ACC/AHA New Cholesterol Management Guidelines: What’s a doc to do?
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Let me state at the outset that I am not a lipidologist, although I have had the opportunity to work with some renowned lipid experts [notably, Drs. Paul Thompson, Peter Herbert and Dick Carleton] over the years and they have taught me a lot. As a clinical cardiologist I have been struggling with how to incorporate the new American College of Cardiology (ACC) and American Heart Association (AHA) guidelines on cholesterol management into my practice. And I have been besieged these past few weeks by my non-cardiology physician and other healthcare professional colleagues, asking whether or not they or their wives should be on a statin. So there is a lot of confusion even among this ultra-informed segment of the population.

There is a lot that I like about the new guidelines. They are oriented more towards healthy lifestyle choices rather than a simple LDL target to reduce cardiovascular risk. Lower may not be better [ie, LDL levels], at least not as a focus of therapy. And with that, they have moved us away from complex cholesterol subfractions [apoLa] and adjunctive lipid lowering medications [niacin, ezetimide, fenofibrates, etc.] which have not been shown to improve clinical outcomes even though they may lower the LDL further. I will, however, continue to periodically measure lipid levels as this is a strong patient motivator.

The new guidelines outline four patient groups targeted for therapy and fortunately three of these are not too different from previous recommendations. Patients with known coronary or cardiovascular disease (prior MI, angina, CABG, stents, stroke, TIA, PAD) should be on statin therapy. In addition, the guidelines include patients with diabetes who many of us have already been treating with statins. The third group are the very rare patients with an LDL >190mg% who are likely to have familial hyperlipidemia and significant family history and where the rationale for treating these patients with statins is more obvious. So far, no big change.

The target group that will present the most difficult choices, especially for primary care physicians, are those healthy patients, between the ages of 40 and 75 years with minimal risk factors and LDLs of 70 to 190mg%. For these patients, the new guidelines provide a “Risk Calculator” which includes 8 elements [age, gender, systolic BP, total cholesterol, HDL, DM, treatment for HTN, and smoking status]. Noticeably absent from the Calculator elements are a family history of premature cardiovascular disease and an assessment of obesity, such as waist circumference or body mass index [BMI], which are important elements in many risk assessments. That aside, the new guidelines recommend that anyone with a calculated 10-year risk of CV events >7.5% should receive statin therapy.

This is where the new guidelines are much more controversial, especially for woman and non-Caucasians, where there is not a lot of data and where the Calculator may significantly overestimate risk and lead to overtreatment. In fact, the Calculator is really only designed to assess risk in the 20- to 59-year-old age group. Age and male gender are strong predictors of cardiovascular events, so if you are a 60-year-old male your 10-year risk is already >7.5%!

There has been so much controversy and criticism surrounding the Risk Calculator already, that the guideline authors have stepped back and recommended that it may be best used to start the discussion about an individual’s risk and benefits of statin therapy. So you may not want to rush out and buy this App [although I am sure it will be made available for free].

Still, it is this fourth group of healthy patients where the current guidelines represent a major departure from prior treatment algorithms for primary prevention. And if these guidelines are applied rigorously, an enormous number of new and previously untreated patients would be started on statin therapy. Many have argued that the data to
support such a recommendation is just not there and that the NNT (number needed to treat) over five years to prevent a single MI is still too high to justify such a broad and aggressive treatment approach. Additional randomized primary prevention trials, enrolling a more diverse patient population, will be needed to answer this question. In the interim, we will have to continue to make our best individual judgment based on lipid profiles, traditional risk factors and adjunctive elements including ABIs, CAC and CRP levels.

Finally, the guidelines recommend either moderate or high intensity statin therapy based on relative risk (the first three groups for sure) and what the patient is able to tolerate (which has always been the biggest hurdle related to statin therapy). High intensity therapy is directed towards a 50% reduction in LDL (so we are slipping back to treating the LDL again) and moderate intensity suggests a 30% reduction in LDL. This may be applicable to previously untreated patients where we have a baseline LDL as a starting point but it is less clear how we are to dose patients already on statins with demonstrable LDL reductions. Lower might still be better and here I suspect many of us will fall back on linking dose to an absolute LDL level. (It’s going to be a hard habit to break.)

In sum, like all guidelines, these represent a stage in the evolution of the science and art of cholesterol management. We are sure to see more science, more controversy and further refinements along the way. As for the Risk Calculator, it has its own risks and may not be ready for prime time yet – we may well be advised to wait until the updated version – if it survives the current and caustic scrutiny.

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