…2011 ACCF/AHA Guideline for the Diagnosis and Treatment of Hypertrophic Cardiomyopathy: A Report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines

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Authors: Gersh BJ, Maron BJ, Bonow RO, et al.

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Perspective:

This document represents a joint effort between the American College of Cardiology Foundation (ACCF) and American Heart Association (AHA) with representatives from several other key organizations summarizing recommendations for the diagnosis and treatment of hypertrophic cardiomyopathy (HCM). The following are 10 points to remember about these guidelines:

1. HCM is a common (1:500 affected) heterogeneous, autosomal dominantly inherited disease that most commonly affects the cardiac sarcomere. HCM phenotype is highly variable.

2. A transthoracic echocardiogram (TTE) is recommended at the initial evaluation of patients with HCM (Level of Evidence: B). If the resting instantaneous peak left ventricular outflow tract (LVOT) gradient is ≤50 mm Hg, it is reasonable to perform exercise echocardiography for detection of exercise-induced dynamic LVOT obstruction (Evidence: B).

3. A 24-hour ambulatory monitor is recommended to detect sustained and nonsustained ventricular arrhythmias and identify patients who may benefit from implantable cardioverter-defibrillator (ICD) therapy. Repeat monitoring every 1-2 years is reasonable.

4. In *asymptomatic* HCM patients, benefit from beta-blockers or calcium channel blockers has not been established (Evidence: C).

5. Beta-blockers are first-line agents for the management of *symptomatic* (angina or dyspnea) patients with HCM (Evidence: B). The addition of disopyramide to beta-blocker therapy or the use of verapamil alone may be beneficial in those who do not respond to beta-blockers.

6. Vasodilators, including dihydropyridine calcium channel blockers and angiotensin-converting enzyme inhibitors, are potentially harmful in those with evidence of LVOT

obstruction.

7. Pharmacologically optimized patients with severe dyspnea or chest pain who have an LVOT gradient ≥50 mm Hg and evidence of septal hypertrophy or systolic anterior motion of the mitral valve should be considered for myomectomy (Evidence: B). When surgery is contraindicated, alcohol septal ablation may be considered (Evidence: B), but has uncertain effectiveness with marked septal hypertrophy (>30 mm) (Evidence: C).

8. ICD placement is recommended for HCM patients with a history of cardiac arrest, ventricular fibrillation, or hemodynamically significant ventricular tachycardia (Evidence: B). ICD therapy is reasonable in patients with an LV thickness >30 mm, ≥1 unexplained syncopal event , or a first-degree relative with sudden death (Evidence: B). Patients at high risk for sudden cardiac death with nonsustained ventricular tachycardia or an abnormal exercise blood pressure response may also benefit from ICD implant.

9. It is reasonable for HCM patients to participate in low-intensity competitive sports (Evidence: C). Intensive competitive sports should be avoided in HCM patients regardless of age, LVOT obstruction severity, or prior septal reduction intervention (Evidence: C).

10. In first-degree relatives, genetic testing (Evidence: B) and a TTE (starting at age 12) (Evidence: B) are reasonable.

Author(s):

Jennifer Ann Cowger, M.D., M.S. (Disclosure)

Topic(s):

Heart Failure/Transplant, Arrhythmias, Noninvasive Cardiology