

## Transcript Optimal Medical Therapy in PAD

Dr. Malcolm Bell: Welcome again, everyone. I'm Malcolm Bell. I'm the host for another in our series from our CV department of interviews with the experts. Recently, I was joined for this podcast by Dr. Stan Henkin, one of our vascular medicine specialists. And if you haven't listened to the podcast on dyspnea with optic pulmonary embolism, I strongly recommend that you do. So we're pleased to have you back again today, Stan, and today we'll be talking about optimal medical therapy and peripheral arterial disease. So, its a welcome.

Dr. Stan Henkin: Thank you, Dr. Bell. It's a pleasure to be here again.

Dr. Malcolm Bell: Okay, well, we've got lots of clinicians listening to this and they probably think they know what peripheral arterial disease is, but maybe you could just remind us in case there are any nuances that we're of looking and, and maybe just describe you the most common symptoms that we may be under the lookout for in these patients. And I think the premise here is that this is a disease that is often overlooked or people may feel uncomfortable with how, how to approach this. So, but maybe we'll just start off with those very simple questions.

Dr. Stan Henkin: Yeah, that's a, that's a very basic question, but it's a really important one because it's not well taught at all or well recognized. So what's peripheral artery disease? Well, peripheral artery disease is what it is and what it sounds like, it's atherosclerosis of peripheral arteries, meaning non coronary arteries. Now, the actual difficulty with PAD is that unlike coronary artery disease, what a well describes that it's atherosclerosis, coronary artery, peripheral arteries. Hard to know peripheral artery of what? Of the leg? Of the arm of the brain. So it mostly means when we think about peripheral artery disease, we mostly mean extremities, lower extremities, the limbs, and it affects up to 10 million individuals in the United States and probably underdiagnosed and really under-recognized. And American Heart Association has really understood that it is well under-recognized and under-reported and underdiagnosed, and has a peripheral artery disease action plan where it involves the patients. And one of the steps is trying to have a better name for this. So be on a lookout for it. So that's, that's really question number one. Question number two. So what are the symptoms? When we think, again about coronary artery disease, we always ask about do you have chest pressure? Do you have chest pain? Do you have shortness of breath? With peripheral artery disease of the limbs, it's more difficult. You know, we say, do your calves hurt when you're walking? And a lot of people say, no, my calves don't hurt, but I have pain in my hip. I have pain in my buttocks. And we think, nah, that doesn't sound like PAD. Well, actually only a minority of patients present with classic intermittent claudication where it's really pain in the calves when you're walking. The majority of patients really two thirds present with other symptoms. It's, it can be pain in the hips, pain in the thighs, pain in the buttocks, and it should be when you're walking and it should stop when you stop. So don't just dismiss a patient when they say, no, my calves don't hurt, my hips do. And you say, oh, well you, you have osteoporosis, you, you have osteoarthritis. It must be, it really take the next step to figure out what are, why is this happening?

Dr. Malcolm Bell: Yeah, the classic situation where you sort of rush to make a diagnosis and then you sort of lock into that. But of course you have people with bad hips and backs you their pain may get better when they stop walking or revenue. So, yeah, but, you know, but, but if you are suspicious or, and, and obviously you're gonna be failing for the peripheral pulses, and then so the patient that you very clearly has qualification or, or a patient that you described, it may not be so clear, how are you gonna work that patient up? And maybe just before we get to medical treatment, which I think is really gonna be the focus here, but if you just sort of just tell us, you know, the, the two or three steps that you may take to, just to confirm that they do have peripheral arterial disease.

Dr. Stan Henken: Yeah. That this is really important. The first step is take off the shoes and the socks and feel the pulses. I mean, I know that we're limited on time with our patients. We have many patients to see throughout the day. But that's really the first step is do a thorough physical exam. Feel, feel those pulses, and not only the pedal pulses, but do a thorough physical exam. Thermal pulses, popliteal pulses. And the more you do, the easier it is gonna get. Because I remember as a resident or a fellow, I thought that a 30-year-old had peripheral artery disease because I could not feel those pulses. But the more you do, the better you're gonna get. Then the next step is really the diagnostic test of choice is ankle brachial index. And a resident ankle brachial index is the first step where you measure pressure in the arm, you compare it to pressure in the leg. Pressure in the leg should be higher than the pressure R because of gravity. But if it's lower, usually less than 0.9 is the ratio that's diagnostic of peripheral artery disease. The step even further to consider is to do an exercise ankle brachial index if you're suspicious. But the resting ankle brachial index is normal. It's, again, very similar to stress testing and coronary artery disease. You get a resting echo, it's normal, you get a stress echo, it's abnormal. The idea is exactly the same. You get rest a BI, it's normal patient exercises, they get pain, they stop. You get a, you get a post-exercise, ankle brachial index, it's 0.6 or 0.7. There you have amassed ankle brachial index.

Dr. Malcolm Bell: And at that point, are you ready for medical therapy or do you need to do any imaging studies at this point, Joe, whether it's ultrasound or CT,

Dr. Stan Henkin: At this point, you are ready to do the medical therapy. You really don't need to consider any other imaging at this point because you have diagnosed peripheral artery disease. This is probably stable peripheral artery disease. And unless you're considering intervention, you really don't need any further imaging because it's not going to help you.

Dr. Malcolm Bell: Okay. So tell us about the, the therapies here. Is it, is it all pharmacotherapy, or what other options do we have?

Yeah, pharmacotherapy is certainly an important aspect of that, but nonpharmacotherapy interventions are really important. So I divided really lifestyle interventions and pharmacotherapy. When we're thinking about lifestyle interventions, the most important thing that you can do is spend time on nicotine cessation, nicotine cessation, nicotine cessation, nicotine cessation, because this really increases the risk of proximal peripheral artery disease, aorta iliac, peripheral artery disease, where the classic symptoms is buttock claudication patients may have erectile dysfunction. So cutting down on that smoking cessation and then fully quitting is super important. Spend time on that. The next step is diet. And you'll say, well, why? Well, because we know that Mediterranean diet decreases the risk of adverse cardiovascular events. And it's the same thing with peripheral disease. Talk of about Mediterranean diet, have a handout on it, and that's, that's really important to decrease risk of adverse cardiac and limb events as well. The next step is pharmacotherapy, and I divide pharmacotherapy into buckets as well. There's antiplatelet therapy, there is statin therapy, and then there's diabetic therapy. And then finally, the very last bucket, but probably the most important one for the patient is symptoms. What are we gonna do about those symptoms? And that's probably the hardest aspect of this, but you need to talk about all those things during your visit with the patient.

Dr. Malcolm Bell: So there's a, a really a lot to uncover there. And then you're sort of staying on the pharmacologic a approach here. You, you mentioned antiplatelet, you agents, so patient with mild claudication. What antiplatelet agent are you gonna recommend?

Dr. Stan Henkin: Yeah, this is a really excellent question and probably the hardest one. So, so classically, we have thought of aspirin as the best antiplatelet agent for peripheral art disease. But I would like to us to think about the Capri trial actually in the Capri trial compared aspirin in PLA compared to clopidogrel, and actually found that in those individuals who were taking coli clopidogrel, the risk of major adverse cardiac and limb events was actually lower than aspirin, while the risk of bleeding was similar between aspirin and clopidogrel.

Dr. Malcolm Bell: That's so an important thing to emphasize, isn't it? Everyone thinks that clopidogrel causes more bleeding than aspirin. And the number of trials that really show that, it's not that you're talking about this trial, but that this is a trial that's more than 20 years old, as I recall, 20,000 patients, you know, double blind.

Dr. Stan Henkin: I, I totally agree. You know, and, and we, we do this all the time, and even recently, as you very well know, aspirin has gotten such a bad rep. You know, there were New York Times articles about, you know, stop your aspirin. You know, nobody needs an aspirin anymore. And we have to really talk to our patients about, gosh, this is not the case for you. You're, you're in a different bucket than a patient who doesn't need aspirin. But I think that the biggest two things that I do during my visit is talk about PLD therapy, and if the patient truly is at a lower risk of bleeding, and you know, I talk to them about, look, cappi- clopidogrel probably has the same risk of bleeding and

probably even lower than aspirin. I switch it. You know, that's, that's step number one. And, and again, be comfortable with clopidogrel. We know how to deal with CLO clopidogrel, we know how to deal with bleeding with clopidogrel. So make sure to get your patients on the right antiplatelet therapy.

Dr. Malcolm Bell: And then statins, are we doing the same thing as we do for heart disease? I mean, there's this high potency, high dose statins, LDO goals. Same.

Dr. Stan Henkin: Yeah, that, that's a, that's another really excellent question. And the next most common thing that I do during our visit, so when we think about statin goals, I really think about two things. I think about LDL goal, which LDL goal is less than 55 milligrams per deciliter as somebody with PAD. But the other goal is 50% or more reduction in your LDL. So the most common thing I see is somebody who is LDL may be 90 on no therapy, and they're started on a moderate intensity statin, such as Pravastatin or maybe Simvastatin, and their LDL is now 70 and they're told this, that's great, you're a goal. That's absolutely not true. We need to get these individuals on high potency, statin such as Atorvastatin 40 or 80, rosuvastatin 20 or 40, and we need to reach that goal of less than 55 per milligrams per deciliter, plus 50% reduction LDL. So one is not enough. You need to have both.

Dr. Malcolm Bell: I'm sort of trying not to smile here because the, of course then we branded the STA intolerance and where do they get that discomfort? Oh, and, and their lower extremity muscles and things. So that I'm, I'm sure you have a way of dealing with that, but let's, let's, let's move on. And so how, how are you gonna follow this patient? You know? So you, you started these, the, I'm not sure we've already talked about sort of exercise program. Yeah, that's,

Dr. Stan Henkin: Yeah. And this is what patients care about most. They care about their symptoms, you know, they don't, they care a lot less about what medications do I need to take. They wanna feel better. You know, a lot of times we see individuals who are working, they need to walk for their job, and they're saying, I have to stop because my legs hurt when I walk. So there is two important components to improving symptoms. One is shockingly pharmacotherapy. The other one is lifestyle intervention. Over the last 20 years, there's been a lot of research done on supervised exercise therapy. Now this is, this is similar to cardiac rehab, but specifically focused on symptoms for the legs. And in 2000 eighteens, we actually got, we, I'm saying as, as a cardiology community, got Medicare approval for payments for supervised exercise therapy. And this is really, really important because not many individuals know about this, but majority of hospitals do actually have these programs set up. So step number one is refer your patient to supervised exercise therapy. This is a therapy where patients walk on a treadmill, they're monitored by nurses, they get similar type of education. And we know that with that pain-free walkin time improves and total walkin time improves. Now, the important aspect that I'll mention for this is ankle brachial index will probably not get better, but this is that ischemic conditioning that we so often talk about in myocardial

disease. The same happens in the periphery. You get improved oxygen delivery, you get probably some collaterals there as well. And it's still so unfortunately underused. I mean, there's been, in the last 10 years, the uptake is horrible. It's like 5%. I mean, we can do better as a community. And so that's really the step number one

Dr. Malcolm Bell: In terms of follow up. And in particular, maybe we should just think about at this point, when do they need to see a vascular specialist? And, and in particular, when should we be considering some sort of intervention?

Dr. Stan Henkin: Yeah,

Dr. Malcolm Bell: Aggressive intervention.

Dr. Stan Henkin: I think seeing a vascular specialist is okay at any time you, you know, patient has claudication diagnosed with peripheral disease, I think it is okay to referral to a vascular specialist at any time because again, we, we can have a nuanced decision conversations about antiplatelet therapy, statin therapy, or lipid therapy in general, because we talk that statin intolerance is so common. So this is when we think about additional agents like ezetimibe, PCSK nine inhibitors, now bempedoic acid and other therapies. And then when do we think about intervention? You know? So the good news, and that's a really important conversation that I have with the patients, is that I tell them that their risk of having chronic limb threatening ischemia or amputation because of their peripheral heart disease is extremely low. It's less than 5%. That's what people care about. Am I gonna lose my leg? Am I gonna lose my toes? And the risk of that is extremely low. What do we do to make it even lower pharmacotherapy, less cell interventions? But how do I follow these patients? I see them on a regular basis. The first time I see them back is three months. I get repeat lipid panel and I talk to them and it, how are you doing? And then the next step in terms of when do I need intervention? It's really how are your symptoms doing? If they say, look, I've tried everything and I still can't do what I need to do, I can't play with my grandkids, I can't work because my legs hurt so much. This is when we start considering intervention because quality of life is really important. And if we've done everything that we need to, and we can do for these patients, by the way, including smoking cessation. Yeah, smoking cessation is truly paramount before considering intervention for these patients. Because just like in stable chronic coronary artery disease, the same is true for stable ischemic peripheral artery disease. This is elective, this is for symptoms. This is not to improve major adverse cardiac events or limb events. We need to do everything we need so that this doesn't happen again.

Dr. Malcolm Bell: Well, it's very encouraging to hear that, you know, at least with good medical treatments and exercise program, that the risk of having a major complication is relatively a low. Stan, I, I, I'd love to get you back again. We can go to the next phase to discuss that in terms of, you

know, who needs intervention and what type of interventions, you know, we would be considering. So again, I want to thank you for, for being with us today and sharing your expertise and experience in this incredibly important disease. And again, as we said at the beginning, sort of maybe sort of undertreated and, and underdiagnosed, and again, I thank our viewers and listeners for, for joining us today.