Introduction and Guest Background

Hi, ladies. Welcome back to Mastering Your Menopause Transition Summit. I'm your host, Dr. Sharon Stills. And I just love being here with you all and having all these informative educational conversations that I'm bringing to you with experts from around the globe.

And today I have Dr. Pushpa Larsen with me. She's another naturopathic physician. She's also a midwife. And I know her from phone calls because she works at Meridian Valley Lab.

She's been there for 11 years and she's one of their consulting physicians. And many of you, she works closely with Dr. Jonathan Wright, who is where I learned how to do hormone replacement.

You know, I call him like the the father of bioidentical hormone replacement in in our country. And I want to always give credit where credit is due. And because I learned from him and he's sort of on the the other side of his career and but because I learned from him, it always drives me crazy that in the hormone field, a lot of people don't even know who's Dr.

Jonathan Wright and I'm like, How could you not know who he is? How could you not have studied with him? And that in the hormone field that's happening now, there's a lot of people who push and do dried urine.

And if, you know, if you're a patient of mine or you've heard me speak, you know, I'm all about the 24 hour urine. And so I wanted to bring Dr. Larsen onso we can have this conversation.

And she works at the lab and she's just full of knowledge. You know, if I have a question, she's the one I call. So I wanted to bring her here to all of you.

So welcome and. Thank you, Sharon. Nice to be here. It's nice to be here. Always saying it's so nice to see your beautiful face because we've just grown before.

So it's right. Then. Did you you went to best year. When did you graduate and enter Catholic? I graduated in 1999 and full time. Really like me. I graduated in one.

Okay. Yeah. So you've been. There just about the time I was getting ready to open my clinic, I opened in 2000, two. That is when I opened. Mary So how did you get involved working for Meridian Valley and helpingrun the lab and interpret test results?

Well, I, I had my private practice for ten years, and and I liked it well enough. I mean, I actually love working with patients. I like being a doctor.

I was such a great business person. That part was a struggle for me. So it was a a little bit exhausting. And then there were all kinds of things that have the economy turned down.

My mom passed away, a lot of things happened. All at once. And I just said, you know, I need to do something else. And I needed something that I had a regular income.

So this job just kind of popped up and I thought, I can do that. And of course, I'd heard about Dr. Wright and but I hadn't really and I had seen him speak a few times, but my training at Bell Steer, we were not really trained in doing hormone replacement therapy of any kind, bioidentical or otherwise.

And I know for years after I started working at the lab, I would talk to new doctors who had just graduated, and I'd be explaining to them about how to use the tests and what different things meant.

They'd say, But we never learned any of this in school. It's like, Yeah, I know we didn't either, but so so I kind of happened into the job, but I really loved it.

Hormone Testing Methods Overview

And I, you know, I'm kind of one of those lifelong learners. I keep you like, you know, there's always more to learn. And so I love working with Dr. Wright and with the doctors in the Tahoma Clinic.

We have weekly meetings between the lab doctors and the clinic doctors, so we get to get feedback on the tests from the people who are using them and make correlations.

There's a lot of information we have gleaned over the years by having that close relationship and being able to follow up on things. So anyway, so that's how I came to be at the lab.

I love that I Yeah, and you've been there quite a long time, so yeah. 13 years now. The right the right job appeared, right. So let's just dove because I think that the question on the listeners, the audience, the lovely ladies who are here with us at the summit, the question on their mind is like, how do I get tested?

There's so much conflicting. Right. Out there. And I just kind of want to like, you know, there's blood, there's saliva, there's urine, and there's 24 hour urine.

Right? So just break it down and. Okay, what's the deal here? Okay. So I think the first the first thing is, why do you want to get tested? Why you want to get tested? Because if you're using if you're using hormones, thyroid or otherwise, if you're using hormones, you want to see what's actually happening.

It's like you may feel better, but you also want to know what is your body doing with those hormones? Are they processing them? Is or is it processing them in a safe way?

So that's one of the reasons why you want to want to test for also helps us see where there are things that might you might be able to adjust so that you know, where you might adjust dosages, that kind of thing.

So there's a lot of reasons for testing, but the ways to test so as you said, blood, which we also refer to as serum saliva and urine, are the three primary ways to test.

Serum is the most common or blood is the most common. That's what's used mostly in the conventional world, and it has certain advantage is I mean, it has very well-established reference ranges.

It's been around a lot. People know what it means, but it's really good for certain types of hormones like luteinizing hormone or follicle stimulating hormone and upper stage.

So it's not as good for steroid hormones, which all of the sex hormones and the adrenal hormones are steroid hormones. One of the disadvantages of a serum or blood is, well, first of all, it's invasive.

You know, there are some people who really have a problems of having the needle put in their arm. I'm not one of them. But there but there are some people for whom it's a real problem.

But also you're looking at a snapshot in time. You're looking at that one moment and our hormones fluctuate throughout the day. And there are certain hormones that tend to be higher at certain times of day. Or in men, for example, testosterone tends to be higher in the morning. But, you know, cortisol, the adrenal hormones are produced throughout the day.

So when you're doing a single blood draw, a single moment in time, you're really just getting a snapshot of what's happening at that moment, not getting the whole picture and some of our hormones are secreted at night when we're mostly asleep.

So serum is not very good for that. It's not very convenient time to get your blood drawn. The other thing is you don't see metabolites, you don't see how your hormones are being broken down in serum and that and that's pretty important.

And it also is in serum. Your mother's in blood, your mostly looking at what we call bound hormones. So most hormones are bound to some sort of a protein, a carrier protein, and they're usually bound pretty tightly.

So it's only a small percentage of the hormone that's actually bioavailable actually available to be used. And in serum, you almost always are looking only at the total, which means the bound plus any free.

But the free is very little unless it specifically asks for like with testosterone you can get free and total in serum, but in most, most of the women's hormones, you're only getting the total hormones.

So you're not seeing metabolites and you're not and you're also not seeing how much is free. So how much is is actually available to be used. I don't know how I'm maybe making this not very clear.

But very clear. And you can you can. The point being is that in a serum test, it can look like, yeah, your hormones look fine. They're right in the middle of the reference range, but they're in the middle of the reference range but for bound hormones.

And if you're not and if your if what you want is free hormones, which you can't get very easily for the female hormones, only for testosterone, you actually can't find that in serum.

So if you want to see what you're actually getting in using, you need something else like saliva or or 24 hour urine. So like. Is there anything so you said a FSA, John Eliot, you like in the blood.

Is there anything else that you like in the serum? Like the free testosterone? Yeah, free and total testosterone. Sometimes in serum, it's sometimes a nice back up, especially if for some men they have a tendency to hold on to their testosterone.

Why Blood and Saliva Have Limits

It doesn't get into the urine very well. And so you'll see. And when you so you see low testosterone in the urine, then doing a serum as a back up may give will give you a different perspective on it.

Now. Ladies has been. So what about for women and testosterone. Yeah, for women and testosterone, you mostly don't get free tests. You could order free testosterone for women in serum, but mostly it doesn't come that way.

It just comes as total. Mm. Did I answer your question? Yeah. But if you can get like a free testosterone on a woman, then in the serum, you can trust that.

Well, when you say trust it. Is it accurate? Well, the likelihood is that whatever lab you're doing does not testosterone, that they have their protocols and their procedures and their their methodology down so that the results are going to be accurate.

Yes. You could ask for a free a free testosterone serum for women. Would I trust it? Yeah, I would trust to say that's what's there. But I would still be I would still be looking at at urine hormones because I want to see how they're breaking it down.

I want to see what they're actually doing with it. Right. So let's talk about the other the pros and cons. So there's a lot of comes to the blood work.

So are there any pros to the most? Mostly it's widely available. It's easily understood. The it's what everybody uses. And so that's what they're used to look at.

But they're not necessarily getting the information out of it that they think they might be getting very misleading. I have seen a lot of patients who are only monitored in the blood and they're told to reduce their doses or, you know, inappropriate.

Right. Look, in 2013 and it's okay, so let's go do saliva because we're going to save the best for last. Okay. What are the. Saliva collection is less invasive, although, I mean, you're not doing needles, you're spitting into a little tube.

That can be problematic for some people, especially as people get older. They don't produce as much saliva as they did when they were younger. And it can be a little bit problematic filling those up.

Also just the slightest bit of contamination. For example, if someone brushed their teeth and there's little microscopic traces of blood in the saliva that can affect, for example, any well or hormones are carried in in the blood.

So you as well as in the saliva. So you are getting an additional additional reading from any traces of blood that are in in the saliva. So, yeah, so there are so there are some problems with saliva in that regard.

It's again, it's a snapshot in time unless you're doing it for point saliva when you're looking at cortisol in cortisone, you're just looking at a single point in time.

And also with saliva, you're not getting any metabolites. So I would say the best thing is to use saliva for our four point cortisol or cortisone or cortisol awakening response.

But I wouldn't rely on it for monitoring hormones. I know people who do, but I wouldn't. Another problem with saliva is that you'll see that most saliva collection kits, they want people to be off of their hormones for a few days before they collect, which means that when you're collecting, you don't actually, because most of these hormones have a very short half life.

So if you are off of your hormones for two or three days, you are not seeing what are your levels like when you're actually on hormones. So that's another problem with saliva.

That makes no sense. Yeah, it really does. Right. Like I don't, you know, so you can have false because of the blood. You're not getting metabolites, you're not seeing what the hormones are actually doing in your system.

Right. I have been taught you never track hormones with saliva. It's just totally inaccurate. Yeah, I wouldn't. I wouldn't. So and I do agree with you like I do use saliva testing for my four point cortisol.

I think it can be very telling because it really shows what the curve is doing. And I can be right back and how I help someone rebalance. Okay, so now let's get to the the meat and the potatoes of that 24 hour urine, which I love and have been doing since I opened up my practice in 2002, same year as you.

But there's a lot of talk. A lot of people out there are just doing dried urine. And so I'd like for you to explain what's up with the dried urine and why it's more beneficial and important to do the 24 hour urine.

Okay. Well, 20 for our urine has been around a lot longer than dried urine. I mean, it's been used is 24 hour urine collection to look at steroid hormones has been being done in research for decades.

I believe that we were the I don't know if we were the first, but one of the first clinical laboratories to do 24 hour urine testing to look at steroid hormones.

So the advantages can and I don't have the ability to share my screen. I don't know. Do you? You can try. Let's see if it will let you. I'm okay. It looks like it will again.

Okay. Oh, yeah. Okay. There you. Go. Okay. So you see this metabolism charge? Yes. You're familiar with this

metabolism chart. You share them. So when I talk about metabolites, this is what I what I mean here.

So you can see here DHEA, DHEA gets broken down to androstenedione, which goes to these two metabolites. Andrew thrown Edo it alone and also can become estrogen, which then becomes estradiol.

So DHEA also becomes testosterone. So DHEA is breaking down. So testosterone and estrogen are actually metabolites of DHEA, but estrogen has its own metabolites.

Here we have two hydroxy two with oxy. I don't want to go into all of them because I don't want to make it too technical.

Why 24-Hour Urine Is Preferred

But some of these metabolites are carcinogenic, such as the four hydroxy astron that's the most carcinogenic of the students were as the two hydroxy astronaut and the tumor foxy astronaut are both very protective.

So looking at the metabolites allows us to see what is your body doing with with your hormones. And here we're looking at cortisol and the breakdown into the cortisol metabolites and also mineralocorticoid.

These are all different metabolites that we can look at that tell us various things about about someone's hormone balance and can allow us to tailor treatment. This treatment decisions.

You know, there are things, for example, that you can use so two hydroxy acids and I said is protective 16 alpha is not as bad as the four hydroxy, but it also has some problems.

Now are some things you why why you want to have it but there are also some reasons you don't want to have too much of it. And there are some botanicals that you can use and some supplements that you can use to push the metabolism ization of estrogen more towards the two hydroxy which is protective then towards the 16 alpha.

So knowing the metabolites and understanding, understanding this is really important for being able to make treatment decisions that really are looking at how effective the treatment is, but also how safe it is.

So try to minimize risk. Is that so? All all so. Do you get why the dried urine versus the 24. Hour urine? So in a 24 hour, you're getting a full 24 hour perspective.

And like I said, and and despite what has sometimes been said about collection, collection for a 24 hour urine is really much easier than a dried urine.

So the in the drug urine is promoted as but, you know, you just tip these for cards. Just this just four times that you don't have to carry this drug around with you.

Well, first of all, most people are able to collect on a day when they can be home for the day, especially when you're talking about women who are in menopause and if they're using whether or not they're using biochemical hormones, because if they are if they're using hormones, you're not waiting for a certain day of their cycle because they're not having cycles anymore.

So a younger woman, we want her to collect in a certain point in her cycle. And for someone like that, they might have a little bit more a restriction about what day they can do it.

But for most of the people you're talking about, this is a menopause summit. So we're talking about mostly women who are not having menstrual cycles anymore.

So their collection time isn't limited by that. If they're taking hormones, we'd like for them to be on hormones for a while before they collect so you could see what their actual levels are.

But but they're not restricted in terms of what day of the week. So people can do it at home and usually most people can do. It's not a problem to, you know, run out and go grocery shopping or something.

As long as you're somebody who can hold their pee for as long as it takes to do that. So but you get a 24 hour so so collection is easy. You need to pee, you collect it.

That's all poured into the jug with a dried urine. You have to pay attention to the timing. And has it been the right amount of time since my last? When you have to be setting alarms, you have to be monitoring your intake of fluids to make sure that it's pretty even throughout the collect between collections.

Otherwise, you're getting a lot of variation in the concentration of the urine because there's what you missed, except for those for collection points.

And there's a lot of variability in terms of what patients can do. Some people can go for hours, four or five, 6 hours without needing to pee. Other people may need to go to the bathroom every hour so you can see there's going to be a lot of difference in the collection points when you have that kind of variability in how people how often people are needing to produce urine and how much you're losing in between and in between collections.

So that's one of the biggest things is you don't get a 24 hour perspective. The you do get metabolites with dried urine because it's still a urine test.

There are there are metabolites you can't get in dried urine or they're analytes. So we do melatonin, growth hormone and oxytocin in a 24 hour urine, all of which are really important hormones.

Some people say, well, I'm not going to use growth hormone or prescribed growth hormone, but it's still an important hormone to know about because it tells you something about the health of the person.

So I other there and there are other things you can do to improve melatonin growth hormone besides actually giving it. So I think it's something worth testing.

So there are things that you get in a 24 hour urine, you don't get it a dried year. And like I said, you get the full day perspective and it's just easier to collect.

But there are a lot more ways collection can go wrong with a dried urine, with people touching the card with maybe they still have some hormone cream on their fingers, or that the card has to either be hung up to dry or it has to be laid flat to dry.

But where are you doing that? If you're doing if you're doing your collection at work, are you going to hang it up in the community bathroom or lay the cards on your desk to dry?

I don't know. So what about as far as results? Like results? Well, I think this I think the 24 hour is better. And can you tell by that is? Well, because you're like I said, you're getting a full day's perspective.

And because as with with the four points and with having to, like I said, monitor fluid intake and and all of these things, trying to keep everything.

So even the the reason for that is because in a dried urine, the results are normalized against creatinine in a way to deal with the variability between different collections.

In a 24 hour urine, you're still looking at creatinine, but the results are not normalized against creating in the same way. So you're it's more precise.

The 24 hour year is more precise than the than the dried urine, but doesn't mean you can't get usable results from a dried urine. But it's definitely never the first thing I would recommend for someone.

Yeah, I know when I have patients who come in and all they have is a dried urine, I'm like, we have to get a 24 hour urine. And it's always different, it's reproducible, it doesn't cross over and we want the most precise results, which is why.

Right. For our urine. And I do agree, I don't know if that's how it was sold, that it's easier. You only have to do four samples, but it's much easier to just carry.

I always tell patients like put the jug or a note on your toilet so you don't forget. And when you run it, it's reminders there because otherwise you have to start all over.

But when we are working with bioidentical hormones, which are such an important part of menopause and the transition and perimenopause, you want the most accurate results?

Like, why settle for something that's not as accurate? And so I'm really passionate about like, you know, I've been using your lab in 24 hour urine testing, like I said from the beginning, because when I decided I was going to do 20, you know, bioidentical hormone replacement because I too did not learn about it in medical school, I thought, well, who do I want to go learn from?

And I was like, Well, I want to go learn from the guy who wrote the first script for Biased in the Country. I have to go listen to what he has to say.

And, you know, and this is his lab. So he you know, when you're writing something, you want to create the best way to test it. And it is, you know, I won't let patients refill their hormones.

Like if everything is status quo, I make them. We have to test at least once a year because I just want to make sure things are not changing and the metabolites are still in a healthy way. So that's so super important.

So is there anything else that you'd like to share that I didn't ask you about. With regard to 24 hour urine versus dry urine? Yeah. I don't think so.

I think that I would say, you you said that you see patients come in to you with dried urine results. And when you do a 24 hour, they're always different.

I think one thing I need to say is you never really can't compare them because they're different methodologies. They're going to have different reference ranges.

But also you can't compare from one lab to another. I mean, just because everybody's, everybody's methodologies are slightly different. So if you're not arriving at your results the same way, you can't compare them.

It's not like I have two apples. So what I'm saying, though, I just find because we know 24 hour urine is the most accurate. Right.

Clinical Monitoring and Final Takeaways

And I find discrepancies. And so that makes you to learn that anyone who's relying on dried urine is not getting fed the right results that are the most accurate.

Right. So I want everyone who's listening friends of your whoever is monitoring your hormones that they learn how to do a 24 hour urine collection so you can get the best results.

And yes, I love looking at the melatonin and the oxytocin and the growth hormone. It's just such good, powerful information that is, you know, just makes a difference in how I treat a patient and how we proceed and so forth.

So just so just to recap, if you're having your hormones, just monitor through blood is not a good idea because that's not the best way to monitor steroid hormones and you're not metabolites.

So if your doctor. And you're probably not getting what's actually bioavailable. Right, you're getting bound hormones and you're just getting a snapshot.

If you say saliva and you're stopping your hormones before your test, that's absurd. But okay. But you're also potentially getting some blood contamination.

You're not getting metabolites. So it's not a good way for monitoring or for testing. You just talked about the dried urine and why that's not as accurate as the full 24 hour snapshot.

So, you know, and I use like I, I use blood. I'll do thyroid hormones in blood. I'll run a DHT in blood. I'll run a sex hormone binding globulin in blood.

So if you're if you're a patient of mine, you're in, you're listening, you're going, wait a second. She just made me got 30 tubes of blood drawn. So I love blood work for Samantha.

But when you when you're a practitioner, you learn especially you've been doing this as long as we've been doing it. You just learn that you want to use the best method for whatever it is you're testing.

And so. I love. To that saliva for cortisol. Great for that 24 hour urine for the sex hormones. And so you want to test not gas and you want to have the right the right point. Love that test that gas.

So this is my public service announcement, you know, to everyone listening that like you want to be working with a physician who understands how to test so that you can be monitored and safely dosed.

And so that's why it was really important that we have this conversation. Right? Because it's kind of like I say it a lot with a chiropractor, you know, someone goes to a chiropractor and they go, Oh, yeah, chiropractic doesn't work.

I still have a headache. And I'm like, Well, it's not that chiropractic doesn't work. It's just maybe you went to the wrong chiropractor or the wrong technique and so forth.

And so it's the same with hormones. Can, you know, can hormone replacement not work or be dangerous or not get rid of your symptoms or not support you in long term challenges and protect your brain and your bones and your cardiovascular system and so forth.

Sure. If they're not properly dosed and they're not properly administered and they're not properly monitored. Right, and done correctly, they're like such an important piece of the healthy aging.

Yeah. Plus menopausal. Yeah, definitely. I mean, there's there are definitely people who after they first start on bioidentical hormones, it's like their life has been turned around.

And there are those people that it takes longer to kind of get the right dosing and the right balance of things. You know, that one of the things, you know, we said, fine, find a doctor who knows how to test.

One of the things that we offer at the lab, which you know about, is is consults free consults to practitioners. We don't offer consults to patients. We can't do that.

It's actually illegal in Washington State for a lab doctor to consult with a patient. But we consult with our clients, the clinicians, so doctors or or osteopath or nurse practitioners, whomever orders our tests.

So we will sit down so that metabolize metabolism, metabolism, flow chart I showed you earlier, we'll go over all that and talk about which hormones are which metabolites are beneficial, which ones are protective, which ones are important for maintaining bone density.

We'll go through and help people understand all of that, help them understand because there's a lot of information in the report. I should have showed you a screenshot of of the sample report.

There's a lot of information in it and a sample summation. As we both said, we didn't learn about this in school and neither did they. They only learned about blood testing.

Right. Well, I'm glad. So. I'm glad you brought that up, because that is the other thing I'll say, like when you're looking for a doctor to help you with your hormones, you like, how do you think I learned about this?

I would get tests and I still even sometimes call and get consults. You know, it's good to get to stay up with the latest research. But this is how I learned a lot of things.

I would get a test on a patient and then I would call and I would go over it. Like you're saying, and then I would. So you want to have a doctor, like if they're like, I don't I don't do 24 hour urine.

Okay, great. You don't do it. Well, maybe it's you could start doing and get educated and this is available. And I think that's a really important quality in a physician that are willing to work with you and open minded.

You know, if someone came to me and said, well, now there's a new way, you know, we're going to take your fingernails and check your hormones I'd be like, sounds weird, but okay, tell me who's doing it.

Let me look into it. So I feel like it's our responsibility as physicians. And, you know, you see the doc, you see me in the office, but there's a lot more that goes on behind the scenes.

That you're. Doing to make sure you're properly cared for. And so making sure you have a doctor, don't let them cop out and say, I don't know how to do that. You can tell me.

You can order the test for me and then you can have a consult with them and they'll teach you how to explain it to me. So. Yeah. So thank you so much for coming and telling us the difference is I think it's just such an important topic and you know, I want you to be on hormones and I want them to be monitored properly so that you're not like I said before, I can tell you how many patients have been improperly monitored and then have doses cut or doses increased and they don't feel good.

And they were like, I felt really good. And then we had a test or the saliva test and they made me change everything. And now I don't. Really. I don't want that for any of you.

So hopefully this really helped you just to understand and you are a 24 hour urine kind of gal. Now go find someone who can do that for you and help you.

So we'll be back with conversation. But thank you, Dr. Larsen, for being here. Thank you so much, Sharon.