

Swapnil Hiremath:

Welcome to the American Heart Association Hypertension Treatment Options podcast. This podcast series is part of a larger program addressing unmet needs in hypertension treatment. In addition to the podcast, this program also includes webinars, spotlight series, which is like speakers presenting grand rounds type presentations, and an update to the comprehensive guide in hypertension, which will be released in January 2023.

The overall goal of this program is to improve systems of care and understanding around unmet blood pressure needs across the hypertension patient journey. We do have some formal learning objectives. Which are firstly to recognize treatment and management options for patients with resistant hypertension. Secondly, to apply shared decision making strategies that improve health equity by better engaging patients in healthcare decisions. And lastly, patient provider communication and patient centered care, and to identify healthcare disparities in hypertension treatment and management.

This entire series, this program is made possible by an education grant from Medtronic. However, the content has been created and directed by a volunteer planning committee, which is independent of the funding. Today's episode will focus on lifestyle modification and hypertension. My name is Swapnil Hiremath from Ottawa, Canada. I'm a nephrologist and epidemiologist at the University of Ottawa. And I'll be your host for this podcast discussion. In terms of disclosures, I do serve on Hypertension Canada Guidelines for Health Behavior Change, but otherwise have no other financial disclosure. Joining me today are two special guests, Dr. Sophia Ambruso.

Sophia Ambruso:

Hi everybody. I'm Dr. Sophia Ambruso. I am on clinical faculty at the Rocky Mountain Regional VA Medical Center, and I'm an assistant professor at the University of Colorado. My conflicts of interest is that I serve as an advisor for Farxiga, and I'm on the Anemia of CKD Education Board for GSK.

Swapnil Hiremath:

Thank you. Sophia. Dr. Belardo.

Danielle Belardo:

Hello, my name is Danielle Belardo. I'm a cardiologist in Newport Beach, California in private practice. I'm the chair of the nutrition committee for the American Society for Preventive Cardiology, and I'm on the American College of Cardiology nutrition subcommittee. I have no financial conflicts of interest to disclose.

Swapnil Hiremath:

Thank you. Thank you, Dr. Belardo and Dr. Ambruso for joining us today. So in terms of hypertension, when we talk about decreasing blood pressure or treating hypertension, from a provider perspective this often is simply write a prescription. Here, take this pill. Start this pill, which will reduce your blood pressure. However, blood pressure does have a lot to do with many different lifestyle aspects. The one best known, of course, is to eat less salt, less sodium. Sodium is at the, at the root of hypertension. But apart from that, eating more potassium, eating a DASH diet. DASH, which stands for dietary approach to stop hypertension, in which includes more servings of fruits and vegetables chiefly. Doing exercise or increasing physical activity. Losing weight. All these aspects have been demonstrated in many clinical trials, systematic reviews, and meta analysis, and they are in fact, part of the recommendation and guidelines to control hypertension from, for example, the 2017 American Heart Association and American College of Cardiology Guidelines.

They have a 1A recommendation for each of weight loss, eating a heart healthy diet, suggest DASH, reducing sodium or increasing potassium intake, increasing physical activity, as well as to drink no more than two standard drinks for men and one standard drink for women. This is going to be the topic of today's discussion.

To start the ball rolling, we know that lifestyle modifications are non-pharmacological measures. They do reduce blood pressure anywhere from three to five, or maybe even up to 10 millimeter of blood pressure drop, depending on the intervention and how much of an effect you might see in an individual patient. But when you see someone in the clinic who has a blood pressure of say 160/100, what do you do in that limited time that you have with a patient? You have a talk about, they often will have to start a medication. So do you talk about lifestyle change with every patient in the first encounter? Would you talk about all these aspects? What is your approach? So let's hear first from Dr. Ambruso about how she would approach a patient, whom they are seeing for the first time with hypertension. Which lifestyle modification would you pick and how do you have the conversation?

Sophia Ambruso:

Thanks for that question, Dr. Hiremath. This is actually a really big question and I don't don't think it's easiest to answer. What I do know is that we should be individualizing our approach to each patient, and rarely is there enough time to cover all aspects in a single visit. Clearly with a blood pressure of 160 over a 100, starting an antihypertensive will probably be one focus of my management plan. Whether we're able to dive into diet, weight loss, exercise, other lifestyle habits, really depends on everything else that can derail an appointment. Are there other comorbidities where I've higher priorities? Health literacy? Sometimes it really takes a long period of time to discuss every single aspect of this patient's care. Patient concerns that oftentimes can truly derail an agenda. Regardless, I think it's important that the topic of lifestyle be addressed and discussed, whether it's at the first, the second, or third appointment.

There's a lot of information though, that can be gleaned just by understanding your patient population, what factors may affect their ability to address their lifestyle. For example, access to healthy foods, mobility limitations, which I think this can provide a foundation around which you can focus many of your efforts. So some of the things that I try to think about during an appointment, maybe not the first one, but during a second, but at least trying to do this is I'll start with like, "Do they live alone? Do they have a support system? Can they prepare their own foods?" I think about my veterans, because I'm generally at the VA, and a lot of these patients are elderly. They've lost their wife. They've never prepared foods and they're reliant on canned soups or microwave foods. The other things I think about is where do they live? Do they have their own transportation? What is their socioeconomic status?

For example, food deserts, which means limited access to a variety of healthy and affordable foods, can be a big issue. For example, 20% of rural counties are considered food deserts. This is a lot of my veterans. If people live more than 10 miles from a supermarket, that's common, and they have a lot of limitations to public transportation or ways to get there. That's going to limit what they have access to. Lower socioeconomic status is also associated with higher intake of fats, sugars, salt, and healthy whole grains. They have lower access to supermarkets again. And then those that exist have lower availability of healthy options, and a greater density of nearby fast food restaurants.

The last thing I want to say is the lower income zip codes, so outside of rural areas, they have 30% more convenience stores and liquor stores. So they just don't have the same access to healthy choices like fruits and vegetables, foods high in potassium, foods low in salt. And it can be incredibly difficult patient population to make or adhere to smart dietary choices.

So I'm going to circle back really quick. Cause I feel like I haven't answered the question, and you guys can insert yourself at any time, but what is most important though is beyond these potential

limitations, is that you've got to talk to the patient, and you have to make a decision with that patient. Because some of them will be able to make the efforts and do this, but others just cannot. So it's really got to be a patient physician decision as to what the best approach is.

Swapnil Hiremath:

Thank you. That is, that encompasses many of the objectives actually, and the focus of today's discussion. Access, as well as the fact that you have to individualize and try to understand the patient's needs rather than give directive advice. Would you want to add anything to this, Dr. Belardo?

Danielle Belardo:

I feel like that was incredibly comprehensive. I think that Dr. Ambruso covered everything that I don't even think there's anything for me to add to that. That's fantastic. Great. That was great advice.

Sophia Ambruso:

One thing I wanted to mention is that it does take time to get into these healthy habits, and you can't get that job done after just talking about it once. It's got to be a conversation you have with the patient every time. And you may not make much headway ever, but it's something to consider, and it's kind of a low hanging fruit. It doesn't, it's something you can talk about and you don't have to write a prescription. Yes, it can be time consuming, but I do think it's worth the conversation.

Swapnil Hiremath:

Absolutely. It's not something you can achieve in the first 15 minute visit for many patients. But that's such, you mentioned this aspect of understanding the patient and shared decision making, so let's expand on that a little bit more. So it's easy when a patient has slightly mildly elevated blood pressure, say 140 over 90, or just about the threshold where you're going to treat them. And they are often, some patients are keen. They don't want to start up medication. They don't want a pill. And they may ask you, "Doc, I don't want to start a pill. Is there something I can do without starting a pill to lower the blood pressure?" These patients, you can just show them the way. And I have some patients who will take it on and they'll do it.

They're engaged. They're enthusiastic. And they will do it on their own. You just show them the... But sometimes there are patients who are maybe very reluctant for many reasons. As you mentioned, it may be because they are living on canned stew or they're a widower, or what have you. Now, how do, they may, if they're reluctant and they're not interested, they are like, "I can't really change." How do you push them? How can you motivate them? Should we even discuss lifestyle change when the patient doesn't seem interested? Or you just hand out a prescription because you want to get their blood pressure under control? Why don't we hear from Dr. Belardo about this aspect?

Danielle Belardo:

Great question. So I think that certainly you have to, of course, meet the patient where they're at. And I think whether the patient is hesitant to start a medication, or hesitant to do a lifestyle change, either way, we have to meet the patient where they're at and give them the best education we can during the brief time we have during a patient visit. So for a patient that is not ready to change diet and lifestyle, I think that's completely understandable. It's not always the best time in everyone's life to make a huge dietary overall and dietary change. Sometimes patients are going through a move or a divorce or the loss of a job, and it's just not the right time for them to make a major lifestyle and intervention. And I

think that's where the shared decision making comes in to make sure that we are finding out what works best for that patient.

Additionally, I think that it's important to just discuss with the patient so that they know that lifestyle does have an impact. I think too often we see, on the other end of the spectrum, that, of course, we want to treat the blood pressure with medical therapy if they have stage two hypertension or stage one hypertension based on our ACC/AHA guidelines. But lifestyle is a Class 1 recommendation, regardless of whether or not you're initiating medical therapy. And so even if a patient isn't ready to make a lifestyle change, I think the onus is on us as physicians to still explain to the patient that something like a dietary change, for example, the DASH diet and the DASH trial can drop a blood pressure, a systolic blood pressure of 11 millimeters of mercury. I mean, that is more than some antihypertensives.

I think that if you speak to your patients with a lot of the information that they may not have heard elsewhere, that just gets patients to start thinking about, "Well, maybe one day I can make a lifestyle change. Maybe it'll be possible for me." But just planting the seed so they know it's an option. Because I think one of the biggest complaints that we can often hear on the other side of the spectrum is that patients feel that physicians are just prescribers, and they're not giving them lifestyle recommendations. So I think meeting the patient where they're at, letting them know that lifestyle change is an option, but not pushing it too far, and helping guide them. And Rome wasn't built in a day, so developing a relationship with a patient, discussing it over future visits is probably most efficacious for sustainable change.

Swapnil Hiremath:

I like that. Rome was not built in a day. It's really true that we have to work on building that relationship, especially when someone's reluctant, or seems unwilling to change their lifestyle. Is there something you would like to add to this Dr. Ambruso?

Sophia Ambruso:

Just that I like to think of these patients, just like I think of someone with smoking cessation. There's the pre-contemplative phase. There's a contemplative phase. There's the preparation stages, and then there's the action stage. And some may never come around, and that's okay. But you do bring it up every visit, hoping that this time you've planted that seed. And over time, I've had many patients who have become more engaged when they trust that I'm invested in their success. And it's fun to watch them move from that pre-contemplative to contemplative, to preparative and then to action stages, to whatever degree of success they achieve. And those are some of the most rewarding experiences that I've had.

Swapnil Hiremath:

That's really well said. So we have talked about how do you approach lifestyle change at the first visit. And how do you keep, how do you approach the reluctant patient perhaps? Is how I can put it. Now let's talk about some specific things. We have mentioned lifestyle, but what are the specific things when we are approaching this? Starting with diet. For example, when it comes to salt, we know that most of the sodium in the Western world is not added in the household or in the kitchen while you are cooking. Since our food comes processed with tons of salt already, less than 3% of the sodium intake is actually from salt added at the kitchen or in the table. Now how do you deal with this? What kind of advice would you give to a patient, when they're having canned soup or what have you, about changing this to a healthier diet? Dr. Ambruso?

Sophia Ambruso:

So I'm going to start out and just say I'm laughing, because I've always quoted less than 10%. And the fact that it's less than 3%, I'm embarrassed that I didn't know that. And that's a lot lower than I thought. So I'll be using that going forward because I think it's more efficient or effective. But I think with most of my patients, it already always starts out with the same discussion. It's, "Let's talk about your salt intake." And then the patient says, "Oh, doc, I eat a low salt diet. I don't cook with any salt. I don't add it to my food." I mean, it's just, it's that. It's repetitive day in, day out. And that single conversation right there represents most patients understanding of what salt, high salt, low salt really means. So it's not uncommon that I have to reset their fundamental understanding of what salt is and where it comes from.

So I actually will start by explaining that the salt we sprinkle on top, and I use quotes because that's how I say it to them, is responsible, now I'm going to use the term, for less than 3% of their total salt intake. And then the rest is hiding in our foods. And then I go on to actually list what those foods are. And then while I'm doing that, I'm also inquiring about my patient's diet. I ask them to describe an average day of meals. How often they eat out. If they eat microwave dinners or canned soups. This is really big in my veterans. I know I already said that. Do they eat fast food a lot? Are they bacon or sausage kind of person? These guys, they don't think there's salt in there. They don't want there to be salt in their bacon and sausage. I'll tell you that.

And then I'll revisit again, I brought it up before, where they live. Are there grocery stores nearby? And this gives me a lot of information, helps me understand what challenges each patient might encounter when we're trying to make these changes. And then before I actually discuss recommendations, and I think this is a really big deal, and I'll bet that it's... It used to be an oversight of mine until a patient brought this up. Is that I make sure I clarify and educate on the terminology, because fewer than half of patients understand that salt contains sodium, or that those are more or less one and the same. And so that's got to be confusing for them since all nutrition labels use the term sodium, not salt. And then we say your salt consumption, your sodium consumption should be less than 2000 milligrams. So really trying to get the understanding to meet up.

And then we'll finally talk about goals. And even though low sodium diet from my perspective is less than 2000 milligrams per day, that is actually difficult to achieve. I certainly struggle with that. And it's a daunting task and actually may dissuade our patients from doing it. So I often start by saying, "Let's see if we can reduce your salt intake by a third or by a half." And sometimes that's still a really high salt diet, but it's better than what we've been doing. And then we try and move forward as things get better. And sometimes when they see progress, it helps them, their motivation to do more.

Swapnil Hiremath:

That's wonderful. And the fact that you talked about health literacy before, and hear about people not understanding that salt and sodium is the same thing. It kind of emphasizes the fact that we need help. Yes. Someone like you does spend a lot of time talking, but someone like me, I'll confess that I'm very poorly trained when it comes to giving dietary advice. As a nephrologist, I know, hey, these things don't eat oranges if your potassium is too high, for a dialysis patient. But when it comes to talking about sodium and the particulars about diet, I wish that every patient had access to a nutritionist or a dietician who can give specific tailored advice based on what their needs are.

Many of our patients do not have access, as you mentioned, to go to a grocery. They're relying on processed food or canned food or microwave dinners. So ready to eat or processed food are just easier options for them. How about these options are rich in sodium, they're poor in potassium and

other healthier minerals. How can we access, this access to a dietician and access to an advice is an issue. How can we tackle this, Dr. Belardo?

Danielle Belardo:

That's a complete, very unmet need. Especially because physicians do not certainly, generally, have the time to do the great work that a dietician can do with the patient. And we're not trained to do that kind of work as well. Unfortunately, the coverage currently for medical nutrition therapy in the US is spotty. So with regards to commercial insurance, certain commercial insurances will cover medical nutrition therapy for various different comorbidities, but many won't and that's just hit or miss. Medicare, at this time, Part B will cover a visit with registered dietician for medical nutrition therapy when referred by a physician, but only if the patient has CKD or diabetes.

There's currently a bill in Congress, I believe, from the registered dietetics organizations trying to push forward to expand medical nutrition therapy coverage. Which I think would be huge considering how important it is for patients to get that sort of care and that sort of interaction with a dietician who can actually give them advice.

But I find that oftentimes, one thing that's simple that can kind of help, is sometimes we over complicate as well, the nutrition advice, and try to be too prescriptive. And I think that if we are just making recommendations that are small, and just general to our patients, they can sometimes grab onto it a little more. Meaning if you encourage patients to focus eating basic things, like more fruits, vegetables, whole grains, legumes, nuts, and seeds. And these foods are naturally lower in sodium. They're naturally higher in potassium. And they're naturally higher in fiber because dietary fiber only exists in plants. So making these recommendations covers all of the Class 1 recommendations from the ACC guidelines without even having to have the patient take out a checklist and say, "Okay, this many grams of fiber a day." And I certainly do that with certain patients depending, but for a patient that you have a few minutes with, sometimes it can be helpful to just kind of give them a more overarching dietary pattern, small changes, that are sustainable for the patient and important things.

So of course, knowing where socioeconomic status, where you're working, and food security and issues like that are important. Reminding patients that things like frozen fruits and vegetables have the exact, if not more nutrient value, than fresh fruits and vegetables. Knowing that there's no hard outcomes that show there's any difference in organic versus conventional produce. Glyphosate is not dangerous. Things that fear monger people away from fruits and vegetables that make access even more difficult, I think clarifying that as well. Patients say, "Oh my gosh, I can eat frozen fruits and vegetables." And I say, "Yes, actually they're frozen at the time that the nutrient value is most preserved. So there's even some data showing it's higher nutrient value than fresh." So I think kind of simplifying it for certain patients, knowing your patient population, and knowing how much details they need, but you can sometimes by just giving them an overall recommendation of a shift of a dietary pattern, you can really hit all of those ACC/AHA Class 1 recommendations without even using those specific words or terminology, and giving them too much to figure out.

Swapnil Hiremath:

That is fantastic. I did not know that the medical nutrition therapies covered for all chronic kidney diseases and diabetes. Which is actually again, we would love for it to be universal, but diabetes and CKD, one in seven adults have CKD, so that does encompass a significant proportion. And I suspect many of us don't know it. I didn't know it as a nephrologist. So this is something that is a message that we should definitely spread. And I didn't know about the frozen fruits as well. Right. I'm going to go back and tell my wife. Because I love frozen blueberries, and she tells me, "No, no, you should be having the

fresh blueberries instead. Frozen is not good." So I'm definitely learning a lot today. But you mentioned about adding stuff, and on that note, in all the focus on sodium, we often forget that potassium is almost just as effective, or perhaps even more effective, in lowering blood pressure.

It reduces the risk of stroke and perhaps modality in comparison to sodium, which you have to reduce. You have to subtract it from your diet and cut out all the processed food. Increasing potassium intake might potentially be easier, just as Dr. Belardo mentioned, with the add a little bit of servings of fruits and vegetables. Just changed your diet a little bit. Or switch your table salt from plain sodium chloride to something that contains a little bit of potassium chloride. Is it as easy as that? Have you found any success with telling people to eat more fruits and vegetables or using a different kind of salt? Is this something you do, Dr. Ambruso?

Sophia Ambruso:

So I'm going to start out and just give a tiny bit of background, because Dr. Hiremath mentioned something about adding or switching table salt to have a little bit of potassium in it. And there was a recent study that came out, it's called the Salt Substitute and Stroke Study. We like to call it SSaSS affectionately. And it was recently published in the New England Journal of Medicine in 2021. And it was a randomized control study that looked at high risk people, those who had stroke or history of stroke, or were over the years of 60 and had poorly controlled blood pressure. And it randomized them to regular salt or a salt substitute with potassium in it. And it compared rates of stroke, major cardiovascular events, and death from any cause. This study was actually unique because it was a cluster randomized trial, enrolled almost 21,000 people from 600 villages in rural China.

So approximately 300 villages were randomized to regular table salt and 300 villages were randomized to use table salt which contained 75% sodium chloride and 25% potassium chloride. So it was a salt substitute. And the results were interesting. The systolic blood pressure was decreased only by about 3.3 millimeters of mercury in that in the salt substitute group. But the risk of stroke and major cardiovascular events were statistically reduced compared to the regular salt group. But what's different is that this was an effective study because people in China, as you mentioned earlier, most of them add their salt to their food in the kitchen or at the table. So as we already discussed in the Western world, we get it from, it's already hiding in our food. And the salt intake by what we add is just 3% or less.

So I'm not too sure of a salt substitute is the most realistic option, or most reliable option. Now where we can get our potassium is from fresh fruits and vegetables. In fact, the DASH diet, as we already mentioned, is really high in fruits and vegetables. I'm not going to go into the rest of it, but it is a lovely diet if you can stick to it. But it's high in potassium. Again, there is that important caveat that fresh fruits and vegetables are more expensive and take more time to prepare than going to McDonald to get a burger, fries, and a Coke. And so a large percentage of our population may struggle with achieving this.

I would like to highlight, though, that Dr. Belardo brought in some really great ways to try and address it, even the simple methods. But it's still a potential issue. I think some possible fixes, and I think, Dr. Hiremath, you've mentioned this in the past, that there could be potential public health initiatives like fortifying, commonly consumed foods, maybe even fast foods, kind of like what they've done with folate and iron, might be a mechanism around this.

Swapnil Hiremath:

Indeed. I've heard rumors that the food industry is looking at this because the results are so positive. And there has been such a public health push about the high sodium content, is that the industry is keen to look at preserving taste, but just switching a little bit of the sodium with the potassium. And I hope some of those efforts do come through, which will make it easier for a lot of our patients.

Moving on to something else. We talked a lot about diet, but the other big one is exercise or rather physical activity, perhaps. How should we think about this? From the clinical trials, we know that patients need to have something like 30 minutes of moderate to high intensity exercise, at least five days a week. Talking about goals. I have an elliptical next to me, and I don't think I achieve that much of exercise myself. So this is not like taking a stroll in the evening kind of physical activity. It's you need to build up a moderate amount of intensity of exercise. So the issue of health equity and access will come in here as well. Because gym memberships are expensive. And buying fitness equipment, especially when you may or may not use it, is also expensive. What kind of approaches or suggestions you have for a patient when this is an issue, Dr. Belardo?

Danielle Belardo:

Yeah, I think that's a great point. We do have excellent data, even because we know that weight loss in and of itself can help with blood pressure. But we actually know that exercise doesn't contribute much to weight loss at all. Weight loss is actually mostly dietary focus. Exercise does though, independent of weight loss, help with improving hypertension, improving blood pressure, both strength training as well as cardiovascular exercise. But again, just like everything else we've discussed, knowing your patients and what's available to them. If you have a patient living in an inner city if you just simply say to them, "Go outside and take a walk." Their neighborhood may not be safe. They may not live in an area that they're able to just go for a jog. Depending on their work hours, it may not be safe for them to go for a walk, even when they're off of work in their neighborhood.

So evaluating all of those components are important. And I think that accessing also knowing where you work, and accessing social work that's there as well, that can maybe help with resources that may also aid and facilitate in patients getting into physical therapy or any sort of program for them. A lot of times for individuals there's limitations, and there's fear of exercise too, from whether it's from pain or from previous injuries. So I think that utilizing social work to help get patients plugged into physical therapy, getting them moving in a way that's safe and effective for them can be helpful as well.

But again, it goes back to knowing your patient population. Here, where I am in Newport Beach, it's quite safe. So my patients don't face those sorts of challenges. But when I was training at Temple in north Philly, it was quite different. So tailoring the advice to your patients. But I do think it is important to reiterate to your patients that a weight neutral improvement, you can see a weight neutral improvement in blood pressure through exercise. And so although weight loss is incredibly powerful for improving hypertension, a weight neutral powerful tool is exercise. So keeping that in mind for patients that exercise can be a useful tool to help improve.

Swapnil Hiremath:

Indeed. Exercise is not just about weight loss, even as you mentioned, weight neutral exercise is good for your blood pressure and many other aspects of your health. But now in a perfect world you can eat healthier, you exercise, and weight loss will follow. But we do not live in a perfect world either, in that in some cases, weight loss does not follow. Though it will still be beneficial as you pointed out. But it's not possible to increase your physical activity or eat healthier. We do have some. But weight loss has been known, if there is weight loss by whatever means, blood pressure does improve. We do have some pharmaceutical agents now that help in weight loss. In broad terms we don't want to go into medication aspects, but in broad terms, how should we thinking about this aspect from a control of hypertension point of view. And again, these medications may not be easily available, so the issue of access and equity comes to mind again. Dr. Belardo again.



Danielle Belardo:

Yeah. So specifically now for cardiology actually, GLP-1 receptor agonists are actually recommended. So semaglutide is the one that's the generic name that's recommended for ASCVD risk reduction in individuals with diabetes. And actually now, even in individuals with CAD without diabetes, because it's been found to reduce cardiovascular risk. And so the benefit of medications like GLP-1 receptor agonists, specifically semaglutide... The reason why the medications differ is because all weight loss medications are not created equal. Previously, historically the weight loss medications have actually only yielded, even GLP-1 receptor agonists, have only yielded about 5% weight loss. That's not so clinically meaningful that a lot of patients want to take a medication. But now we have data showing that semaglutide at high doses can yield over 15% weight loss in a year, which is the most clinically significant weight loss of any medication for weight loss that is out there. It's second to bariatric surgery.

This doesn't include of course the most recent medication that was released that's for Type 2 diabetes, that's a little different. That's a GLP-1 combined GIP. But these medications have changed the way we've looked at obesity. We've always viewed obesity as this issue that is a self control issue, and an issue that has to do with just eat, eat more... I mean, eat less, exercise more. It's that simple. And now we're finding the way that these medications interact with the hypothalamic, pituitary access. It's really important to... This needs to be, as a cardiologist, I think this needs to be a part of every single cardiologist's preventive cardiology practice. You shouldn't be treating hypertension without addressing obesity if it's there. If the patient qualifies for GLP-1, they should be provided the option. Because we know that it can have so many benefits with cardiovascular, reducing risk factors, helping with weight loss for the right patient.

And so with regards to coverage, it's interesting. It actually varies by state. In California, Medicaid covers 100% of semaglutide, which is unbelievable. And so a lot of commercial insurances are starting to expand their coverage. So hopefully that will continue to improve, especially because these medications have been such a game changer. And as a cardiologist, historically we've hated weight loss medications. Because a lot of them generic phentermine, for example, they're stimulants. They can push our patients into things like atrial tachycardia. And they don't have the same, they have minimal weight loss benefits. But these medications have really changed the way, I think, that we both think about obesity and as well as we think about weight loss in general. And it also gives patients an option they haven't had before.

Swapnil Hiremath:

Exactly. Right. We go beyond just say eat less and exercise to something that may actually, rather than blaming people, we have an option where they can actually lose weight. So in terms of other lifestyle that we didn't talk about, and we won't be covering necessarily every aspect, it's also important that alcohol is a part of the puzzle in many different ways. And there is very high level evidence, 1A again, showing that decreasing alcohol intake down to two standardized drinks for men and one for women, does have a great effect on reducing blood pressure.

But now we have gone on long enough, though this conversation can never end. There's so much more about lifestyle that we can talk, but let's wrap up. This has been a great conversation. Are there any other points or issues that we have skipped or any final words that you would like to mention? Let's go with Dr. Ambruso first.

Sophia Ambruso:

I don't think so. I felt like this was fairly comprehensive. I really enjoyed listening to everything that Dr. Belardo had to say. And Dr. Hiremath, thanks for the invitation and the review on some of these things that I haven't thought as much about as well.

Danielle Belardo:

Likewise, I've loved learning from you both as well. And I feel like we really hit the broad spectrum of things with regards to lifestyle and hypertension. So thank you so much for inviting me.

Swapnil Hiremath:

Thank you. Both of you, Dr. Ambruso And Dr. Belardo, for sharing your expertise and advice on how you approach several aspects. It is not just knowing how much blood pressure goes down, but actually how to implement it. As we have talked, throughout this episode, unlike prescription medications where you just write a prescription, make sure there is coverage for it. There is way more than that when it comes to lifestyle. Getting to know your patient, getting to know their living circumstances, their motivations, and approaching things again and again and again, depending on where you are in the relationship is so important.

So with that, I'd like to conclude this episode on lifestyle modification for the unmet needs in hypertension. The previous episodes we have recorded, in case you haven't heard them, cover adherence and home blood pressure monitoring. And stay tuned for the next podcast after this, which will be on team based care.

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