

Medical Treatment of chronic heart failure

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The modern pharmacologic strategy of treating heart failure focuses on the correction of exaggerated neurohumoral activities which are stimulated by ventricular dysfunction and exert adverse effects on the cardiovascular system. The abnormal neurohumoral activities include increased secretion of angiotensin II, aldosterone, catecholamines, vasopressin, and endothelin. These inappropriate responses result in increased peripheral vascular resistance, ventricular remodeling and hypertrophy, and decreased endothelium-derived vascular relaxation. Therapy of heart failure shall be initiated once there is evidence of ventricular dysfunction as detected by cardiac sonography or radionuclide cardiac imaging. Modes of therapy can be recommended according to the stages of heart failure and targets of therapy.

Early treatment: angiotensin converting enzyme inhibitors, spironolactone, and selected β -blockers. (?Angiotensin II receptor antagonists)

Symptomatic treatment: salt restriction, diuretics, organic nitrates, digitalis glycosides, angiotensin converting enzyme inhibitors, spironolactone, and selected β -blockers. (?Calcium antagonist, and angiotensin II receptor antagonist)

Treatment of severe heart failure with tissue hypoperfusion not responsive to standard therapy: dobutamine.

Prevention of thromboembolic complications: aspirin, warfarin.

Prevention of sudden cardiac death: amiodarone, implantable cardiac converter-defibrillator.

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