



TRANSCRIPT

Episode 1 - Roadmap to ASCVD Treatment

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Narrator: Cholesterol is one of the primary causal risk factors for the development of atherosclerosis. As we know, managing atherosclerotic cardiovascular disease or ASCVD requires a holistic approach across multiple disciplines working together to achieve guideline-directed lipid management. Through the support of Novartis Pharmaceuticals Corporation, the American Heart Association has created a podcast series that explores multiple perspectives of ASCVD care with clinical subject matter experts from across the country.

00:38-00:42

Narrator: Let us take you on a journey through the patient care pathway to understanding ASCVD.

00:43-01:16

Liz Olson: A healthy lifestyle, including the management of lipids, is a key component to reducing ASCVD risk. For those with ASCVD, medication is a key component in treating this disease. On today's podcast, we'll look at the American Heart Association's Guidelines for Managing ASCVD and discuss the challenges in identifying and managing cholesterol on this lifelong process across the continuum of care. I'm Liz Olson with the American Heart Association, and with me today is Dr. Murtuza Ali, Professor of Medicine and Pharmacology at LSU's School of Medicine in New Orleans.

01:17-01:19

Liz Olson: Dr. Ali, welcome. Nice to have you here.

01:20-01:21

Dr. Ali: Glad to be here, Liz. Thank you for having me.

01:22-01:26



Liz Olson: Yeah, absolutely. Would you tell us a little bit about your background?

01:27-01:59

Dr. Ali: Sure. I'm an interventional cardiologist and general cardiologist here in New Orleans, practicing in an academic environment, serving an inner-city and a suburban community with a catchment area that includes much of rural Louisiana also. Louisiana, as a state, is heavily rural, and so our patient population tends to come from a variety of different communities and obviously involved with primary prevention of cardiovascular disease as well as secondary prevention of cardiovascular risk factors in those patients who have unfortunately, already suffered an initial cardiac event.

02:00-02:13

Liz Olson: Well, thank you. It's great to have you here. Let's start off with, if you could, tell us what is ASCVD, and what does the American Heart Association recommend for managing ASCVD risk?

02:14-02:48

Dr. Ali: So ASCVD stands for atherosclerotic cardiovascular disease, and what that really amounts to is the development of plaque-based blockages in the vasculature, in the arterial and venous system of the body, really anywhere in the body. This could range from those blockages that result in angina, heart-related pain, or they could be blockages in the brain resulting in strokes or mini-strokes or blockages resulting in peripheral arterial disease and leg pain or ischemia in the legs with walking or other exertion.

02:49-03:20

Dr. Ali: So, all of those are manifestations of ASCVD, and they're all the same underlying disease process, which is the development of plaque in the arteries of the body and result in narrowing of the arteries of the body, resulting in diminished blood supply to the tissue that's been supplied by those arteries. The American Heart Association has obviously put a lot of focus on the management of the risk factors that lead to the development of plaque in the body. And one of those risk factors is cholesterol, total body cholesterol, bad cholesterol.



03:21-03:37

Dr. Ali: And just in general, the idea that cardiovascular risk can be mitigated by successful lifestyle behaviors that reduce the chance of plaque development, as well as successful pharmacologic efforts to lower plaque burden through the management of risk factors such as cholesterol.

03:38-03:52

Liz Olson: Okay. Great. Thank you. So, the *2018 AHA Cholesterol Management Guidelines* included an algorithm for managing ASCVD risk. Can you talk with us about when a provider should refer to this algorithm?

03:53-04:36

Dr. Ali: Really, at any time that a patient is being assessed for cardiovascular risk, the provider should be using algorithms such as the ASCVD Risk Calculator. So, in anyone who is at risk of the development of ASCVD, and that is anybody over the age of 35 or so, or patients with diabetes, patients with smoking history, patients with family history of heart disease. Really all of us, by virtue of, unfortunately, the lifestyle that many of us lead, are at potential risk for the development of ASCVD and the use of risk calculators, such as the American Heart Association's ASCVD Risk Calculator can help guide conversations about what type of behavioral or pharmacologic efforts may be needed in any given patient for the mitigation or management of that risk.

04:36-04:50

Dr. Ali: So, it really, very broadly speaking, everyone should be using a risk calculator such as this. It may not be necessary at every visit, but certainly as we get closer to being at higher risk, the conversations become much more important.

04:51-04:57

Liz Olson: And for patients who need medication to manage their ASCVD, what does the algorithm recommend in that case?

04:58-06:16

Dr. Ali: First line therapy is always going to involve some amount of behavioral modification, such as eating better, exercising more, etc. That's relevant, particularly

in those patients who have not yet had a cardiovascular event and who have elevated risk, but not definite ASCVD yet. Now, oftentimes those are going to be beneficial but may not be sufficiently beneficial for the reduction in cholesterol levels that are needed to lower the risk sufficiently. And, certainly in patients who have already had a cardiovascular event, the use of medications is going to be much more important because lifestyle modification will probably not be sufficient for those patients, and the use of pharmacologic agents carries with it an improvement in outcomes even above and beyond that which is achieved by lifestyle modification. Specifically, to answer your question, the pharmacology that's relevant here in terms of first-line therapy is the use of statin medications to lower cholesterol. And these are—there are a variety of different standard medications on the market. They all have benefits, varying degrees of potency and varying degrees of benefits. And those conversations should be had between patients and their individual providers about what the appropriate statin medication would be, given the degree of risk in any given patient.

06:17-06:53

Dr. Ali: If those are insufficient, sometimes additional agents are necessary. Agents such as ezetimibe can be added to the statin therapy for a further lipemic reduction or cholesterol reduction. And then if that combination of medications is insufficient, then the addition of, or use of PCSK9 inhibitors can further lower cholesterol and reduce cardiovascular risk. So broadly speaking, that's kind of the escalation algorithm at play here. And obviously these conversations should be had individually between patients and providers to guide what the right strategy for any given patient is.

06:54 -07:08

Liz Olson: What is the role that lipid management plays? We've talked about some of the medications that manage high cholesterol, and how does that change in a care setting versus, let's say, in the hospital or as an outpatient with your provider?

07:09-07:44

Dr. Ali: I think the short answer to that is that if you're presenting to the hospital with a cardiac event: unstable angina, myocardial infarction, heart attack, or any other cardiovascular event such as stroke or peripheral vascular disease resulting in need for hospital presentation; you're demonstrating that you need a higher degree of cholesterol control. And there are a number of trials that have demonstrated the use of high intensity statins to be beneficial in patients presenting with unstable cardiovascular conditions, necessitating hospital presentation.

07:45-08:26

Dr. Ali: So, the difference is not necessarily in the end point of how low a cholesterol we might target, although that is relevant also. But in terms of whether we use a lower intensity or a higher intensity statin right out of the gate in an escalation strategy or in a most-bang-for-the-buck right out of the gate type of strategy. I think that is really kind of the big difference between patients who present with unstable cardiovascular conditions, and those you might see in a clinic setting who are concerned about a development of cardiovascular disease but don't yet have it, or who present with stable cardiovascular disease that is under control and are trying to further reduce their risk of subsequent events down the road.

08:27-08:41

Liz Olson: There are certainly a lot of challenges to maintaining care at this time, but are there ongoing challenges with managing lipids and ASCVD—any barriers, maybe, that could be relevant as the disease progresses?

08:42-09:27

Dr. Ali: I think it's about vigilance, primarily. It's about recognizing that our patients with ASCVD or at risk of ASCVD need to have their cholesterols checked periodically, need to have the medications that are being used, or the combination of medications that are being used for those patients titrated upward, as needed based on the response to therapy. And, you know, the management and the surveillance for this involves blood draws and being able to check cholesterol levels. And certainly, at a time when a lot of patients are concerned about accessing health care because of concern about leaving their home or being exposed to health care environments, that could potentially be a challenge in terms of ensuring that patients understand the importance of getting serial blood work in order to make those medication adjustments.

09:28-10:00

Dr. Ali: Beyond that, I think the biggest challenge is that the risk of elevated cholesterol and subsequent cardiovascular disease is indolent. It doesn't show up right away. It's not the sort of thing where if you missed your medication or you're not sufficiently adequately optimized, you're going to feel badly and therefore, you'll



remember to take your medication. This is a disease process that happens much more slowly in a much more incremental time period. And therefore, one doesn't feel badly immediately when a variable such as cholesterol is not under control.

10:01-10:35

Dr. Ali: It really becomes much more occult, and it needs to be dealt with...the management of it becomes a much greater personal, patient responsibility because they've got to take their medications even in the absence of feeling poorly. And that's something, you know, many of us as humans struggle with, that. We forget to take our medications because life is busy, but the consequence of missing those is much further down the road than it is right away. A comparison I like to use, for example, with some of my patients is "I don't remember to take my antihistamines every day, until I started sniffing."

10:36-10:52

Dr. Ali: And then I remember right away that I forgot to take my medication that morning, or my inhaler or whatever it might be. And I have an immediate reminder because I know that I forgot something. And that's a little bit more challenging in diseases such as cholesterol management because the consequences are not immediate.

10:53-11:16

Liz Olson: Yeah, a really important point. When we're looking at the lifetime risk of ASCVD in addition to managing medications, should the disease get to that point, overall, what can a patient do to be proactive in managing their care across their lifetime: identifying risk, managing risk for both young and older patients?

11:17-12:15

Dr. Ali: So, there is no single answer to that, obviously. I think for a lot of us, the challenge in managing longitudinal disease processes is to maintain that vigilance that we talked about earlier: to maintain the diligence that's necessary to eat healthy over a protracted period of time, to exercise in a sustained manner over protracted period of time, to take our medicines even when we don't feel badly without them because we know that the benefit is longitudinal. I think understanding one's degree of risk and understanding one's degree of benefit from medical therapy is obviously very important to us as providers to be involved in that conversation with our patients



and to educate our patients about what their individual risk might be so that the benefit of the medication or other therapies that we're recommending are understood and that ownership is felt both by patient and by provider about the need to manage these risk factors longitudinally.

12:16-12:47

Dr. Ali: I think that really does get to informed conversations between patients and providers about what the reason for any given therapy is, and why it's, you know, what the consequences or potential consequences of not managing those risk factors might be so that motivation to participate in whatever the recommended therapy might be is that much more combined and that much more robust if patients understand what it is that we're doing, and why we're doing this or why we're recommending something.

12:48-13:12

Liz Olson: Taking a look at different care settings, I'm curious if there are unique challenges that may come up when working to manage these lipid lowering drugs, maybe in a rural setting or a setting where it may be difficult to get to a hospital or a physician on a regular basis? Can you talk about some of those challenges that may be unique to a geography?

13:13-13:47

Dr. Ali: Yeah, I think that's an interesting point. In our nation that we do have areas of health care access that are much more limited or much more broadly available than others. And that changes the ability of patients to access providers, as well as obviously the ability of providers to have the bandwidth necessary and the ability to offer those care, you know, that care to many patients. Generally speaking, if you live in a community where there are fewer providers, you might potentially have less access to lab work, less access to doctor's visits.

13:48-14:22

Dr. Ali: I think there are opportunities here in terms of telemedicine and physician extenders and structured programs that many health plans participate in to use treatment algorithms and nursing outreach, etc. to help patients manage their care of these, you know, get bloodwork done in settings that are closer to home, etc., and coordinate with a remote consultant who can help manage some of these risk factors. Conversely, what's interesting, is that it seems to be that lipid panels in urban areas

patients, that the average lipid panel in an urban area tends to be worse than those patients in rural areas.

14:23-14:54

Dr. Ali: And this may have something to do with the diets, the ability to move, you know, the activeness of lifestyle perhaps between rural areas and urban areas. And so again, the need for individualized risk assessment and risk factor modification, I think, is just so critically important and expanding access to care, regardless of the community, but oftentimes in less populated communities, is really something that's obviously very important to driving down population-based risk factors.

14:55-15:11

Liz Olson: For health systems broadly, do you think there are certain challenges that providers need to think about when they're working to maybe integrate better lipid management into their processes? Or are there certain barriers that they need to be aware of and address?

15:12-15:49

Dr. Ali: I don't think they are unique. There are barriers. And I think they are, they're common in many parts of chronic disease management, and those tend to be things like access to be able to get your patients in and get bloodwork done more often, to have sort of structured plans where there's an escalation strategy in place based on the results from the last lipid panel. Oftentimes, we're not seeing patients for many months in between visits. Labs may be done but not responded to until later on in the course of the patient's disease process.

15:50-16:16

Dr. Ali: So, I think there's nothing specifically unique in my mind to the management of cholesterol here that isn't part of the management of any chronic disease condition. And it speaks, I think, to the need of sort of systematic approaches to the management of cholesterol, in addition to many other risk factors like blood pressure or glycemic control or anything else that is part of the chronic disease condition for many of our cardiovascular patients.

16:16-16:38



Liz Olson: Do you have any recommendations from your experience in working with patients on how caregivers can support their loved ones as they're going through ASCVD and in managing these medications? Are there questions they should be asking at a regular check in to either manage that risk or manage the condition itself?

16:39-17:14

Dr. Ali: Yeah, I think family members and caregivers of patients with ASCVD are going to be critically important. A lot of the stuff that is going to help reduce those risk factors are going to involve things that might affect somebody else in the house also, such as changing the diet, whether one cooks with this type of food or that type of food, etc. And so, I think that the more support that patients have in terms of making some of the behavioral modifications and lifestyle modifications that are going to result in healthier lifestyles, are going to be important and are going to need that support coming from family members can really make such a big impact in helping patients achieve their goals.

17:15-17:29

Liz Olson: So, Dr. Ali, overall, what would you say would be some of the most important pieces for physicians and providers to take away in treating ASCVD? And what would the message be for a patient?

17:30-18:25

Dr. Ali: I think for both groups, for both patients and for providers, the single biggest take home message here is about awareness of any given patient's individualized cardiovascular risk, using tools such as the risk calculator and an appropriately diligent and aggressive risk stratification strategy that should include exercise and diet control and lifestyle modification. The addition of pharmacology, if appropriate, depending on the reasons why the patient was presenting in the first, and then sustained attention to their cardiovascular risk, including cholesterol, so that over time, as additional treatments become necessary, if they do, those are instituted in a timely manner so that the lifetime risk from cholesterol, in particular, as one of the cardiovascular risk factors can be mitigated as much as possible for any given patient.

18:26-18:33

Liz Olson: Well, Dr. Ali, thank you so much for taking time with us today. It's been a real pleasure, and I appreciate all of your insight on this topic. Thank you.



18:34-18:35

Dr. Ali: Thank you.

18:36-18:53

Liz Olson: This has been ASCVD Perspectives. To learn more about managing ASCVD for yourself, a loved one or your patients, you can visit the American Heart Association's website at heart.org/quality for tools, resources and more. I'm Liz Olsen with the American Heart Association and thank you for listening.

18:54-19:30

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