

## OVERVIEW: HEART FAILURE IN OLDER ADULTS

Heart failure (HF), particularly in the setting of preserved systolic function, disproportionately afflicts older individuals and results in significant morbidity, mortality, and health care costs. Caring for older adults with HF requires knowledge of age-related physiologic changes, complex multi-organ, multi-dimensional syndromes, and interdisciplinary teams.

HF is predominantly a disorder of the older adult population, and more than 50% of older adults with HF have a normal EF. Compared with younger HF patients, older patients are more likely to be women, and to have antecedent hypertension, less CHD, and multiple comorbid conditions. Compared with those with HF and low EF (HFLEF), hospitalized older patients with HF and normal EF (HFNEF) have similar mortality and recurrent hospitalization rates. The primary chronic symptom of HF is exercise intolerance, which can be quantified with cardiopulmonary exercise testing, is related to prognosis, and is similar in severity in older patients with HFNEF compared to those with HFLEF. Physical function can be assessed quickly and easily during serial follow-up with timed and distance walk tests and ADLS = Activities of Daily Living, IADLS = Instrumental Activities of Daily Living.

Age-related changes in the CV system (increasing arterial and ventricular stiffness, impaired beta-adrenergic responsiveness), coupled with changes in other organ systems (especially the kidneys and lungs), predispose older patients to the development of HF and also increase symptom severity, worsen prognosis, and complicate management.

Dietary indiscretions (e.g., excess sodium and fluid intake) are major preventable causes of recurrent HF exacerbations. Multidisciplinary management of older adult patients with HF, including those with a normal EF, reduces hospitalization, improves quality of life, and reduces cost. Treatment of hypertension reduces the incidence of HF by about 50% in older adults and is, therefore, a highly effective strategy for the prevention of HF in older adults. There have been few trials of HFNEF to date, and none have shown reductions in mortality. While management of HFLEF is generally similar in older compared to younger patients, there are limited data available regarding the most challenging subsets of patients, such as those ages  $\geq 80$  years, those with multiple comorbidities, and residents of long-term care facilities. There are limited data regarding the efficacy of ICDs and biventricular pacemakers in very elderly (e.g.,  $\geq 80$  years) HF patients, and the decision process for these interventions requires attention to psychosocial and ethical issues.