Stress And Hypertension: Key Insights Transcript

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Introduction to Stress and Hypertension

Welcome back to the summit and I'm very excited to interview someone today all about stress and how this mental health component that we tend to ignore it can really have an impact on our overall life, but also with hypertension.

Today, in welcoming Dr. Melissa Mondala, she is certified in a lot of things, advice elements into daily medicine addition, but also integrative psychiatry, really unique qualifications to talk about this subject.

So how are you today? I'm well. Thank you so much, Dr. Laurie Marbas It's always a pleasure to be here and share some tips for everyone here. Excellent. So we'll just jump right in.

There's a lot of things that can contribute to hypertension, but like I said, I don't think people quite appreciate the amount stress and our mental health and thoughts can actually contribute.

Can you really talk a little bit about that, either chronic stress or acute illness or stressors, all of that related to what are the kind of the the things that we should be looking for?

Yeah. You know, stress is a word that we haven't heard before or have. Right. You know, it's like everywhere there's it's not just small s and big S or small t, big T small t, little micro traumas and big T, big trauma.

But as is the same way, sometimes people approach situations with a positive outlook and they feel okay or they thinking it's not, as I would say, harmful to them.

How Stress Raises Blood Pressure

But other times there are certain situations that can be alarming if it has to do with work related stress, or sometimes as moms or family members where there's conflict that can be really high in someone's nervous system to the point where they feel like they're having a panic attack, but may translate into someone feeling like they might have a heart attack because of their blood pressure being so elevated and their nervous system being on overdrive.

And they might feel that chest pressure and the sweaty hands. And so it's really important to see that stress is something at all levels. Everyone defines stress differently and everyone approaches stress in a way handling on their cultural background, their family background, their their environment.

They may have they may perceive it in a way where it's manageable and where they can build the sense of, you know, what, it's going to be okay versus, you know, it's not okay.

And I feel threatened. And when they feel threatened, that's when my blood pressure can spike, just like when you go natural stress sometimes going in a doctor's office.

Right. And you go in the doctor's office, that white coat, hypertension, you very feel that heightened sense. But things to really watch out for is understanding that chronic stress means stress over a lifetime can be harmful when you're not learning stress management techniques, when you're not able to understand that stress is really the the elephant in the room and you really got to address it first before even trying to get take your medications because the medications only work so much.

Or are you trying to eat healthy really well, but you're still uptight because you're stressed out. What do we you know what there's other factors pulling at, you know.

Absolutely. So that mind body connection, please, could you speak to that a little bit on what that looks like? Like is

it the other nervous system, the imbalance?

Like, how do we even begin to know that it's really stress that's inducing the hypertension versus something else? Or how do we begin to peel back the layers about that?

Yeah, absolutely. So when it comes to the autonomic nervous system, that's the unconscious part of our brain where we not only have this ready wired in, where you have the sympathetic and the parasympathetic the sympathetic, not only releases the cortisol, not not just first thing in the morning, you know, it weakens you up.

But sometimes we feel on alert, in overdrive all throughout the day because there's triggers of stress. And then there's also the the running out and running.

And that's kind of the the other aspect where that works on the on the arteries and sometimes even the kidneys. And so there's layers of stress going not only through the receptors of our heart, our kidneys, the arteries, and sometimes even our you know, there's the brain connection.

We might when we're stressed out, we get that headache. And if people call it that tension headache, but it's really their their blood pressure rising, too.

That's one of the symptoms of hypertension, is they have they start getting headaches for some people. And they might feel like there's this sense of over doomsday, doomsday stress or that that's the end of the world they might catastrophize in their mind.

And so when we think about not just hypertension, the nervous system, the release of hormones that are being impacted in the overall nervous system and bloodstream, they are feeling often overwhelmed.

So that's the neurogenic component. There's a neurogenic brain or vascular component and the hormonal component, and it's really multifactorial. That's why we often have to talk about the big picture.

And even when it comes to neurogenic aspects, if someone is having so much stress that they're not sleeping well, it's it's really a bi directional aspect because the sympathetic once again is really overactive.

And so. Go ahead. Yes. Yeah.

Mind-Body Connection and Nervous System Effects

And studies have shown actually more neurogenic releases, even people who have who are overweight or who have type two diabetes or pre-diabetes, heart failure.

So they have intense feelings of physical and emotional stress and so if you have those conditions, it's just kind of compounding a pile of stress that impacts even your view of your your day to day.

So adjusting the stress, peeling it back layer by layer allows us to really knock down the the layers of why we have hypertension and why stress impacts the blood pressure.

So someone understands that they're under a lot of stress and they're concerned this actually might be part of the issue. So they wake up, their blood pressure's elevated, they're going to bed, the pressure is elevated.

Maybe they're being prescribed one or two, maybe sometimes three or more medications and really struggling to control their medications. Their doctors work them up and they wait and see.

As far as physiologically, there's no evidence of a secondary cause of hypertension that we need to address. So hormones are at play neurogenic. You know, the nervous systems at play.

So how do we begin to address this stress? Like what is the first step when someone comes into your and says,

Dr. Mondala, I'm on all these medications, I don't want to be on medications.

They are side effects. But I continue to deal with a lot of stuff as the medications that are causing me stress because I don't want to be on these occasions.

I'm worried about my health. Where do you even start with someone on a psychological level? Yeah, I know. Thank you so much. Because a lot of it has to do with mindset and thoughts and values and just meeting them where they're at and saying, you know, first of all, what are your triggers for stress?

Triggers can be even though someone's tone and how they speak to you or a memory or it can be the clutter in your room that you need to clean up. Or it can be that that aspect where you may feel stuck in your mindset thinking, Well, I don't feel like I'll ever get better.

And I really don't feel that I have the appetite to eat these healthy foods or I don't know if I can get to the kitchen and cook meals. And so really meeting them in a way where, you know, if this is a stressful situation, how can we make it, number one, not just realistic but we how can we not just generalize one thing?

Because most time we think if one thing is not okay, everything is not okay. So there's sometimes we just don't know that we have in in psychology terms, it's just disordered thoughts or cognitive dissonance.

But in our, in our minds, we just may have these unconscious blindspots that we don't know that is skewing our way of how we perceive our day to day. And so when we're able to just either journal it, speak about it openly, we are able to show ourselves and the provider that there are things that I not only need to work on, but I need to overcome these hurdles because I want to get to that hope.

But I need to minimize that trigger because it's it's not ongoing. It's not a threat every single second of the day. So it's basically it's an acceptance of understanding that these triggers are setting off a cascade of events that are causing blood pressure to understand a different perspective, maybe, of of what is actually going on in their lives.

But are there is there are other types of therapies like CBT or ACT therapy, meditation, mindfulness, like what practices do you particularly utilize in your integrative style of treatment?

Psychological Approaches to Identifying Triggers

Yeah, CBT cognitive behavioral therapy is probably the most common one, and that's basically getting you're not just substituting thoughts, but you're able to find out what what misconceptions we have in our mind that are more realistic.

So CBT is important for those who have trauma. EMDR is great eye movement desensitization in a way where people think it's not just in person, but it's actually studies have shown it can be done.

Virtually basic eye movement, sleep and even emotional tapping can really be really good. I practice this with my patients from head to toe, but basically you're you're tapping on reflexes, primitive reflexes to relax the nervous system on their face, on their body, and that can relax them and get them in the moment, even doing in a panic attack that can be really helpful.

And for someone who may be a little bit and not just anxiety, but some people have OCD, so desensitization. So going into situations that might be very alarming to them, but creating a new scenario, a new narrative so that it is not as harmful and threatening in their mind.

So and of course, mindfulness stress reduction therapy is really amazing. And mindfulness, you know, it's hard to grasp without trying it yourself and in mindfulness is taught in a way where how can we really not only be present with the day to day and what we hear smell, but also be okay with the thoughts that may be intruding our minds and mean it may be negative, but how do we find them? And accept it and move on into a pathway of healing?

Perfect. And then is there any say in acute stress is occurring? Not necessarily to the level that it's a panic attack where someone might need more higher level of intervention, but someone's starting to feel stress, to feel the tightness in their test or breathing techniques or thought exercises, writing any writing experiments, anything at all that they can help them one calm down and then maybe other long term therapies that they can do themselves, or do they should they be under the guidance of a therapist at all times?

What does that look like? Yeah, great question. You know, I love my psychology therapist, colleagues, meditation experts, coaches, the main thing I teach people is vagus nerve exercises.

And that's the opposite of the sympathetic nervous drive and is the parasympathetic. And it so the longest nerve on the brain going down to all the systems, even the gut.

And that's where you are. And they're funny. To your favorite song and harpists humming to some jazz song or humming to a song that really gives you a sense.

And I've and it's amazing because I speak to therapists all the time, even with people with ADHD as if it's The Lord of the Rings or it's it or if it's a chant that really calms you hum that out or you sing seen in sing it into action and you get to be you get to live it out and experience it within the panic attack.

So that's really helpful. Also gagging. I know this might sound weird, but literally a gag can really activate it really quickly. So if you get a spooning, just gag.

And of course, this is someone who has eating disorders, but it really it's not too bad. You just gag and then it changes there.

Therapies for Stress and Anxiety Management

There you go. You get the vagus nerve and then the shock in your of your chest will kind of slow down. And one of my favorite techniques is getting ice packs and putting it on your chest.

So there are some studies that show that just putting cold compresses on your chest can really leave that sensation during your panic attacks that you might have and or putting your hands in cold water.

So those are my favorite ones that my patients in kind of tend to use rather than, you know, taking the medication right away if they and that can slow that down at least five or ten points lower than what they usually had in terms of blood pressure.

Even their heart rate can go down up to 20. So you'll see if you're dropping intensity of the certain scenario, the panic attacks, the the the feelings.

So basically you're shocking your system, physically changing that type of movement. So let's say they're in a place that they can't do something, that they don't have access to the cold or what other things can they do.

Like if they're driving their car, for example, or sitting in a very important meeting or, you know, riding on a bus or something? Like what? What can they do with that point?

You know. Great. I love that exactly. You know, you may not have an ice pack with you, but you have your breath and breath is at your fingertips. And my favorite is just not only inhaling, exhaling four or five, inhaling four or five and exhaling, but doing so like you breathe really quickly, like maybe two or three short inhales and exhale from a really long and that's been shown not only in our event medicine and other ways of meditation, but you're really trying to get here.

You're going to you're pretty much flushing your you're in be safe thoughts your frontal lobe that's overthinking the moment and you're just saying let's start fresh.

It's going to be okay. So that's what that inhale and exhale does. I love doing that, at least for a whole minutes, if possible. If you can do it too, it at least five times and then to the regular inhale and exhale and then take a break.

Breathe normally after that and then try again for 5 minutes. It's really important to kind of do that continuously as much as you can, as long as you're not feeling lightheaded, you might be really feeling lightheaded because you're in panic. But I would say let's try to slow down the breathing because most people are hyperventilating during those times doing panic when their blood pressure is also spiking.

And I and I totally sympathize for those people who have high blood pressure, because I have a mother in law whose blood pressure is high throughout the day, night and day.

And sometimes the night hours is when the blood pressure tends to pick up and that's either because there's feelings of for some people of loneliness and the people are actually scared of the dark.

So if you wanted to journal during those times and ask yourself, why do I feel this way in the evening? What happened during this evening hour now? Because it's not always the food, right?

You're like, I did everything right. I minimize all my salt, but why is my blood pressure still high at night? So that's where the journaling and exploration will come in.

Figuring out when blood feelings are attached to your blood pressure because there's a lot of fear and focus. I have one patient who doesn't even check her blood pressure because she will go in Fuller.

Immediate Calming Techniques for Acute Stress

She will start crying tremendously because the whole idea of taking her blood pressure and her mind jumps to, Oh no, I'm going to get a heart attack and I need to go to the E. R.

That's what that's where her mind goes. So if there's if anyone out there has those thoughts, I understand. And it's it's a hard place to go. So that's why it's important to have a psychotherapist bring that up with her and maybe she can walk you through that scenario and see what kind of memories come up so that you can adjust them.

Yes, I've had really interesting things happen. Some of that physiologic breathing. You're saying about the take a deep breath in as much as you can and then a little bit more holding your breath and doing a really long exhale because of that stimulation of the vagus nerve.

And then I've done that for seven, eight breathing with someone who's actually having elevated blood pressure in my in my presence and physically not a telemedicine visit, but a in person.

So I was checking the blood pressure manually and it dropped 15 points after four, seven, eight readings. So breathing in over four, holding for seven, reading over 8 to 4 cycles.

So it's a really a pretty quick response with that breathing technique. And then I love the writing, the express, the writing. I notice psychology. I'm in some rabbit holes right now just digging into it.

So I think that's fabulous. But I want to also kind of speak to your other certifications in your other specialty, which is lifestyle. I think it's such an important thing here that people understand that they literally can impact their blood pressure sometimes.

Obviously, there's this genetic piece, but what are some of the lifestyle interventions people can do to improve their blood pressure? Yes, thank you, Laura.

And I love those breathing techniques. It's like the box breathing. There's so many. So whatever is easy for you to remember, everyone who's listening, do it and do it repetitively.

The lifestyle aspect, I would say, you know, movement walking. So whenever my patients come in, I tell them, you know what? Make sure you use the bathroom before you take your blood pressure.

Maybe take a little walk and then we'll meditate and then let's check your blood pressure. And usually that's, you know, really brings it down like you said, 20 points instantly before before diving into other things.

And then with with my patients, it's really taking those slow walks, those slow strolls, especially if someone's really anxious, if if they're not an anxious person, maybe a faster walk will be okay.

And I would say a long, slow walk and really does the job with, I would say at least 30 minutes of walking everyday would be a great start if possible.

I know with with my mother in law too, we went to Japan and I'm just saying this because it was just so recent. We did 10,000 steps and really that's what kept her blood pressure rock solid in so doing, walking as much as you can throughout the day and making it a lifestyle.

And if it's if you can do once a week, try to do it on weekends and three times a week. So that's going to be really key is moving and making it fun and interesting.

You know, sometimes they have gyms burning who can do a little bit of different styles. If it's Pilates and then yoga and then spin or is it more of like at least your heart rates going up when you're doing a little bit of weights and working on bone density and other things that you're working on.

So that's a whole bunch of exercise and then sleep, which can undermine sleep because when you have 3 to 4 hours, it's going to be hard to have healthy blood pressure readings.

So getting deep quality as long six, seven, eight, eight is ideal. As much sleep as possible can really give you that sense of rest so that you're not in an alarm state.

Lifestyle Changes for Better Blood Pressure Control

And then of course, our favorite worry is the nutrition as much plant based for fruits, vegetables, beans, nuts and seeds. And if, you know, celery is salt, so, you know, you can find that flavor, that other ways to really spice up your meal, use herbs to really make your food interesting and when it comes to avoiding toxins, people still need to avoid those, you know, being around smoke or secondhand smoke or vaping more and more, we have people being exposed to that, especially at a young age.

And that's the number one way of getting your blood pressure up. Absolutely. So, yes. And of course, eating those dark green leafy veggies, wonderful things.

Hibiscus tea is one of my favorite ground flaxseed avoidance of salt. Yeah. Which throughout the summer everyone's been told these different things. But I think exercise is such an important piece that people don't really think about is really interesting.

I did a some research, I didn't do research, but I read some things about isometric exercises, having better benefits than resistance training or aerobic on blood pressure.

It was really fast. So that's like the wall sets like we did when we're in PE class. Yeah, it says something about that extended contraction of muscle that causes that resistance, that that heart.

When your heart's pumping, the actual resistance lessens in the arteries. That's really fascinating. So is there anything else that you like to do? Like when do you decide that medications are required for examples while patients are working on all these are the lifestyle interventions.

What are your suggestions for people? Yeah, great question. I know for some people this may they check blood

pressure for the first time and they they've seen, oh, well, my blood pressure's elevated and that's an opportunity to really hone in to lifestyle changes because there's an awareness of not only a high blood pressure, but where we can use interventions by lifestyle changes for at least one, three, six months.

And I am pretty gracious with patients because it takes time to build new habits and really having a tracker would be really great to see. So we can see trends over time and they'll see that after they exercise their blood pressure drops or after them, they meditate or do yoga and you can have control.

So I think it's also being aware of once again triggered is number one if what makes you angry, what makes you stressed, what makes you overwhelm and sad or what?

What are the foods you know, you eat out at that restaurant? I'm maybe I need to order something healthier or I need to find a way to walk away from a situation and take a deep breath.

So really having this understanding of what blood pressure is, listening to the body, and then we talk about medication. If we've tried a whole, as you can see, a whole bucket full of possible opportunities and solutions and sometimes, you know, fits in the danger zone where it's 116 or, you know, above.

And I probably will start thinking of medications 140 consistently. Nothing's working. Maybe I'll introduce the low dose, but I really am going to press hard on the hibiscus tea as we talked about in the flaxseed and all those I, I like to see patients know what their blood pressure can do for them because the body can can adjust with the lifestyle and, and then we can bounce around with different medications if needed.

And really finding ways, is it more simply, more leafy greens or simply more nitric oxide smoothies and grapes and other things that we need in the diet?

When Medications Become Necessary

I think we we can definitely personalize it, but definitely, Laurie, Dr. Laurie Marbas and other health care providers are going to walk you through, move through and seeing what's the safest for you because that's what we want to do.

Protect your heart and your longevity. Yeah, because at the end of the day, you know, your kidney health, your brain health, your heart health, there's so many things that are being impacted by high blood pressure that we want to do everything in our power, one that we can do.

But sometimes medications are needed. And I know one other thing is, you know, is two things. Inflammation is a big one. So as you lose weight and lose that visceral fat, that really causes the inflammation, that's the fat around the organs will decrease.

And I found that people need to hit a BMI under 23 or 22, honestly, to really start seeing blood pressure that maybe had been a little bit stubborn to drop in in a more safe and normal zone that we can come off medications so.

Well, this has been great. Dr. Mondala. I want to say I was trying to say Dr. Melissa and Dr. Mondala at the same time it was. Dr. M Dr. M right, with double M and it's been great speaking to you today about all of this, and I'm very excited about people that understand the stress in our mental health is such a the intersection between hypertension and other health disparities issues is so important.

So thanks again for being here with us. Yeah, it's a pleasure. Thanks, everyone. See you soon.