SCIENTIFIC LETTER

Dying from heart failure in hospital: palliative decision making analysis

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Heart failure is the only cardiovascular disease whose prevalence, incidence, and mortality is increasing.¹ Modern treatments for heart failure slow but do not stop its progression. The course of the disease is difficult to predict; patients hospitalised for acute exacerbation of severe heart failure have a generally poor six months survival rate, but survivors retain relatively good functional status.² Prognostic criteria in seriously ill patients with heart failure are not effective in identifying which population will still be alive six months later.³ Frequently quality of life in heart failure patients is poor and death occurs in the hospital, even among patients who received community based long term care.⁴

We undertook the present study to examine the palliative care—that is, the total care patients receive when they do not respond to curative treatment, focusing on symptom relief—provided to patients dying from heart failure in the internal medicine department of a tertiary teaching hospital.

METHODS

We conducted a retrospective review of the medical records of 150 patients more than 65 years old, who died consecutively of heart failure (ICD-9CM code) during a two year period (1999–2000). Patients were excluded if they had insufficient data ($n = 10$), had experienced sudden death ($n = 5$) or died during the first 48 hours of hospitalisation ($n = 8$), or if they died from another disease ($n = 9$). Presence of heart failure was confirmed on the basis of formal demonstration of impaired systolic or diastolic function and persistent functional impairment indicative of New York Heart Association (NYHA) class II, III or IV. We evaluated written information regarding do not resuscitate (DNR) instructions, graduation of therapeutic decisions, and the information provided to the patient and relatives on the prognosis of the disease, assessed from the chart review of each patient. Total withdrawal of drug treatment and provision of palliative care were also assessed.

RESULTS

One hundred and eighteen patients were finally included in the study; 60 were women and 58 were men, mean age 79 years (range 65–97 years). Death occurred a mean of 13 (3–90)

days after admission. NYHA status was: II 6%, III 50%, IV 44%. DNR instructions were specified in only 32% of patients, and decisions about intensity of care in 10%. The level of knowledge of the disease prognosis was 3% for patients and 25% for relatives. Drug withdrawal was done in 18% of patients and palliative care in 22% (mean 2.6 days before death).

DISCUSSION

Palliative care for patients with cardiovascular diseases has so far received less attention than for those with cancer, for example. The decision to institute palliative care is affected by the difficulty in establishing end stage heart failure. In a study involving 263 patients with heart failure, 40% received a major treatment intervention in the last three days of life, suggesting that doctors did not recognise the proximity of death.⁵ Future patient care planning should include end-of-life policies to improve the comfort and wellbeing of patients in the final stage of heart failure.

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REFERENCES

- 1 Bonneaux L, Barendregt JJ, Meeter K, *et al*. Estimating clinical morbidity due to ischemic heart disease and congestive heart failure: the future rise of heart failure. *Am J Public Health* 1994;**84**:20–8.
- 2 Jaagosild P, Dawson NV, Thomas CH, *et al*. Outcomes of acute exacerbation of severe congestive heart disease. Quality of life, resource use and survival. *Arch Intern Med* 1998;**158**:1081–9.
- 3 Christakis NA, Escarce JJ. Survival of Medicare patients after enrolment in hospice programs. *N Engl J Med* 1996;**335**:172–8.
- 4 Fried TR, Pollack DM, Drickamen MA, *et al*. Who dies at home? Determinants of site of death for community-based long term care patients. *J Am Geriatr Soc* 1999;**47**:25–9.
- 5 Lynn J, Teno JM, Phillips RS, *et al*. Perceptions by family members of the dying experience of older and serious ill patients. *Ann Intern Med* 1997;**126**:97–106.