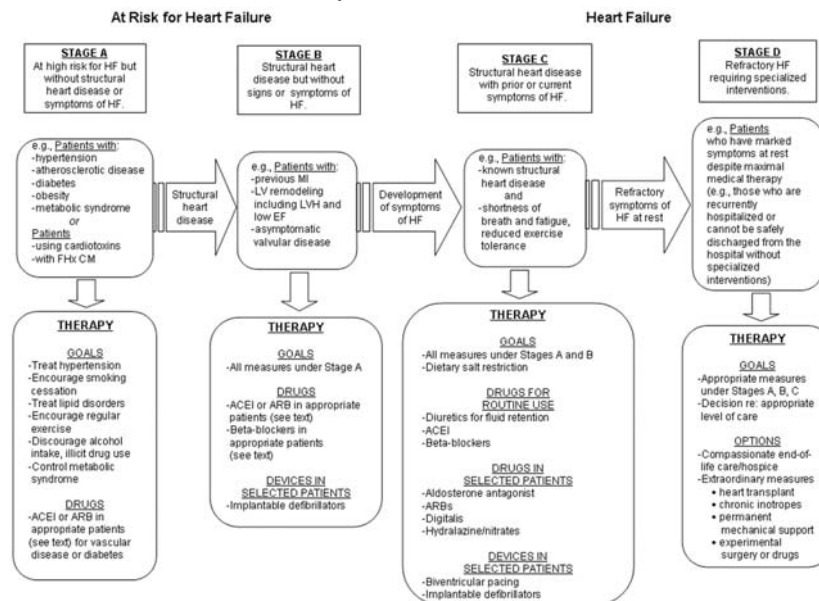


2010 Bravo Health Congestive Heart Failure (CHF) Guidelines

Bravo Health supports the 2009 Focused Update Incorporated into the American College of Cardiology/American Heart Association 2005 Guidelines for the Diagnosis and Management of Heart Failure in Adults. Guidelines should never supersede clinical judgment. The practitioner, in conjunction with the patient or responsible party, should decide whether these or other recommended services should be performed more frequently, less frequently, or not at all.

Stages in the Development of Heart Failure/Recommended Therapy by Stage ACEI indicates angiotensin-converting enzyme inhibitor; ARB, angiotensin II receptor blocker; EF, ejection fraction; FHx CM, family history of cardiomyopathy; HF, heart failure; LV, left ventricular; LVH, left ventricular hypertrophy; and MI, myocardial infarction



Recommendations for the Initial Clinical Assessment of Patients Presenting With Heart Failure

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A thorough history and physical examination should be obtained/performed to identify cardiac and noncardiac disorders or behaviors that might cause or accelerate the development or progression of HF.

A careful history of current and past use of alcohol, illicit drugs, current or past standard or "alternative therapies," and chemotherapy drugs should be obtained.

Initial assessment should be made of the patient's ability to perform routine and desired activities of daily living.

Initial examination should include assessment of the patient's volume status, orthostatic blood pressure changes, measurement of weight and height, and calculation of body mass index.

Initial laboratory evaluation should include complete blood count, urinalysis, serum electrolytes (including calcium and magnesium), blood urea nitrogen, serum creatinine, fasting blood glucose (glycohemoglobin), lipid profile, liver function tests, and thyroid-stimulating hormone.

Twelve-lead electrocardiogram and chest radiograph (posterior to anterior [PA] and lateral) should be performed.

Two-dimensional echocardiography with Doppler should be performed to assess left ventricular ejection fraction (LVEF), LV size, wall thickness, and valve function. Radionuclide ventriculography can be performed to assess LVEF and volumes.

Coronary arteriography should be performed in patients who have angina or significant ischemia unless the patient is not eligible for revascularization of any kind.

Recommendations for the Serial Clinical Assessment of Patients Presenting With Heart Failure

Assessment should be made at each visit of the volume status and weight.

Careful history of current use of alcohol, tobacco, illicit drugs, "alternative therapies," and chemotherapy drugs, as well as diet and sodium intake, should be obtained at each visit.

Recommendations for Patients with Reduced Left Ventricular Ejection Fraction

Diuretics and salt restriction are indicated in patients with current or prior symptoms of HF and reduced LVEF who have evidence of fluid retention.

Angiotensin-converting enzyme inhibitors are recommended for all patients with current or prior symptoms of HF and reduced LVEF, unless contraindicated.

Beta blockers (using 1 of the 3 proven to reduce mortality, i.e., bisoprolol, carvedilol, and sustained release metoprolol succinate) are recommended for all stable patients with current or prior symptoms of HF and reduced LVEF, unless contraindicated.

Angiotensin II receptor blockers are recommended in patients with current or prior symptoms of HF and reduced LVEF who are ACE inhibitor-intolerant.

Drugs known to adversely affect the clinical status of patients with current or prior symptoms of HF and reduced LVEF should be avoided or withdrawn whenever possible (e.g., nonsteroidal anti-inflammatory drugs, most antiarrhythmic drugs, and most calcium channel blocking drugs)

Exercise training is beneficial as an adjunctive approach to improve clinical status in ambulatory patients with current or prior symptoms of HF and reduced LVEF.

An implantable cardioverter-defibrillator is recommended as secondary prevention to prolong survival in patients with current or prior symptoms of HF and reduced LVEF who have a history of cardiac arrest, ventricular fibrillation, or hemodynamically destabilizing ventricular tachycardia.

Implantable cardioverter-defibrillator therapy is recommended for primary prevention of sudden cardiac death to reduce total mortality in patients with non-ischemic dilated cardiomyopathy or ischemic heart disease at least 40 days post-MI, a LVEF less than or equal to 35%, and NYHA functional class II or III symptoms while receiving chronic optimal medical therapy, and who have reasonable expectation of survival with a good functional status for more than 1 year.

Patients with LVEF of less than or equal to 35%, sinus rhythm, and NYHA functional class III or ambulatory class IV symptoms despite recommended, optimal medical therapy and who have cardiac dyssynchrony, which is currently defined as a QRS duration greater than or equal to 0.12 seconds, should receive cardiac resynchronization therapy, with or without an ICD, unless contraindicated.

Addition of an aldosterone antagonist is recommended in selected patients with moderately severe to severe symptoms of HF and reduced LVEF who can be carefully monitored for preserved renal function and normal potassium concentration. Creatinine should be 2.5 mg per dL or less in men or 2.0 mg per dL or less in women and potassium should be less than 5.0 mEq per liter. Under circumstances where monitoring for hyperkalemia or renal dysfunction is not anticipated to be feasible, the risks may outweigh the benefits of aldosterone antagonists.

The combination of hydralazine and nitrates is recommended to improve outcomes for patients self-described as African-Americans, with moderate-severe symptoms on optimal therapy with ACE inhibitors, beta blockers, and diuretics.

Recommendations for Patients with Refractory End-Stage Heart Failure

Meticulous identification and control of fluid retention.

Referral for cardiac transplantation in potentially eligible patients.

Referral of patients with refractory end-stage HF to a HF program with expertise in the management of refractory HF is useful.

Options for end-of-life care should be discussed with the patient and family when severe symptoms in patients with refractory end-stage HF persist despite application of all recommended therapies.

Patients with refractory end-stage HF and implantable defibrillators should receive information about the option to inactivate the defibrillator
