

section 2.6.1: End stage cardiovascular disease

Description of the disease and progression

End stage cardiac disease is seen in the young, usually with a genetic disposition, in the ageing process and as a complication of cancer and/or cancer treatment and accounted for 19% of all deaths in Australia in 2003.¹ Cardiovascular disease can affect specific parts of the heart: valves, muscles, vascular system. Complications can be specifically targeted to the heart or to the peripheral vascular system with oedema as a normal side effect. Myocardial ischaemia and infarction with subsequent cardiac surgery are common. Other complications include cardiomyopathy, arrhythmias, pericarditis, pericardial effusion, superior or inferior vena cava obstruction and lymphoedema.

Cardiovascular disease can be extremely debilitating and leaves the person with increasing lethargy, dependency on others for assistance with their care and increasing dyspnoea. Life expectancy can be months to years depending on the right combination of medication and the ability to meet personal need requirements.

Potential symptoms

- dyspnoea
- peripheral oedema
- lethargy, intolerance to physical exercise
- increasing care requirements, assistance with activities of daily living (ADL)
- arrhythmias such as atrial fibrillation, ectopic beats
- chest pain

Identification of potential problems

- ask about difficulties breathing, nocturnal chest pain or chest pain with activity, pain on inspiration, irregular heart beats, dizziness
- take radial pulse or auscultate the heart listening for regularity, strength and rate of heart beat
- observe for oedema of the face, neck or upper limbs, legs, feet; productive cough with phlegm that is frothy or stringy; abdominal swelling
- auscultate for fluid in the lungs
- note increases in weakness or tiredness requiring rest during the day

Specific considerations for end stage disease

End stage disease is usually marked by persistent refractory symptoms at rest which are unresponsive to optimal pharmacological and non-pharmacological therapies, and where the patient is not suitable for heart transplantation. There may be intractable angina which is not appropriate for cardiac revascularisation.

Where the patient may previously have had long periods of stability, now disease is frequently punctuated with sentinel events such as decompensation and progressive debilitation with multiple emergency presentations or hospital admissions. There is usually an accompanying fall in functional status, with New York Heart Association Class 4 symptoms², this classification meaning that there is severe disability and that any physical activity brings on discomfort and symptoms occur at rest. The patient may have psychological or existential distress, or may have refused further aggressive or invasive treatment.

Management strategies

- management changes from physiological status to relief of symptoms including maintaining pharmacological strategies to relieve dyspnoea and minimise fluid retention
- see *Therapeutic Guidelines – Palliative Care* for symptom management³
- patient requirements for community-based supports are reviewed
- an assessment of caregiver needs is completed
- discussion regarding patient preferences for end of life care, advance directives and related decision making is facilitated
- check with your local facility about the existence of a clinical pathway for heart failure management which includes the role of the specialist palliative care service and referral guidelines.⁴

references

¹ Australian Institute of Health and Welfare, Incidence and prevalence of chronic diseases, see www.aihw.gov.au

² The Criteria Committee of the New York Heart Association (1994) *Nomenclature and Criteria for Diagnosis of Diseases of the Heart and Great Vessels*. 9th Ed. Boston, Mass: Little, Brown & Co; 253-256.

³ Therapeutic Guidelines- Palliative Care, Version 2 (2005), Therapeutic Guidelines Ltd, Victoria, Australia.

⁴ Krum H, Jelinek M, Stewart S, Sindone A, Atherton J, Hawkes A (2006) Guidelines for the prevention, detection and management of people with chronic heart failure in Australia. *MJA* 185 (10): 549-556.