Heart Failure

Evaluation and Treatment for Heart Failure Patients

(See page 7 in Guideline for information specific to HF patients with preserved systolic function.)

Evaluation

History: Thorough assessment of functional status and activities of daily living **Physical:** Thorough assessment of volume state **Initial 12 Lead EKG**	**Initial Lab Tests:** CBC, UA, Electrolytes, BUN, Creatinine, Calcium, TSH, Liver Function Test, Glucose, Lipid Profile **Serial Monitoring:** Weight, electrolytes, renal function	**2D Doppler Echocardiogram** **Chest X-Ray:** PA + LAT **Evaluate For Ischemia:** Cardiac cath & angio: if angina present or revascularization is considered

Treatment

Classification *(see page 7 for details)*	ACC/AHA HF Stage	A*	B	C		D
	NYHA Functional Class	None	I	II	III	IV
Medications	ACE Inhibitor	For patients with diabetes, atherosclerosis. Consider for HTN or multiple risk factors	For all patients (Use of ACE inhibitors for patients with LVEF <40% is often used as a performance measure) Lack of evidence for ACE and ARB combination therapy			
	ARB	If ACE intolerant. Lack of evidence for ACE and ARB combination therapy				
	Hydralazine/Long-Acting Nitrate		If ACE or ARB intolerant; or in addition to standard triple therapy (in black patients) Standard triple therapy is ACEi or ARB, Beta Blocker, and Aldosterone Antagonist			
	Beta Blocker[a]		In all patients			
	Digitalis			Consider for symptom relief or rate control–Target dig. level <1.0. If prescribed monitor dig. level, especially in the elderly		
	Aldosterone Antagonists	Consider in diabetics who are post-MI with EF<40%, Consider in other patients who also have evidence of CHF-(rales, abnormal CXR or S3)[b]		If Class II - IV symptoms, for patients with preserved renal function and normal potassium concentration[c] in non-diabetics with EF<35%		
	Nitrates Alone or with Hydralazine			Consider on top of ACE inhibitor, beta blocker, diuretic[d]		
	Diuretics			Current or recurring fluid retention		
	Anticoagulants	If AFib or previous thromboembolic event				
	Influenza and Pneumococcal Vaccine	In all patients				
	Avoid Drugs that Potentiate HF		In all patients (Drugs such as, but not limited to: NSAID, Glitizone, Enbrel)			
Additional Treatment Considerations	Hypertension	Control to guideline goals (<140/90 mm HG for ages <60; <150/90 for ages ≥ 60 mm HG with no diabetes and no kidney disease)				
	Atrial Fibrillation	Control rate; oral anticoagulant				
	Weight Loss	Recommended if BMI >25				
	Exercise	To tolerance, consider cardiac rehab to improve functional capacity				
	Education - including caregiver(s)	Disease process	Disease process, medications, signs to react to, daily weights, signs and symptoms of depression			
	Restrict salt & excess fluids	In all patients to appropriate levels				
	Cardiotoxins	Avoidance of smoking, alcohol consumption, and illicit drug use				
	Advance Care Directives	For all patients				
Referrals	Case/Disease Mgmt	Monitor daily weights and close symptom surveillance (consider referral for nurse case mgmt)				
	Telehealth Monitoring	Consider use of telehealth monitoring services for selected patients				
	Cardiovascular Specialist	Consider to evaluate & treat as indicated	Consider to evaluate and optimize medical therapy; coronary revascularization; valve replacement/repair; implantable defibrillator; biventricular pacing			Transplant; Mechanical circulatory support
	Palliative Care			As appropriate for symptom management		

a. Beta Blockers recommended for use with heart failure: carvedilol, metoprolol succinate, bisoprolol; b. EPHESUS study on eplerenone; c. Serum K+ and GFR should be monitored periodically; d. Nitrates with Hydralazine recommended in addition to standard therapy for all African-Americans with heart failure. *No symptoms of heart failure, no structural heart disease

Guidelines are intended to be flexible. They serve as reference points or recommendations, not rigid criteria. Guidelines should be followed in most cases, but there is an understanding that, depending on the patient, the setting, the circumstances, or other factors, care can and should be tailored to fit individual needs.