducted in Great Britain with patients dying of heart failure and their caregivers identified several problems unique to the treatment of this patient population.²² Patients tended not to recall receiving any written information about their condition and often did not see an association between symptoms, such as dyspnea and edema, and their cardiac status. Similarly, patients and caregivers did not feel particularly involved in the decision-making process regarding the illness. This is further compounded by data from the United States suggesting that what prognostic information exists is frequently

Download English Version:

<https://daneshyari.com/en/article/5679477>

Download Persian Version:

<https://daneshyari.com/article/5679477>

[Daneshyari.com](https://daneshyari.com)