ADAPT Functional Medicine Q&A with Tracey O'Shea

Tuesday, July 13, 2021

1. [I] ran a DUTCH test on a 54-year-old, postmenopausal female with [a] previous history of a hysterectomy in June 2017. [She received a] breast cancer diagnosis in 2019. [She] started tamoxifen [in] June 2020 and Effexor 75 milligrams. (02:11)
2. With [trimethylamine N-oxide] (TMAO) levels, would there be value in stool testing for bacteria that produced precursors for TMAO as an attempt to shift bacterial load and microbial diversity through diet and lifestyle and supplements as a way to reduce cardiovascular risk? (07:59)

Tracey O'Shea: All right. We'll give everyone some time to filter into the channel here. So let me just see. Katie, do you know if there were any pre-submitted questions? I'm going to go back and try to find [them].

Katie: There were a couple that Chris sort of addressed last time, but not fully that I put some notes on. And then there's one additional one.

Tracey O'Shea: Okay, let me try to pull that up while everyone's coming into the room. Let me just find the link here. Hopefully, I can find it quickly. All right. I also have my daughter in the background upstairs crying. I hope it doesn't distract everybody. But please let me know. It's one of those days. All right, I'm just looking at Chris's questions. Let's see, and feel free, if you have, oh sorry, go ahead.

Katie: This is on the Functional Medicine Q&A tab.

Tracey O'Shea: All right, perfect. And anyone who's here, please feel free to post your questions in the Q&A so that I can answer them while I'm looking at some of these questions that Chris maybe did or did not answer. So I'll take a crack at this one. I think this person also reached out to me already.

So this person [says], "[I] ran a DUTCH test on a 54-year-old, postmenopausal female with [a] previous history of a hysterectomy in June 2017. [She received a] breast cancer diagnosis in 2019. [She] started tamoxifen [in] June 2020 and Effexor 75 milligrams."

Okay, this person did reach out to me, actually, with this individual question, maybe after the fact. And what had happened was, they did this previous DUTCH test before starting the tamoxifen and the Effexor, and then [on] the repeat DUTCH test, everything had just plummeted. The estradiol went down from 4.5 to 0.3, the progesterone went down from 0.7 to 0.3, testosterone, [dehydroepiandrosterone] (DHEA), so you get the picture. And she's struggling with hot flashes, vaginal dryness, and weight gain. She was on EstroDIM and MitoCORE and also taking five milligrams of DHEA approved by the oncologist, some Methyl Support, and some adaptogens. And this person was just asking about adding support to this person's profile and where to go from there.

It's tricky, as you can imagine, with managing hormones in someone who has had a history of breast cancer. And I think what we're seeing here is the goal of the tamoxifen in trying to reduce those levels. And doing some support that is not related to supporting hormone levels makes sense. So I think milk thistle and some of the other things that might help with hot flashes could be reasonable recommendations. And of course, working with the oncologist. The answers that I sent back to this person [were] a little bit more about, like, I haven't heard back I don't think, but the question I had is, was the person having hot flashes prior to the tamoxifen? Because we know that that can be a side effect from tamoxifen. And my understanding of how tamoxifen works is it increases sex hormone binding globulin to try to decrease free estrogens. So I did recommend running some serum labs that include DHEA, sex hormone binding globulin, estrogen-free progesterone. I think it's important to get serum testing, in my opinion, to back up your DUTCH test results.

And we also talked about the dim, using dim. Is that more because of trying to support estrogen metabolism? You could consider stopping that to see if that's impacting any of the symptoms that she's having. And something to consider also is, I think that they were, I assumed that she [has] hormone receptor positive breast cancer, because that is an important question. They didn't really specify in the notes, but that's something to also clarify. I don't know enough about this, and I would probably honestly do a little bit more research and talk to the oncologist about estriol vaginal cream. Because I understand that there's really very little systemic impact, and it's not the form of estrogen that would stimulate ER Alpha, which has a lot to do with the estrogenic effects on the breast.

You could also consider some of those things like some localized support and helping with vaginal atrophy and some of the other symptoms that may come along with what is happening as a result of the tamoxifen. So that's the best way that I could probably answer that is I need more information. And there are some products that we like to use for hot flashes and some of these other symptoms. But again, what are the hormone effects of those supplements? So, this is a pretty tricky case, and I think you have to do your best to try to see if [you] can find alternatives that aren't going to really impact hormones directly. And then also work with the oncologist in that case. So [that's] not a perfect answer, but just some thoughts and ideas that I had had that I answered for this person.

And let's see, I already answered the one about the Australian blood marker units for international patients or international providers. So I have provided that. If you're an international provider and you need that, you let me know. Send me a message. The other person here. Let's see, oh yes. So I also got this question already sent to me individually, but I'll share it here just so people have that resource.

This person was asking about "TMAO levels," and "would there be value in stool testing for bacteria that produced precursors for TMAO as an attempt to shift bacterial load and microbial diversity through diet and lifestyle and supplements as a way to reduce cardiovascular risk?"

I thought [it was] super interesting that they're doing that. And I did provide this person with some resources. Chris has an article about TMAO, [where] Peter Attia interviewed Chris Masterjohn. Also, there's a little bit of information from them on TMAO. So the answer to this [question] is that it's really interesting, and I think that it probably would be pretty cool to be able to assess the microbial diversity to see if there are certain species that are more prone to producing TMAO that also coincides with serum levels of elevated TMAO.

Now, the real question I think here is, is it fruitful to do a stool test to try to find out that information? And as you will see in the updates, for lesson six, we talk about the pros and cons of the different types of stool testing and the limitations that the stool tests have. And one of those limitations is, is it really representative of the entire ecosystem of the gut? And I think if you're doing whole-genome sequencing, and doing some of the labs that really do give you that information, then yes, that could be a really great way of getting a sense of what the microbial diversity is. And do you have the eight main species, mostly Firmicutes and Proteobacteria phyla, that are consistent with choline consumption and [trimethylamine] (TMA) accumulation. So if you're doing the right kind of stool tests that give you the depth of knowledge, then this could be something really cool to figure out and do.

So if you have someone that has a really large overgrowth and representation of those species that do participate in choline consumption and TMA production with high levels of TMAO, and I have to say, with other risk markers of cardiovascular disease, right? There's still some discussion about how all of those things connect. And we know that high TMAO levels are connected to increased cardiovascular risk. But the question is, is that all connected to diet and gut microbes and the microbiome? So there's some controversy and discussion happening about that. But from a perspective of theoretically being able to do some stool testing to figure out if that's an avenue to go down, then I think it would be cool to do. But I think you do have to pick the right test.

Some of the other stool testing that we're using is doing [a] combination of [polymerase chain reaction] (PCR) testing and culture. So I think you could still use that test, probably as a general guide. But if you really want to be thorough about that, and really have a good sense of those different species that are represented in the TMAO production, then you probably do want a

more thorough stool test. So just some cool stuff that's happening with different ways to adjust the microbiome in reducing cardiovascular disease risk. And I think a lot of those things are fairly consistent with other things we might do in general, like a Mediterranean style diet, Mediterranean style Paleo. A lot of those, in my opinion, are probably already going to happen. If you already have someone who does have cardiovascular disease risk, that's indicated by high apolipoprotein B; they have lipoprotein(a) that's elevated, [and] they have all these other markers. Maybe they have a coronary calcium score that's high. If you're already going down that route, you may by default already be doing some of those diet shifts and changes that would potentially alter that microbiome ecosystem to reduce TMAO levels.

So do you need a special test for it? Maybe. Maybe it would be cool, especially if you're doing studies and trying to show some connection with those things. But other than that, yeah. So I think it's really interesting stuff that's happening.

Let me see, I don't know if anyone has any other questions. [Those were] all the pre-submitted questions. Just a reminder, if you do have individual questions for me, as you're going throughout the curriculum or the course, or you have questions about cases that you need help with, you can send me pre-submitted questions through, I think it's the live, submit a live question button, and then you have to navigate your way through there to send me an email. And I can help you in that way, as well. I'm trying to think; we have a couple of new things happening on our end. We're starting to open up [and] created the PTP ADAPT alumni membership. So those are some cool things that are happening in the works. You don't have to worry about them now because you're kind of grandfathered in, and you have access to all of the stuff as part of the program. But eventually, those will be things that will be options for having access to case mentorship, Q&As after you graduate, and then still having your finger on the pulse of any updates and upgrades that are coming out in the program.

So as you get closer to graduating, we can talk a little bit more about some of those different perks and additions to the offerings that we're trying to create a more robust community for our graduates and for our alumni. It's really important for us to continue networking and building our expertise and our practices and having those discussions and building community forums that are a little bit more interactive than maybe our forum is with the current students. So some things to come and some things to look forward to.

I know there's a few of you in here. I don't know if you have any other questions for me about the curriculum [or] about anything that you are coming up against. So I do want to give you some time to answer or discuss the Q&A. I'll give you a little bit of time here. I don't want to end it too early and take away those opportunities. Well, you know where to find me in the program; [the] ask a question area [is] where you can find me. Get onto the forum, talk to other students, and thank you for showing up. I'm sorry we didn't have a whole lot of questions today. It's one of those things where students drive the discussions. And so hopefully, that means that things are going well and that you're deep into the blood chemistry section of the program. This is really the fun part. I like a lot of this section. So hopefully, you'll start to identify

those patterns and see some of the things that we're discussing and connecting the dots and those kinds of pieces. So thank you for showing up. I really appreciate it. And like I said, ask me questions if you have anything else. Have a great rest of your day, everybody.