



Failure of the Elderly Heart

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Despite falling incidence of coronary artery disease and cancer, the incidence of heart failure (HF) is increasing. Atrial fibrillation (AF) is an important contributing cause for HF.

There are two forms of HF: systolic and diastolic. In the elderly, diastolic HF is increasingly common, often secondary to hypertension, diabetes and underlying coronary artery disease. A measurement of left ventricular function such as an echocardiogram is necessary to make a diagnosis of HF with normal systolic function. Newer hormonal measurements such as Brain type natriuretic peptide may be useful to separate chest infection (a common problem in the elderly) from HF.

The standard therapy of HF includes diuretics, angiotensin converting enzyme inhibitor spironolactone and betablocker. In the elderly, it is important to avoid polypharmacy. Postural hypotension and the renal function may limit the dose of some of these therapies.

Despite optimal medical therapy, 18% of patient with moderate heart failure will die in 1 year. Research into new targets for pharmacological therapy is underway, but early results have not been encouraging. In patients with left bundle branch block and HF, biventricular pacing can improve cardiac function and quality of life, and especially in conjunction of an implantable cardioverter defibrillator, improve survival. The later also take care of sudden cardiac death, an important cause of death in patients with heart failure.

AF occurs in up to 30% of patients with HF, and may be a cause of HF. It is very likely that AF may increase HF. Conversely, in patients with HF, atrial stretch can aggravate AF. AF management includes rate control, rhythm control and anticoagulation, and excluding of underlying causes such as thyrotoxicosis.