

Subject: FGP Ambulatory Clinical Care Guideline: Updated Heart Failure - Systolic Dysfunction

Outlined and summarized below are (1) What's new, (2) Key Points, (3) how to access the updated guideline and related material, (4) information regarding LVEF entry into MiChart, and (5) members of the guideline team.

1. What's New!

Treatment

- Recommendations for the integration of 2 new classes of medical therapies ---- AR/NI (angiotensin receptor/neprilysin inhibitor) and sinus node modulator
 - ACE (angiotensin-converting enzyme) inhibitors, ARB (angiotensin receptor blocker) or ARNI (angiotensin receptor blocker/neprilysin inhibitor) for all patients.
 - Sinus Node Modulator for patients who have been admitted to the hospital for HF within the last 12 months, have sinus rhythm with HR > 70 while on maximally tolerated or target dose of beta blocker.

2. Key Aspects

Diagnosis

- Ejection fraction (EF) evaluated to determine the etiology as systolic dysfunction rather than diastolic dysfunction or valvular heart disease.
- Serum BNP to help determine if dyspnea is due to HF.

Treatment

Pharmacologic Therapy

For patients with systolic dysfunction (EF < 40%) who have no contraindications:

- ACE (angiotensin-converting enzyme) inhibitors, ARB (angiotensin receptor blocker) or ARNI (angiotensin receptor blocker/neprilysin inhibitor) for all patients.
- Beta blockers for all patients except those who are hemodynamically unstable, or those who have rest dyspnea with signs of congestion.
- Aldosterone antagonist (low dose) for all patients with symptoms of heart failure or with a history of hospitalization for heart failure.
- Isosorbide dinitrate-hydralazine combination for symptomatic HF patients who are African-American.
- Diuretics for symptomatic patients to maintain appropriate fluid balance.
- Digoxin only for patients who remain symptomatic despite diuretics, ACE inhibitors and beta blockers or for those in atrial fibrillation needing rate control.
- Sinus Node Modulator for patients who have been admitted to the hospital for HF within the last 12 months, have sinus rhythm with HR > 70 while on maximally tolerated or target dose of beta blocker.

Device Therapy

- Implantable defibrillators considered for prophylaxis against sudden cardiac death in patients with EF ≤ 35%.
- Bi-ventricular pacemakers considered for patients requiring defibrillators who have symptomatic HF and QRS durations ≥ 120 msec.

Caution

HF patients on multiple medications are at risk of potential drug interactions and side effects. For example, the risk of hyperkalemia is increased in patients with renal insufficiency treated with an aldosterone antagonist and an ACE inhibitor.

3. Internet Links.

Guideline and CME activity: <http://www.med.umich.edu/1info/fhp/practiceguides/heart.html>

Patient Education:

- [Understanding Heart Failure](#)
- [Additional materials on heart failure from the Patient Education Clearinghouse](#)

All UMHS Clinical Care Guidelines: <http://www.uofmhealth.org/provider/clinical-care-guidelines>

4. UMHS Operations. Since May 2016 Cardiology has been entering the LVEF as a discrete piece of data. It is visible in the results review tab under the Cardiology section.

The image shows a software interface with a left-hand navigation menu and a main content area. The navigation menu includes items like 'Chart Review', 'Care Everywhere...', 'Results Review' (highlighted), 'CareWeb Chart', 'Synopsis', 'Combined App...', 'Appt Desk', 'History', 'Allergies', 'Problem List', 'Medications', 'Immunizations', 'Demographics', 'Health Maintenance...', and 'Flowsheets'. The main content area has a search bar at the top and a tree view of search results. The tree view is expanded to show 'RESULTS', which includes categories like 'LABORATORY RESULTS', 'ANATOMIC PATH', 'RADIOLOGY', 'CARDIOLOGY', and 'OTHERS'. Under 'CARDIOLOGY', 'CARDIAC MEASUREMENTS' is listed, with 'LVEF, Echo' as a sub-item. This sub-item is circled in red.

5. Guideline update team and oversight.

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