

TRANSCRIPT

Episode 2 - ASCVD Management in the Emergency Department

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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.

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

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Liz Olson: A healthy lifestyle, including the management of lipids, is a key component to reducing ASCVD risk. For those with an ASCVD diagnosis, medication is an important part of managing and treating the disease. On today's podcast, we'll look at how ASCVD is diagnosed and treated in the emergency room, and how that impacts long term management for both patients and their primary care providers. I'm Liz Olson with the American Heart Association, and with me today is Dr. James Langabeer, Professor of Emergency Medicine and Vice Chair for Population Health at University of Texas Health Science Center at Houston.

01:18-01:22

Liz Olson: We're here to discuss ASCVD management in the emergency department setting. Dr. Langabeer, how are you today?

01:25-01:25

Dr. Langabeer: I'm great. Thank you for having me. I appreciate it.



01:25- 01:27

Liz Olson: Absolutely. Can you tell us a little bit about yourself?

01:28-01:56

Dr. Langabeer: Sure. I'm, like you said, I'm a professor of emergency medicine. I've spent most of my career focused on figuring out ways to improve the care, the quality of care, that goes on within emergency settings. Most of it is in emergency cardiovascular care, but also cerebrovascular care and many other aspects—primarily concerned with how to get patients better care from their episode in the emergency department.

01:57-02:08

Liz Olson: Great. Well, it's wonderful to have you. Let me just start off by saying, is the emergency room the right place to identify and treat ASCVD? Why not refer it out to a primary care provider?

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Dr. Langabeer: That's a great question. So just to back up one second and kind of explain it, for...if we have any patients or family members listening in, atherosclerotic cardiovascular disease is extremely important. We tend to call it in the ED, I think most people would just say, cardiovascular disease. And atherosclerosis would be one sign or symptom. So, we're kind of changing the paradigm of how we're viewing this to be much more of ASCVD as a larger disease and not just a sign of one.

02:40-03:14

Dr. Langabeer: And so, what that is, is you know, we've got these arteries that carry blood, oxygenated blood, the good blood away from the heart and into parts of the body that need it the most, especially the brain. And when we have high levels of fats and proteins that build up, they tend to cause damage to the lining of the walls of the arteries. So, if you think of it like a hose and the hose, you've got high calcium or high lime deposits, and that starts to build up over time, and it restricts the water flow in a hose or a shower head.



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Dr. Langabeer: And it's the exact same thing we see with our body. And what happens is it materializes by reduced blood flow to...tends to be to the brain. And we end up with major problems such as a stroke or a heart attack. So, it's extremely important that we address it. But that being said, why doesn't it happen more in the emergency department? I think the issue has always been for an emergency medicine physician, someone who's practicing in an ED, is...they know how to treat acute symptoms.

03:49-04:31

Dr. Langabeer: So, if you are bleeding and you cut your arm, they can fix the bleed. If you're having a stroke, they will do their best to restore blood flow immediately. And with ASCVD, it tends to be seen as a more chronic condition and not an episode, not something acute, which we can treat right then. And so that being said, there's a scope of most people's practice, and a lot of emergency departments simply view it out of their scope of practice to provide something that they don't know much about except for that minor, you know, 30 minutes or an hour that they had them there sitting in the bed in the emergency department. So, I think that's why we're not seeing a lot of it right now.

04:32-04:40

Liz Olson: So, for emergency room staff, how would a patient present to them in the emergency room that would indicate they may need to be screened for ASCVD?

04:41-06:22

Dr. Langabeer: Well, that's a great question. So, I think, you know, today you go in and whether you're brought by EMS and you're unconscious, or you walk in, or you present with a family member, you tend to give your chief complaint you know, and that's what we call it, your primary complaints, your chief complaints. And those are the things you're concerned about. I don't believe most people come in complaining of a narrowing and hardening of our artery walls because we don't know that's our problem. So, this is the first problem: if we didn't know we had it in the first place, and we weren't being treated for it, when we go into the ED, we might be having other symptoms. So, you know, a very common one might be angina where you've got chest pain. And that's, of course, considered to be extremely...it's a red flag in an emergency department because you're going to get immediately triaged. And we want to make sure...we're going to put you on an EKG, and we're going to make sure you're not having a heart attack, you know, an acute myocardial infarction. And that is probably



the way that they would present, is with one of these signs. And the signs, you know, sometimes it could be more general, like shortness of breath, but most of the time it would have to be, in order for it to be thought of in terms of ASCVD by a physician, it would have to be something that presents like cardiovascular pain or shortness of breath, or you know, if it were a stroke, of course, it's something that we would think of. But the prevention of it is less thought of by the physician than the immediate treatment of it. If that makes sense.

06:23-06:49

Liz Olson: So, for the patients that are coming into the emergency room, they're being screened. They've got these indicators that we need to take a closer look. Are these the patients that are not at a level where they would be admitted to the hospital necessarily—maybe somebody who's just had a stroke, obviously, or heart failure or something else, or some other kind of cardiovascular disease progression. Are these folks that are maybe just having the early signs of it, where they would be discharged from the ER?

06:50-07:22

Dr. Langabeer: Most of them probably would be, if you know, like I said, you don't go in complaining of hyperlipidemia, you know, high cholesterol. You don't tend to know that's the problem. So, unless they presented with one of the most severe consequences of this disease, a heart attack or a stroke or heart shut down, then they won't get discharged. And if you look at across the country right now for emergency departments, 40 to 45% of visits get admitted into an inpatient stay.

07:23-08:36

Dr. Langabeer: But 60 to 65% are discharged and most are discharged within an hour of seeing the physician. And so, there's not a whole lot of time. And, you know, most of the time the time is being spent waiting and/or seeing a nurse and getting some history taken and very little time is spent with the physician. Of course, this is the way very busy practices work like that. And so, there's not a lot of time to go through and discuss the things that would lead us to a real diagnosis of atherosclerosis, and that would be really understanding the family history: Do you have a family history of smoking, prior strokes, prior MI's, prior heart failure? Tell us about your own personal circumstances: Do you diet? How do you eat? Do you exercise? Those kinds of discussions in an emergency department are much less common in busy metropolitan EDs than if you would go to your local primary care doctor where they might have a



few more minutes for this. And so, again, you know, the focus of emergency departments has always been the acute treatment of a disease or a condition.

08:37-09:05

Dr. Langabeer: And these kinds of things are seen as much more symptomatic. They're much more comprehensive. They require kind of internal medicine thought processes, and that's why they're overlooked in many cases. And we've got to figure out how to turn that around. And there's lots of ways we can try to turn that around for emergency physicians to really get much more involved in this and to be more proactive. But I don't think today it's necessarily happening across the board.

09:06-09:40

Liz Olson: That's really interesting. And you spoke to this a little bit about, it sounds like there are some missed opportunities or potentially missed opportunities if there maybe aren't protocols in place or triggers in an EMR to maybe get additional information or help discharge that patient with certain educational information for their primary care provider. Can you talk a little bit more about some of maybe the common missed opportunities, or things that the emergency department team can do to be better prepared to educate these patients and discharge them safely to their continued care out of the hospital?

09:41-10:45

Dr. Langabeer: Sure, yeah. I think that's the key. How do we build on and create some opportunities for emergency physicians to do a much better job because everybody wants to do a really good job at this. And, you know, I think the problem is if you come in for chest pain, and you get a full workup, including an EKG, and then we're going to take your blood, and we're going to do a full, comprehensive panel, and that tends to come sometimes with a lipid panel if there's thought of "This could be cardiovascular in nature, let's run a lipid panel." And that may come back and show us some level of concern for the physician. And so, I think the very first missed opportunity is right there. If cholesterol is high, it's sometimes...the communication doesn't occur between the physician and the patient about the cholesterol. It may be something more general, such as, you know, you've got a couple of the risk factors for cardiovascular disease, and I recommend you go and visit with your primary care physician as soon as you get out of here.



10:46-11:22

Dr. Langabeer: Instead, the conversation can be much more proactive in terms of finding a way to educate the patient on the risks of cardiovascular disease and the ABCDEs of cardiovascular disease and really use that as an opportunity, as well. Now that we have connected systems, in most cases, the hospital EDs are part of large health systems. And even the freestanding or urgent care centers are often part of these systems where we can go in and flag patients for follow up by another physician.

11:23-12:52

Dr. Langabeer: And I think that needs to occur a lot more often. That's really what we consider to be population health—notifying the system that a patient meets certain kinds of criteria and notifying the physician who is ultimately responsible. And there's usually one person responsible unless they've only been into this health system one time. They have an internal medicine or a family medicine or an OB/GYN or whoever is their primary care person. And that person is triggered with a workflow, an alert through the electronic health record that says, "I need somebody in my staff to follow up with this person and bring them in," or at least have a follow up conversation on the phone and say, "Tell me about what happened, you know, at the emergency department the other night, and Dr. So-and-So would like to see you here." And I think that's where we need to get a lot more proactive. The systems are now in place. The processes are not. And so, you know, we've got the systems that can do all these fancy alerts and workflows, but right now it's not being done widespread across the 6,000 hospitals we have in the United States. It's just not. And so there's a huge opportunity for population health within the emergency setting that can work better with the primary care and even specialist care for patients that presented in the ED the night before. And that's the opportunity. That's where we've really got to go if we want to improve the state of emergency care in the United States.

12:53-13:17

Liz Olson: That's really interesting. Fantastic. So putting myself in the shoes of a caregiver, I'm in the emergency room with my loved one. What should I do? What should I be taking note of while we're in the ER so that I can support them at home now across care with their primary care provider later on, now that they've been identified as someone at high risk for ASCVD or with ASCVD?

13:18-13:48



Dr. Langabeer: Yeah, I think that's great. If you are lucky enough to walk in or to present to the emergency department and have somebody with you, the main goal of that additional person is to provide a second pair of ears and a second pair of eyes and to make notes. So, I would really strongly recommend caregivers take notes and not notes in physician terms, but notes in their terms that they'll understand when they get home.

13:49-14:23

Dr. Langabeer: So, I see this quite a bit. I work with a lot of folks, elder people, geriatric patients, we would call them, through the emergency department. And what often happens is you get so stressed because of that brief episode you had in the ED and an encounter with the physician, which just is generally stressful for most people. But a lot of things are thrown at you. And you might remember that five minutes or 10 minutes, but your memory or recall on that the next day is probably 50% or 30% of what you were told.

14:24-15:29

Dr. Langabeer: And even if you go back and you look at notes, the notes are a lot of times if they're written by physicians and you just look at the discharge summary, you really don't know what to do. So, a caregiver, it's really important (or if you go by yourself), to just make a few notes and most importantly, know that when I left the emergency department, I'm probably not going back there to get my follow up care. I'm probably not going to go back and get a secondary prescription for something. I need to find somebody that can tell me what happened in the ED, and the caregiver's real role is to make sure that all of that was understood. In the emergency department they gave you this, and they gave you that. They diagnosed you with something that I think was high cholesterol. And they gave me a reading of 295. And I'm going to follow up with our doctor tomorrow, get us in. And then that's the real key. You know, in the ED there's a lot of opportunities to screen better, to educate better, and to refer patients and make sure the patients follow up with their physician.

15:30-16:076

Dr. Langabeer: But then it really comes down with the patient to, once you've been identified as having this potential condition, what are the steps that I can take? And the first thing I would want to do is I'd want to get back into my normal doctor, if I have one, and hopefully everyone has one and repeat the test. So, I would repeat the blood work, and I would make sure that after fasting that I see that the levels of both low



density and high-density lipoproteins are the same as what we observed in the ED. Or are there significant differences?

16:07-16:45

Dr. Langabeer: And a lot of times the stress can elevate things and not fasting in the ED could elevate things so that when we took a screen the first time, it may be totally different than the second time. Of course, most of the time it's not, but it's possible. So, you want to repeat that. And then with your normal regular physician, your ongoing primary care, then we want you to create a course of action. And that course of action, we call it the ABCDEs, but it's basically: Do you need to be on an aspirin or antiplatelet? And most people with cardiovascular disease could benefit from a baby aspirin.

16:46-18:02

Dr. Langabeer: Of course, your physician needs to be working with you on that. That's the A. The B is blood pressure because blood pressure is highly related to the level of blood flow that goes through your arteries. So, monitoring that on a daily basis is something a caregiver or a patient should be doing. If I was diagnosed with potential for hyperlipidemia or high blood pressure in the ED, I would want to test that on a normal basis two to three times a day, every single day and write that down. I would check my cholesterol again. I would make sure you limit the cigarettes, and then I would really worry about diet and exercise. And we call those the healthy lifestyle interventions. But what are the things that a caregiver and you can do together? Walking, eating better, eating Mediterranean diet, low fat diets, less meat. What are those kinds of things we can do to build a really good plan, and then follow up with your physician every 90 days at the beginning to repeat the test and see if it's working? And do you need medications, a statin? There's a lot of new therapies coming out for this. To make sure...because what we don't want is we don't want it to go unchecked in the ED and unchecked after the ED by a physician. So, follow up with your primary care doctor after any emergency department visit.

18:03-18:12

Liz Olson: Well, Dr. Langabeer, thank you so much for giving us such great insight and a lot to think about on ASCVD management in the emergency room. Really appreciate it.



18:13-18:14

Dr. Langabeer: Thank you very much. I enjoyed being here.

18:14-18:31

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

18:32-19:10

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