



Review

Multidisciplinary management of heart failure just beginning in Japan



Yukihito Sato (MD, PhD, FJCC)*

Department of Cardiology, Hyogo Prefectural Amagasaki Hospital, Amagasaki, Hyogo, Japan

ARTICLE INFO

Article history:

Received 3 December 2014
 Received in revised form 13 January 2015
 Accepted 16 January 2015
 Available online 23 February 2015

Keywords:

Heart failure
 Heart failure management
 Cardiac cachexia
 Palliative care

ABSTRACT

The mortality associated with end-stage heart failure (HF) is high despite the development of new and increasingly effective drugs and non-pharmacological therapies. Repetitive hospitalizations predict fatal outcomes and each hospitalization should prompt individual conversations with the patient, the family, and the caregivers. A multidisciplinary disease management program promotes the education of patients and their families and modifies their behavior, with a view to ultimately improve the prognosis and quality of life. From the early to the late stages of HF, a multidisciplinary disease management program should be implemented. In Western societies this multidisciplinary management has long been debated and endorsed, in contrast to Japan, where it has just begun. In 2012, the Japanese Nursing Association launched a certification in chronic HF nursing. A Japanese version of HF disease management should soon be developed in its own social environment.

© 2015 Published by Elsevier Ltd on behalf of Japanese College of Cardiology.

Contents

Introduction	181
Members of the team, sites of activity, and clinical endpoints	182
Members of the team	182
Sites of activity	182
Endpoints	182
Tool kits	182
Interventions	184
Disease management program	184
Optimizing medical treatment	184
Daily instructions in the Japanese culture	184
Dietary interventions	185
Palliative care	185
Ambulatory and home-based infusions of inotropes	185
Management of dyspnea and pain	186
Resuscitation	186
Conclusion	186
References	187

Introduction

The mortality associated with end-stage heart failure (HF) is high despite new and increasingly effective drugs and non-pharmacological therapies [1–3]. Repetitive hospitalizations predict mortality

[4] and promote organ injury, and each hospitalization is a time when discussion with individual patients, their relatives, and the caregivers should take place. A disease management program is a multidisciplinary approach, which promotes the education of the patient and their relatives, and modifies the behavior with an ultimate goal to improve the prognosis [5,6]. Despite the recommendation of several pharmacological treatments by professional practice guidelines, the performance of individual medications is highly variable among medical institutions, and might be increased by the implementation of a multidisciplinary management program.

* Correspondence to: Department of Cardiology, Hyogo Prefectural Amagasaki Hospital, Higashidaimotsucho 1-1-1, Amagasaki, Hyogo 660-0828, Japan. Tel.: +81 06 6482 1521; fax: +81 06 6482 7430.

E-mail address: yukihito.sato@gmail.com

However, in end-stage HF, the treatment objectives may change, and the preservation of quality of life (QOL) becomes particularly important [7–9]. At this point, the objectives of the multidisciplinary approach may also change. The medical therapy recommended by the guidelines might have to be discontinued because of side effects, such as hypotension and renal failure. Moreover, some patients may need palliative interventions, including opiates. These choices must be individually re-evaluated by the multidisciplinary team. In Western societies this form of multidisciplinary management has been adopted and debated for decades. In contrast, it is just beginning in Japan. In 2012, the Japanese Nursing Association created a certification in chronic HF nursing. This review discusses the role of multidisciplinary interventions in the context of Japanese medicine.

Members of the team, sites of activity, and clinical endpoints

Members of the team

While the role of multidisciplinary teams in the treatment of patients with HF has been described, the individual team members have been less clearly characterized and the members of multidisciplinary teams vary among institutions [5,6]. However, the main members of the teams are doctors and nurses. In Western societies, internists, family physicians, or general practitioners are sometimes included beside cardiologists. Lee et al. reported that collaborative care of HF by a cardiologist and primary care physician within 30 days after discharge of the patient from the hospital was associated with superior outcomes [10]. The nursing staff is hospital-based and specialized in the management of HF, as well as in charge of cardiac rehabilitation and home care [5,6]. The pharmacist educates patients in the use of medications and dispenses information regarding medical therapies to the multidisciplinary team members, helping patients follow the therapeutic guidelines and promoting medical compliance. Koshman et al. reported the results of a meta-analysis and pharmaceutical care in the treatment of patients with HF. Since all-cause mortality and hospitalizations for management of HF were lowered, they concluded that the inclusion of pharmacists in the HF care team should be strongly considered [11]. Other health professionals, such as dietitians, physical therapists, and social workers might also be included. The dietician should explain what type of food should be consumed to lower the risk of adverse cardiovascular events, as dietary indiscretions are known to precipitate the readmission of patients to the hospital. Nutritional interventions may also be important in the support of cachectic patients. In Japan, the current composition of multidisciplinary teams includes cardiologists, certified nurses, pharmacists, physical therapists, and dietitians [12].

Sites of activity

The work place of multidisciplinary management teams is divided between hospital and ambulatory settings. Out-of-hospital places include ambulatory facilities, homes, and telemonitoring. Jencks et al. reported that the 30-day rehospitalization rate of US Medicare beneficiaries suffering from HF was 26.9% [13]. Since the risk of rehospitalization is high just after the patients' discharge from the hospital, a seamless in and out of hospital disease management program is crucial. A thorough discharge education is critical [14] and an outpatient-based disease management program should be enforced [15]. Telemonitoring might help implement the multidisciplinary approach when access is limited by geographical constraints. The Telemonitoring to Improve Heart Failure Outcomes (Tele-HF) study failed to significantly decrease the rates of all-cause re-hospitalizations and deaths [16]; however, a

recent meta-analysis, which excluded Tele-HF, showed a trend toward a decrease in all-cause mortality conferred by a structured telephone support program [17]. Further studies are necessary to confirm these observations. New means of remote monitoring with implantable cardioverter defibrillators (ICD) with or without resynchronization therapy are promising [18]. The Evolution of Management Strategies of Heart Failure Patients With Implantable Defibrillators (EVOLVO) study found that remote monitoring reduced the number of emergency visits and the overall consumption of healthcare resources [19].

The Japanese Heart Failure Outpatients Disease Management and Cardiac Evaluation (J-HOMECARE) study observed improvements in the patients' psychological status and lower hospitalization rates by a disease management program led by home visiting nurses [20]; the Home telemonitoring study for Japanese patients with heart failure (HOMES-HF) is in progress [21].

Endpoints

Among clinical endpoints, morbidity and mortality represent the gold standards [22]; however, an accurate assessment of the effects of multidisciplinary interventions on these endpoints is challenging, as the patients present with complicated illnesses often requiring multiple hospitalizations. McAlister et al. reported that multidisciplinary strategies lowered the rate of hospitalizations for HF and all-cause hospitalizations, although they had no effect on mortality [23]. In the Coordinating Study Evaluating Outcomes of Advising and Counseling in Heart Failure (COACH) study, management of the disease by trained nurses did not lower the rates of death and hospitalization for HF [24]. The effectiveness of a multidisciplinary team is sometimes ascertained by the use of evidence-based therapy, the number of hospitalizations, the consumption of resources, functional capacity, QOL, and patient-reported health outcomes [25–28].

Depression is common in HF and contributes to poor outcomes [29,30]. Change in the severity of depression was a primary endpoint in the Sertraline Against Depression and Heart Disease in Chronic Heart Failure (SADHART-CHF) trial [31], while changes in QOL, depression, and anxiety were the primary endpoints in the randomized Management of Sadness and Anxiety in Cardiology (MOSAIC) trial [32].

Besides the disease characteristics, socio-environmental factors also play an important role. Tsuchihashi et al. reported that irregular follow-ups, weak professional support, and unemployment are also predictors of poor prognosis in Japanese patients, and might be targets to lower mortality and morbidity [33].

Tool kits

The implementation of multidisciplinary team management is greatly facilitated by a tool kit, providing patients with a uniform education by nurses in or out of the hospital, pharmacists, and cardiologists and family physicians. For example, the Improve the Use of Evidence-Based Heart Failure Therapies in the Outpatient Setting (IMPROVE HF) study provided evidence of improved management of ambulatory patients suffering from HF, based on a best-practices algorithm, clinical pathway, standard encounter forms, checklists, and pocket cards [34]. A textbook on HF was released by our institution in 2012 (Fig. 1a). It teaches the pathophysiology, medical treatment, life style modification, and self-monitoring and self-management of HF, including abundant illustrations. The Japanese Heart Failure Society also released another textbook (<http://www.asas.or.jp/jhfs/topics/20130301.html>) (Fig. 1b). While a critical pathway may be an option to strengthen the therapeutic guidelines [35], such a critical pathway

Download English Version:

<https://daneshyari.com/en/article/2962875>

Download Persian Version:

<https://daneshyari.com/article/2962875>

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