Gregg Piazza, MD, MS (00:01):

Welcome to the peripheral artery disease podcast titled Understanding PAD One Step at a Time. This is the first in a series of podcasts from the American Heart Association peripheral artery disease, PAD, Initiative. This is part of the PAD National Action Plan. I'm Dr. Gregory Piazza. I'm one of the vascular medicine cardiologists at Brigham and Women's Hospital, and I'm delighted that all of you were able join us. I'd like to make some introductions. First, I'd like to introduce my colleague, Dr. Dyane Tower, who's going to provide us with a lot of her expertise as we talk through this podcast. Dr. Tower received her doctor of podiatric medicine degree from the William Scholl College of Podiatric Medicine, and went on to complete her residency training in Greeley, Colorado at the North Colorado Medical Center.

Gregg Piazza, MD, MS (01:02):

After residency, Dr. Tower continued her education at the Dartmouth Institute for Health Policy and Clinical Practice as the APMA Public Health Fellow, where she earned her master of public health degree. Dr. Tower practiced in Illinois and New Hampshire prior to taking on a full-time role with the American Podiatric Medical Association where she serves as senior medical director and director of clinical affairs. Her primary roles at APMA include the APMA registry and also cultivating relationships with other organizations and entities within healthcare. Dyane, thank you so much for joining us.

Dyane Tower, DPM, MPH, MS (01:46):

Thank you so much for having me today.

Gregg Piazza, MD, MS (01:48):

Excellent. And then we're very fortunate to have a patient representative, Cheryl, who's going to help us to understand the patient journey as we talk about this overview of peripheral artery disease. Cheryl, thank you so much for participating.

Cheryl Wilson (02:07):

Yes. Good morning, and thank you for having me.

Gregg Piazza, MD, MS (02:10):

Excellent. Excellent. Well, we're going to start first off with just a little bit of level setting. We're going to talk about an overview of peripheral artery disease. And as many of you may know on this podcast, peripheral artery disease is one of the major manifestations of atherosclerotic cardiovascular disease. Typically, when we talk about peripheral artery disease, we often consider it as atherosclerotic buildup in the arteries of the lower extremities. The important thing to realize about peripheral artery disease is it's something that increases in its prevalence as we all get older. And so it is something that's actually quite common, especially as patients get older than 55, 65 years, and we need to be on the lookout for it. More recently we've really become much more aware of the fact that there are also some very important racial and ethnic disparities with peripheral artery disease.

Gregg Piazza, MD, MS (03:13):

A lot of our communities that maybe have been underrepresented in healthcare, such as the African American community and the Hispanic community, bear a significant burden of peripheral artery disease. And we can do much better at understanding this important disease in these populations. The presentations of peripheral artery disease can be really quite diverse. Some patients present with

difficulty walking. We call that claudication. Others present with atypical limb symptoms, pain that maybe doesn't fit into the classic description, and we'll get more into that. And then sometimes patients present with a more dramatic type of peripheral artery disease where they have pain at rest or tissue loss with ulcerations, and that's a more urgent type of manifestation for peripheral artery disease. And so I think with that overview, I'd really love to hear from Cheryl about the story of how you were diagnosed with peripheral artery disease. Cheryl, tell us a little bit of the start of your journey.

Cheryl Wilson (04:24):

Yeah. So, my journey actually started in 2009. I was having some severe pain just walking I want to say maybe 200 yards. My job requires me to be a little physical. And I remember I was strolling a suitcase into the teacher's lounge. I'm a health and wellness coach so I met with the teachers every Monday for their wellness program. And I had to park pretty far out in the parking lot. And every time I got in the teacher's lounge, I was just praying that nobody would come in because I was in tears for a few weeks with my leg hurting so bad. And it was time for a physical. So, I made an appointment and it took about six weeks for me to get the physical. And I received a phone call that afternoon. After seeing my nurse practitioner, my doctor called and told me what he thought was going on. And they immediately referred me to a vascular surgeon. And about 10 days later, I had my first stent put in.

Gregg Piazza, MD, MS (05:34):

Okay. And-

Cheryl Wilson (05:35):

I was in [inaudible 00:05:36].

Gregg Piazza, MD, MS (05:37):

... Cheryl, I think that really resonates with us as healthcare providers in the story of so many patients. I guess one question I had for you is, do you think that this was going on for much longer? Looking back, do you feel like maybe you suffered a bit with this before realizing that something was wrong?

Cheryl Wilson (06:03):

Absolutely. You're exactly right. There's so many pieces of the puzzle and you start trying to figure out what were your earliest symptoms. And there was some pain at night where I would wake up and my legs would hurt. I would hang them over the bedside. And then I realized throughout all this, after filling out the questionnaires, I inherited this disease from both sides of my family. And so I was doing everything right, taking good care of my health in the industry that I'm in. But unfortunately this is a disease that breeds itself, it lends itself to claudication over time. I don't think it happens overnight. It just...

Gregg Piazza, MD, MS (06:48):

Yeah. No, I mean, I think that that's exactly right. It's something that does develop over time. Did you have interactions with clinicians or other healthcare providers about this? Before you were diagnosed with PAD, what were the other things that you were told this could be?

Cheryl Wilson (07:11):

Actually, there was nothing else. They wanted to rule out like, did I have any type of cyst or did I have any other issues going on, any type of strain or something like that. But I think once she took the ABI, she did that right in the office, I think the nurse practitioner... I was lucky that I could have that done right then and there, even though she didn't share with me what she felt could be wrong. She wanted to talk with my doctor first. And then I received the phone call and I met with a wonderful vascular surgeon. But I did seek a second opinion. And-

Gregg Piazza, MD, MS (07:52):

Sure.

Cheryl Wilson (07:53):

... he was right on the money, too. I mean, he recommended bypass right away. He felt like it was something else. I had been in a car accident. He felt like it just could have been from that. And then we discussed my family history. But he was wonderful. He said, "Even if you do have the bypass surgery, the surgeon you have now, the one that you saw before me, he's the one I recommend to do it." So, I did end up having the bypass surgery two years ago, the fem-pop, but I'm doing great. And my goal is to manage this disease and to spread as much awareness as I can.

Gregg Piazza, MD, MS (08:36):

Excellent. I mean, I think that's so important, Cheryl. I think hearing it from us is important, but for other patients to hear from a fellow patient, it's so important. I do want to ask Dr. Tower about the approach to a patient with the symptoms that Cheryl has. What do you look for in the history and physical? It seems like she had a pretty expeditious diagnosis, but that's probably more the exception than the rule.

Dyane Tower, DPM, MPH, MS (09:05):

Yes. Yes, absolutely. Thanks, Dr. Piazza. And Cheryl, thank you for sharing your story with our listeners and us for this podcast today. And Cheryl, you mentioned a couple of things already that I'm going to talk about today as well, but first things first. Patients come in. We, of course, start with a history, talk to the patients, understand what they're experiencing, how long it's been going on, how this is affecting their daily lives, and just trying to get a better picture of what patients are going through. And Cheryl, you also mentioned you inherited some of this from your family, and I think including a good family history as part of the history taking process is also going to be very important when seeing patients who experience these kinds of symptoms. A social history is also going to be something to take into consideration. Some patients have history of tobacco use. Not all, but some do.

Dyane Tower, DPM, MPH, MS (10:09):

And that will also be part of the conversation moving forward as we get into talking about some of the treatment options and things to consider as we move forward. But sometimes patients may not always have a diagnosis when they come to see a provider or a podiatrist in particular. And so just understanding what other diagnoses patients may have that may not be PAD in particular. Maybe they have had a history of a carotid endarterectomy, some other kind of surgical procedure, or a heart surgery. They've had a stent placed in their heart or some other procedure that indicates that they have some level of arterial disease. It doesn't have to be in the lower extremities. It doesn't have to be in the feet in particular.

Dyane Tower, DPM, MPH, MS (11:02):

But it's really getting a better understanding of what this patient may have overall in their whole body leading us to think, "Well, if they have had some kind of artery problem in their neck, in their heart or in their bellies, then they're all the same vessels that travel through the body." So, there's a likelihood that there's something happening peripherally in the lower extremities all the way down to the feet, and that can give us an indication as well. So, thinking of past diagnoses, past surgeries, past procedures, those are all good questions to ask when a patient comes in that you may think has something going on artery-wise.

Gregg Piazza, MD, MS (11:52):

Excellent. And Dr. Tower, when you hear Cheryl's story of how she was diagnosed, it speaks to some of the excellent bedside tools that we have, but there's more to it, isn't there? What do you use as tools to evaluate patients where you suspect there's PAD?

Dyane Tower, DPM, MPH, MS (12:10):

Yeah, that's a very good question. And Cheryl, you mentioned some really classic signs that we would think of PAD if a patient came and said, "I can only walk this certain distance before my legs hurt," or, "My one leg hurts. I have to stop and take a breather and let my leg calm down or cool down before I can get back up and walk." So, your distance that you've traveled is indicative to us that there may be something peripheral artery related going on. Your description of dangling your feet or legs over the side of the bed at night, that gravity helps that blood flow come down to the feet and that's also a really good indicator for us to really start that light bulb goes on and we start thinking, "Well, hat other things do we need to think about?" Understanding what medications you may be taking as well can also be a clue into us, if people are maybe taking some cholesterol lowering medications, or again, have some family or self-history of some risk factors for artery disease, those are things that we'll clue into as well.

Gregg Piazza, MD, MS (13:27):

Excellent. Excellent. So, Cheryl, once you got your diagnosis, once you knew what you needed to do, what were the medical changes that were made to your regimen? And you mentioned bypass. There obviously was some surgical suggestion of what to do. But tell us about what the team told you about treatments.

Cheryl Wilson (13:52):

I think that's a great question because I did not know that this was not a curable disease. So, I thought I was going in to get a stent, that, well, that they were going to do the balloon treatment, do the cleaning. What do you call it? I don't know. I call it a Roto-Rooter. So, they ended up doing a stent. That didn't work. But I thought it was one and done. I thought I was going to be cured. And so I think had I known, I would've asked more questions, but I also felt like that's not something that your average patient may not think to ask. If you're told, "Hey, we're going to do this procedure. If we find out where the blockage is, we might be able to put a stent in." You sign the paperwork for it. But at the very same time I thought that was going to be the cure-all. Because I had never even been diagnosed with high cholesterol. But I did go on the lowest dosage, five milligrams a day, and I am on a blood thinner. And so I've been doing that now, I guess, since 2009.

Cheryl Wilson (15:05):

My actual cholesterol is pretty good, so I can't imagine how this would be for someone that really wasn't already trying to take good care of their health. And I just, looking back, all the physicians I'd ever been

to for an accident or an injury or just my wellness checkups, there was never anything on the medical questionnaire, the forms you fill out. You'll see things like, "Does heart disease run in your immediate family?" And you might list who it is. But I've never seen anything about PAD or vascular. Because I believe if it said vascular or peripheral arterial disease, I would've gone up to the front desk and said, "Hey, can you tell me what this is? I don't know." And come to find out my grandfather, he had it. Unfortunately he died when he was 66 years old. He was also diabetic. So, we know how those two go together. Not very well. So, I mean-

Gregg Piazza, MD, MS (16:11):

[inaudible 00:16:11] not at all.

Cheryl Wilson (16:12):

Yeah. So, I just lost an aunt four years ago to vascular disease. She had 21 stents and her health was never good enough to have the bypass. And of course that wasn't my goal to have a bypass, but at the same time nothing else was really working, no matter how much energy I put into it. So, I felt very fortunate to be in such a great state of health just to have the bypass surgery.

Gregg Piazza, MD, MS (16:41):

Absolutely. No, that's one of the important things, is the medical therapy has to be instituted before revascularization, before we do any bypasses, to make sure that you have the best chances possible to do well during the surgery and to retain the result. If the medical therapy's not good, it's hard to expect the bypass to stay open. So, that's a very important point. Dr. Tower, for all of our listeners and for all of us, do you have a list of must do ABCs of PAD treatment? The things that you know, this has to get done before we even consider revascularization.

Dyane Tower, DPM, MPH, MS (17:29):

Yeah. And thinking about some of the things that may lead up to determining some of the treatments and referring to someone who may be doing some of the intervention. Thinking about, Cheryl, you mentioned already some of the testing that you had done. A good physical exam, trying to figure out those pieces of the puzzle to understand what's the current state of the blood flow. And Cheryl, you mentioned having an ABI or an ankle brachial index done right in the office. And that is just really great information to have. And you also mentioned that PAD and diabetes don't often go well together. And there may be some other testings like [inaudible 00:18:16] indices that are going to be important in patients who also have diabetes because of the calcification. And the ABI may seem like it's okay when in fact the blood flow isn't as much as we need.

Dyane Tower, DPM, MPH, MS (18:32):

And if a patient comes in with, let's say, an ulceration or some kind of skin opening, that's where we need to start thinking about treatments. So, the prevention side of things, these early medical treatments. Physical activity is really important. It can help create collateral vessels around some blockages. So, I think that's going to be an important component as long as it's appropriate for each individual patient. Changes in lifestyle. So, if somebody has high cholesterol or diabetes, maybe there are some dietary, nutrition, exercise changes that could be discussed and considered with providers. Certainly tobacco. We mentioned that earlier. Thinking about cessation of any tobacco products. And then Gregg, we're thinking about some medical and some intervention options. At least for me in my

practice, any kind of medical treatment. Maybe it's a medication for cholesterol lowering. Maybe it's good control of blood sugars for patients with diabetes.

Dyane Tower, DPM, MPH, MS (19:42):

Cheryl, you mentioned blood thinners. Maybe it's some other kind of medication that changes the way the blood cells flow through the vessels. Those are instances where I personally would engage with my colleagues, primary care, endocrinology, other vascular medicine specialists, to help patients and all of us as a team work together to try to get all of the pieces of the puzzle there together. And then thinking about the more invasive or intervention, whether it's endovascular or open types of procedures, definitely getting our colleagues involved. Because podiatrists aren't typically doing those types of procedures, but we're caring for that tissue loss that, Gregg, you mentioned earlier, that any ulcerations or tissue loss situations, we all just are working together as a team to try to create a scenario in which we can have the best possible outcome.

Gregg Piazza, MD, MS (20:38):

I love that idea of the collaboration to preserve the tissue, to make the outcome the best it can be. One last question, Dr. Tower. For a patient like Cheryl, now Cheryl's been revascularized, what should she be on the lookout for, for signs that maybe things aren't going well, and when should she reach out?

Dyane Tower, DPM, MPH, MS (21:08):

That's a really good question. I would definitely recommend Cheryl keeping in contact with your providers who have done the bypass, because they may have certain surveillance opportunities, timeframes that they want to check on the patency of the graft and any other symptoms that you may be experiencing. And asking any kinds of questions. "What should I be looking out for? What kinds of symptoms should I be worried about if I experience them?" And that may indicate that there's a new blockage in your bypass graft. And I think being able to ask those questions of the team taking care of you so that you know when you should reach out.

Dyane Tower, DPM, MPH, MS (21:55):

And if you experience any symptoms like you had in the past, the night pain, feeling like you need to dangle your foot, you can't walk a certain distance, or if you notice even changes in color to your skin or changes in the way your skin feels or looks to the touch, changes in hair growth, any of those are things that might prompt you to ask questions of your care team. And I would say it's always better to ask early and find out that things are okay than wonder and think, "Is this okay? Maybe it's okay. I'll just wait," And then come to find out that maybe there's something going on that could have been caught earlier. So, I think early questions are always the best.

Gregg Piazza, MD, MS (22:44):

Excellent, excellent. That is perfect. So, in the last couple of minutes, I think we've had a really nice discussion about PAD and the burden that it places on our patients. Just Cheryl, a wonderful description of the journey from symptoms to diagnosis to treatment. And then Dr. Tower just giving us fantastic pearls for what to look for in a patient, always maintaining PAD at the forefront as a possible diagnosis, and then looking for the clues that are there to help us make that diagnosis, selecting the right way to screen or diagnose, and then when to engage colleagues and the care team. Not all of us can manage every aspect of PAD. That's a really important, I think, take-home. We need to have a group of clinicians from medical therapy to re-routing blood flow so that we can heal the tissue. But also our colleagues,

our podiatrists, to make sure that the tissue is given the very best, and again, I really love that, the very best chance to heal and to stay healed.

Gregg Piazza, MD, MS (24:03):

And so it really is a collaborative effort. And I think when we can do that, we can give patients like Cheryl the very best chance of a good outcome. I want to thank all of you for participating in this podcast with us today. We had a lot of important points about peripheral artery disease. It's not over. There'll be more in this series. This podcast is part of the American Heart Association PAD Initiative. It's sponsored by Janssen Scientific Affairs. I'd like to remind all of you to encourage your patients and your colleagues to play an active role in their medical care by advocating for themselves and their family members, and to participate in this series of podcasts. To get additional information, please do visit the AHA's PAD website for more educational opportunities and content. And then thank you so much for participating. It's wonderful to have you with us.

Dyane Tower, DPM, MPH, MS (25:07):

Thanks for having us.

Gregg Piazza, MD, MS (25:08):

Thank you, Dr. Tower. And Cheryl, your input really helped make this something, I think, that will endure and be very helpful. Thank you.

Cheryl Wilson (25:17):

And thanks for having me. I always look forward to getting together with you guys. I learn something every time.

Dyane Tower, DPM, MPH, MS (25:22):

Thank you.

Gregg Piazza, MD, MS (25:23):

Thank you.