Take 3 – Practical Practice Pointers© December 3, 2018 Edition

Cholesterol 2018, A-Fib PPS, Hand/Foot/Mouth in Adults

From the Guidelines

1) ACC/AHA (et al) Management of Blood Cholesterol 2018

An updated guideline on the management of blood cholesterol was recently published. It replaces the 2013 guideline and emphasizes a more intensive approach to lipid management based on recent controlled studies and expert consensus. The top 10 take-home messages from the executive summary to reduce the risk of ASCVD include:

1. **In all individuals, emphasize a heart-healthy lifestyle across the life course**. A healthy lifestyle reduces ASCVD risk at all ages. In younger individuals, healthy lifestyle can reduce development of risk factors and is the foundation of ASCVD risk reduction. In young adults 20 to 39 years of age, an assessment of lifetime risk facilitates the clinician–patient risk discussion (see # 6) and emphasizes intensive lifestyle efforts. In all age groups, lifestyle therapy is the primary intervention for metabolic syndrome.
2. **In patients with clinical ASCVD, reduce low-density lipoprotein cholesterol (LDL-C) with high-intensity statin therapy or maximally tolerated statin therapy.** The more LDL-C is reduced on statin therapy, the greater will be subsequent risk reduction. Use a maximally tolerated statin to lower LDL-C levels by ≥ 50%.
3. **In very high-risk ASCVD, use a LDL-C threshold of 70 mg/dL to consider addition of nonstatins to statin therapy. Very high-risk includes a history of multiple major ASCVD events or 1 major ASCVD event and multiple high-risk conditions.** In very high-risk ASCVD patients, it is reasonable to add ezetimibe to maximally tolerated statin therapy when the LDL-C level remains ≥70. In patients at very high risk whose LDL-C level remains ≥ 70 mg/dL on maximally tolerated statin and ezetimibe therapy, adding a PCSK9 inhibitor is reasonable, although the long-term safety (>3 years) is uncertain and cost effectiveness is low at mid-2018 list prices.
4. **In patients with severe primary hypercholesterolemia (LDL-C level ≥190), begin high-intensity statin therapy without calculating 10-year ASCVD risk.** If the LDL-C level remains ≥100 mg/dL, adding ezetimibe is reasonable. If the LDL-C level on statin plus ezetimibe remains ≥100 mg/dL and the patient has multiple factors that increase subsequent risk of ASCVD events, a PCSK9 inhibitor may be considered, although the long-term safety (>3 years) is uncertain and economic value is low at mid-2018 list prices.
5. **In patients 40 to 75 years of age with diabetes mellitus and LDL-C ≥70 mg/dL, start moderate-intensity statin therapy without calculating 10-year ASCVD risk.** In patients with diabetes mellitus at higher risk, especially those with multiple risk factors or those 50 to 75 years of age, it is reasonable to use a high-intensity statin to reduce the LDL-C level by ≥50%.
6. **In adults 40 to 75 years of age evaluated for primary ASCVD prevention, have a clinician–patient risk discussion before starting statin therapy.** Risk discussion should include a review of major risk factors (e.g., cigarette smoking, elevated blood pressure, LDL-C, hemoglobin A1C [if indicated], and calculated 10-

year risk of ASCVD); the presence of risk-enhancing factors; the potential benefits of lifestyle and statin therapies; the potential for adverse effects and drug–drug interactions; consideration of costs of statin therapy; and patient preferences and values in shared decision-making.

7. **In adults 40 to 75 years of age without diabetes mellitus and with LDL-C levels ≥70 mg/dl, at a 10-year ASCVD risk of ≥7.5%, start a moderate-intensity statin if a discussion of treatment options favors statin therapy.** Risk discussion should include a review of major risk factors (e.g., cigarette smoking, elevated blood pressure, LDL-C, hemoglobin A1C [if indicated], and calculated 10-year risk of ASCVD); the presence of risk-enhancing factors; the potential benefits of lifestyle and statin therapies; the potential for adverse effects and drug–drug interactions; consideration of costs of statin therapy; and patient preferences and values in shared decision-making. If risk status is uncertain, consider using coronary artery calcium (CAC) to improve specificity (see #8). If statins are indicated, reduce LDL-C levels by ≥30 %, and if 10-year risk is ≥ 20%, reduce LDL-C levels by ≥50%.
8. **In adults 40 to 75 years of age without diabetes mellitus and 10-year risk of 7.5% to 19.9% (intermediate risk), risk-enhancing factors favor initiation of statin therapy (also see #7).** Risk-enhancing factors include family history of premature ASCVD; persistently elevated LDL-C levels ≥160 mg/dL; metabolic syndrome; chronic kidney disease; history of preeclampsia or premature menopause (age <40 years); chronic inflammatory disorders (e.g., rheumatoid arthritis, psoriasis, or chronic HIV); high-risk ethnic groups (e.g., South Asian); persistent elevations of triglycerides ≥175 mg/dL; and, if measured in selected individuals, apolipoprotein B ≥130 mg/dL, high-sensitivity C-reactive protein ≥2.0 mg/L, ankle-brachial index (ABI) <0.9 and lipoprotein (a) ≥50 mg/dL, especially at higher values of lipoprotein (a). Risk-enhancing factors may favor statin therapy in patients at 10-year risk of 5% to 7.5% (borderline risk).
9. **In adults 40 to 75 years of age without diabetes mellitus and with LDL-C levels ≥70 mg/dL to 189 mg/dL, at a 10-year ASCVD risk of 7.5% to 19.9%, if a decision about statin therapy is uncertain, consider measuring CAC.** If CAC is zero, treatment with statin therapy may be withheld or delayed, except in cigarette smokers, those with diabetes mellitus, and those with a strong family history of premature ASCVD. A CAC score of 1 to 99 favors statin therapy, especially in those ≥55 years of age. For any patient, if the CAC score is ≥100 Agatston units or 75th percentile, statin therapy is indicated unless otherwise deferred by the outcome of clinician–patient risk discussion.
10. **Assess adherence and percentage response to LDL-C–lowering medications and lifestyle changes with repeat lipid measurement 4 to 12 weeks after statin initiation or dose adjustment, repeated every 3 to 12 months as needed.** Define responses to lifestyle and statin therapy by percentage reductions in LDL-C levels compared with baseline. In ASCVD patients at very high-risk, triggers for adding nonstatin drug therapy are defined by threshold LDL-C levels ≥70 mg/dL on maximal statin therapy (see # 3).

The guideline retains a similar approach to the 2013 guideline for 4 “statin benefit groups:

- No clinical ASCVD but with diabetes and LDL-C of $\underline{\geq}$ 70
- Clinical ASCVD without heart failure (secondary prevention)
- Severe primary hypercholesterolemia (LDL-C ≥190 mg/dL)

- No clinical ASCVD or diabetes but LDL-C ≥ 70 and ≥ 7.5% 10-year risk by the calculator (primary prevention).

My Comment:
My intention with this Pointer is to raise your awareness of the existence of this new document and some of the major highlights from it. In many ways, the new document returns to the "pre-2013" guidelines with regard to using the LDL-C as a guide for therapy in some patients with the addition of the use of the risk calculator. It also intensifies focus on special populations with their own ASCVD risk factors as well as clarifying the indications for the use of ezetimibe. One area likely to draw controversy is the use of CAC imaging to decide on treatment in some patients and whether this is truly cost effective (#9). The guideline also re-emphasizes no need to measure a lipid profile in the fasting state. Also **note the new ASCVD Calculator App link below**.

As one commentary stated as a summary, "The new document appropriately lets clinicians calculate patients' statin eligibility but then separately think about statin suitability." I suspect we'll be covering more of the implications of this guideline in future editions of Take 3 since the AAFP/ACP have not yet reviewed/endorsed the guideline.

References:

- Grundy S, et al. Guideline on the Management of Blood Cholesterol 2018. Journal of the American College of Cardiology. November 10, 2018. Article
- Updated Risk Calculator "ASCVD Plus: Link

Questions From a Colleague

2) Atrial Fibrillation PPS

There have been more questions from colleagues as a result of the October 29 Take 3 "Atrial Fibrillation Edition." To help answer these questions, I reached out to David Sane, MD, who is the Section Chief of Cardiology for Carilion Clinic, and Carl Musser, MD, who is a Cardiac Electrophysiologist and Medical Director, Cardiac Electrophysiology Lab, Carilion Roanoke Memorial Hospital.

Question:
What is the role (if any) of amiodarone for patients with chronic atrial fibrillation?

Answer:
Be careful with using the term "chronic" when describing atrial fibrillation as this does not provide any insight as to whether the AF is paroxysmal, persistent or permanent which really drives management. If the patient is in "permanent" atrial fib with a rate control and anticoagulation strategy (no plan to try and cardiovert), then management would rarely require amiodarone on an outpatient basis as either a beta-blocker or diltiazem (+/- digoxin) can in most cases accomplish an acceptable target HR ("lenient control" is ≤ 110). Pacemaker with AVJ ablation would typically be our first contingency for rate control (after beta-blocker and diltiazem) before using amiodarone unless it was felt that it was only needed temporarily.

Question:
What are the criteria for obtaining an echo in a patient with a newly diagnosed murmur?

Answer:
The clinical context is important, but in general, it is reasonable to have a low threshold to do an echo if the patient has any cardiac symptoms, such as syncope, pre-syncope, dyspnea, palpitations, chest pain. If there is any reason to suspect endocarditis, likewise, the patient needs an echo. Then there is a group of patients who, even if asymptomatic, may need an echo. This would include aortic stenosis, aortic insufficiency, and significant mitral regurgitation, which all need to be diagnosed and followed carefully. Since echo is noninvasive, it is probably best to have a low threshold for echos in patients who present with a newly diagnosed murmur.

My Comment:
Incidentally, I recently saw a patient in her mid-50's who had "mitral regurgitation" on her problem list, but I had never noted a murmur on her prior to her most recent visit. Though she was asymptomatic, the murmur was quite impressive. An echo revealed moderated to severe MR and she is scheduled for a mitral valve replacement next week.

From the CDC and College Campuses on the East Coast

3) Coxsackie Virus (Hand, Foot, and Mouth) Outbreak

Some east coast college campuses have reported an outbreak of Coxsackie virus infection (often called hand, foot, and mouth disease or HFMD) over the past 8 weeks. Symptoms of hand, foot, and mouth disease can include fever, sore throat, lesions in the mouth, or skin rash on palms of the hands, soles of the feet, knees, elbows or buttocks. The virus can spread from person-to-person through direct contact with unwashed hands or surfaces contaminated with feces. It can also be transmitted through contact with an infected person's saliva, stool, or respiratory secretions. Persons are most contagious during the first week of the illness.

My Comment:
Infectious outbreaks on college campuses = a student health logistical nightmare! While isolated outbreaks happen on college campuses, the extent of this one has been unusual. This is good reason to stay up to date on these "diseases of childhood," even if you no longer see children in your practice!

Reference:
CDC Hand-Foot-Mouth: Link

Feel free to forward Take 3 to your colleagues. Glad to add them to the distribution list.

Mark

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