



Progress Your Health Podcast - Episode 092

Should I Take Thyroid Medication Before Blood Test?

Dr. Maki: Hello everyone. Thank you for joining us for another episode of the Progress Your Health podcast. I am Dr. Maki.

Dr. Davidson: And I am Dr. Davidson.

Dr. Maki: How you doing this morning?

Dr. Davidson: I am doing very well. How are you doing this morning?

Dr. Maki: Well, the skies are blue. The birds are out. Looks like it is going to be another beautiful day.

Dr. Davidson: I look forward to it. It is what, spring in Washington. And even though, it does, it is Washington State it does rain here. But at least the you know; everything is green, and we do get some beautiful days.

Dr. Maki: Yes. We certainly do. Now, granting the summer, people that are not familiar in summertime, there were hardly rains at all. June, July, August, September, does not rain hardly much. It gets kind of dry. But certainly, the spring, the fall, the winter, it makes up for those months that it does not rain for sure. Okay. So, this one is a situation that comes up all the time, for existing patients, for new patients, for questions we get from listeners and readers, the timing of thyroid medication and blood testing. Some say to take it in the morning, some say to take it the day before, and skip it that morning. There is, like I said, there is, you know, there is a couple of opinions and how that is supposed to be done or what say you?

Dr. Davidson: I would say both.

Dr. Maki: Yes. So, you would say that both are right.

Dr. Davidson: Yes. When somebody asks, should I take my thyroid the morning of the blood test, there are times when I say yes, and there are times when I say no. You know, it really depends on how we are going to monitor it now. We are very specific when we monitor thyroid levels. Specifically, we will do the thyroid stimulating hormone, the TSH, the free T4 in the free T3. You know, we want to, you know, those are kind of like my nitty-gritty. I mean, then you can do a reverse T3 and a few others but really, you know, the free T3 is super important. A lot of conventional doctors do not always test the free T3, or somebody might be on a particular type of medication like Synthroid Levothyroxine and they only do the TSH — unfortunately, just the TSH, or if they are a little bit more progressive, they might do a TSH and a free T4. So, it really for us since we are so — now, you know, so nitty-gritty on how we dose and how we read the blood test. I will do both.

Dr. Maki: Yes. Right. So, a typical scenario that we see all the time, for both of us, for our new patient. They have gone to another doctor there on one of the T4 mono therapy medications, they are on Synthroid Levothyroxine. They do not feel very good. They have been on that dose, or doctor changes their dose up and down and up and down. It was--

Dr. Davidson: Based on their TSH.

Dr. Maki: Based on their TSH. Although, they increased her dose or TSH goes down, now they lower their dose. They still do not feel very good. So, it is this like, kind of back-and-forth musical-chair dosing of the thyroid of the of the T4 medication with really no consideration for how the patient feels. It is solely based on the TSH number. And for those listening, we do not agree with that at all, that is why we typically do not prescribe those medications. So, in a case like that, that patient comes in to see us we would automatically switch and increase, depending on what their labs are — the baseline labs, what they were on from their previous doctor. We look at those numbers and we make decisions based on what they were on, coming in to see us. We will switch and increase typically, right, because when you go from those conventional medications to a — what we like to do most of the time is compounded thyroid. The compounded thyroid, because it is stain released does not necessarily — it does — it is not as strong as the instant release commercial medications.

Dr. Davidson: Yes. Because it is sustained release, when you take it, it does not shoot through the, you know, the ozone layer, into your system, it comes up gently and stays gently throughout that 24-hour period. Now, we also do, you know, desiccated thyroid, porcine desiccated thyroid, nature thyroid, armor thyroid, and P-Thyroid and West thyroid. We also do, you know, the porcine thyroids as well, but when somebody is —

but the compounded T4-T3, which is a Compounded Sustained-Release Levothyroxine and a Compounded Sustained Release combined together capsule, Liothyronine is — and the Porcine Desiccated Thyroid, they are like, you know, apples and oranges compared to Synthroid or Levothyroxine.

Dr. Maki: Yes. They are really — they are completely kind of two different animals, in some respects. They are not really a fair comparison. When you try to go from one medication, the commercial type to the compounded ones, you cannot match up the dosing. It is completely-- Now, some of the farmers, some of the compounding pharmacies, do make conversion charts, but those are even worse.

Dr. Davidson: The ones on the Internet are terrible.

Dr. Maki: Yes. You cannot — if you base your new prescription for that patient that comes in — if you base your new prescription based on what they are already taking, without increasing and at the same time, they are going to be under medicated.

Dr. Davidson: Or readjusting the T4-T3 based on what they were on, they will feel terrible.

Dr. Maki: Yes. They will, they will kind of regress in a way. So, that is why we typically, from experience, we typically switch in increase right off the bat, because people tend to be across the board. They tend to be under dosed. That is the argument for test, for skipping medication in the morning, is because if you take your medication the morning your blood levels are going to rise shortly thereafter the taking the medication. So, if you see a blood level that is higher after, you know, if let us say three or four hours after taking your medication. Some people think that that is a falsely elevated number. But when you first transition somebody from a baseline before they came to see you and now you are switching them to a completely different medication, you have to see that change in the beginning before you have them skip their medication. If they do not take it for 24 hours, you are basically flying blind. You have no idea what that new medication is doing to their levels and you cannot accurately change or adjust based on those new numbers.

Dr. Davidson: And then, you are just, having to look at the TSH to realize it. So, just to kind of reword what Dr. Maki was saying. New patient comes in. They know their thyroid is off. They have been on some kind of tea for therapy, or maybe they have not been on any therapy before, but they know their thyroid is off. We have some blood work right in front of us saying, "Hey look your thyroid looks like it is off. Let us start you on some thyroid", you know, some calm — either compounded T4-T3 combo or maybe some

natural Porcine Desiccated Thyroid. So, we are going to start you off now. And then, you know, if they were on a different dose, maybe you might raise it up. Then we are going to test you after about a month, you know. It takes about three weeks for those therapeutic levels to rise in your bloodstream and become, you know, facilitated into your system. So, I usually do not want to do it any less than three weeks. So, we might test it in about a month. So, I always tell them please wake up in the morning, take your thyroid, and get your blood test, you know, around four to six hours later. Do not do it right away because then it will jump up a little bit too high. Because we need to know if you are absorbing this new thyroid medicine.

Dr. Maki: Yes. Right. You had a baseline from your previous medication. Now, we are transitioning to literally the commercial types of the compound of the natural Desiccated Thyroid. It is — none of them are the same thing. So, you cannot — one dose of one versus one dose of the other two types, you cannot compare them — as even though they are all thyroid medications, they are all completely different in how a person responds to them. But by taking it four to six hours afterwards, you are going to see that rise, it is going to go up artificially, but now you can compare that to the baseline numbers. And for the practitioner, it makes total sense.

Dr. Davidson: Yes. For me to know, like my digestive system is different than your digestive system, which is different than somebody else's. How am I absorbing this? So, if I see that I give them this medicine and it does not come up, then I will know you, you know, we have got to work on your digestive system because we are always doing that too. But maybe the dose needs to come up. But let us say it does come up. Then I will know that they are able to digest it. They are able to absorb it and it is really more specifically, I would say about the T3 component of the thyroid medication. T3 is an awesome — I mean, it is an awesome thyroid hormone, but it is very volatile. It is unstable. It has a short half-life. So, if you had taken your new thyroid medication yesterday and then went to the blood, you know, it is right now with about, you know, 11:30 a.m. or 10:30 a.m. here in the morning. I went and got my blood draw right now. It has been well over twenty-four hours. Since you took that medication, I am not going to get an accurate reflection of where your T3 levels are at.

Dr. Maki: Yes. Right. So, you are taking it twenty-four hours prior. Your levels have already come up and then have basically bottomed back out. So, you are almost, in some ways, when you are looking at that blood tests, you are starting over every twenty-four hours. So--

Dr. Davidson: With the exception of the T4 though. T4 does have a longer half-life. I think it is close to seven days. So, if you did miss it and, you know, took your blood

work, you know, today. Right now, and I did not take my thyroid since yesterday, the T4 might be slightly a little bit more accurate, but the T3, it is almost like useless.

Dr. Maki: Yes. Right. And the T3, the free T3, is the number that we are trying to increase. The TSH is going to go down as the dose goes up of any one of those three medications. The T4 monotherapy, the NDT, Natural Desiccated Thyroid or the compounded, the TSH is going to go down as you increase the dose of all those medications. On the T4 monotherapy, the Synthroid the voxel levothyroxine, those are not going to have any impact on the T3. The T3 is not going to change and sometimes it just goes down. Even though the TSH might go down, your T4 might come up. But nothing typically happens to the T3 and that is the active thyroid hormone. T4 is just a conversion hormone. It has no activity in the body, whatsoever. T3 is the one that has all the effect or all the action on the body. That is the one that we want to have. That is the one we want to modulate as much as we can.

Dr. Davidson: Now, with us saying that, you know, I am sure there are those of you out there like, "What? This makes no sense. I never take my thyroid medicine before my, you know, taking my blood test". Now, if you are on Synthroid, it really does not matter whether you take it, or you do not take it. And really, I would say do not take it. You know, do not take it the morning of your test if you are on Synthroid. And that is what your endocrinologist is going to want and probably will only check maybe the free T4 and the TSH. But if you are on any kind of therapy that has the T3 in it, in the beginning, I always have you take it and then wait several hours to check how your absorbing it. I mean, granted — and I will tell you, number one, we do not base thyroid doses on blood tests alone. We do take into consideration, you know, a huge factor of your symptoms. What are your thyroid symptoms? We do take that into consideration for dosing, but it is wonderful to have that objective data of where those free T3 levels are. Once we kind of get things balanced out, then we do will say, "Hey, tomorrow, you know when you go get your blood drawn, do not take your thyroid that morning". So, we will do that as well because I want to see you without the thyroid.

Dr. Maki: Yes. So, again, if for a — for that. So, in the beginning we want them to take their thyroid so we can see the change from what they were taking previously. So, let us say three months, six months, we have made a couple of dose changes in that time. Now, their TSH is actually a little low. Let us say their TSH, the lower end of the reference range is point four-five. Let us say their TSH is point two-five, point one, point zero-one, point something lower than the reference range because they took their medication three to six hours before their blood draw. Now, we will have them say, you know what, the next time you go in to do blood work in a month or three months or whatever it is. Now, skip it that morning. So, now it has been, like you said, over

twenty-four hours since they have taken it. Now that, all those numbers should be adjusted accordingly and now we can make a better determination of what needs to happen with their dosing because now we are seeing it. We saw it at its highest point, the last blood test, the numbers were a little bit, you know, abnormal. But now, we are going to see it at its lowest point, and we can continue to maintain, you know to you know, approach the ideal dose for that particular patient.

Dr. Davidson: Yes. So, the answer to the question, because people asked this all the time, you know, "Should I take my thyroid medication before my blood test?". The answer is sometimes yes and sometimes no.

Dr. Maki: Yes. Right. Now, that — again, we have gotten some pushback from people sometimes. "Oh, I am not supposed to take it. I read on the internet. I am supposed to take it. I am not supposed to take it", because you know, you are seeing these artificially elevated numbers. It is — like I said, it is more about the process that we have of why we want to see them in the beginning and eventually those numbers, we want to, you know, they are going to change over time. That is the whole point. A lot of times compounded thyroid kind of gets a bad rap. Well it did. I tried it did not work. It is always a dose-dependent issue. Compounded thyroid is not as strong as some of those other thyroid medication. And when it comes to thyroid, I will tell you, conventionally, everybody is very conservative when it comes to dosing thyroid medication. And I do think a lot of patients, which is why taking your medication the day before, is such a popular recommendation is because people are chronically under dosed. You take your medication the morning, your Synthroid, your TSH goes down, your numbers are too low. So, now you still feel like you have all these hypothyroid symptoms. But now your doctor is going to lower your dose from 125 to 112 or from 100 down to 75 or 88 micrograms. When you already feel you already still have the same symptoms. That is not going to help you very much. So, in that context, yes. Taking your medication, the day before, make some sense. But if the practitioner is chronically conservative on the thyroid dosing, it does not matter when you take it because you are never going to really achieve the optimal dose that is going to make someone feel better which is what we are trying to do with every patient. We are trying to optimize the TSH and the free T3, a low-normal TSH high-normal free T3. Usually the patient feels pretty good in that, in that relationship between those two numbers.

Dr. Davidson: And you think if your thyroids low, we are giving you medication to bring it back up. So, when you say abnormal or artificial levels, I do not exactly consider that when I take my thyroid in the morning sure, you know, I take it at six in the morning by twelve, or you know, I would not call my level i artificial or abnormal. I would call them

normal because my thyroid is low and so I am taking a dose to put it at the right high, optimal level.

Dr. Maki: Right. Yes. Totally. And you are right. I would not call it abnormal or artificial because those numbers are dependent on the medication. You have been taking it, you know, for a while. That is your — in some ways the medication is your new normal, you know. So, it is complicated, you know, knowing when to take your medication that morning and knowing when not to. The symptoms, the patient sub symptoms, and the objective data, help us determine when we say yes to take your medication the morning before your blood test, and when to say no. So, they are both right.

Dr. Davidson: So, when we were, you know, I was saying that we are very specific in how we, you know, dose the thyroid, look at the thyroid, get your input, when you think about it, especially with the compounded, you are not quite as versatile with the Desiccated Porcine Thyroid or Nature Thyroid, or armor. But with the compounded T4-T3, you can make any microgram, quarter microgram changes in anything that you want based on that individual. Some people — so, you think about with a porcine, you know, the pig thyroid which I still love and have lots of people on it, but it is a four to one ratio for micrograms of T4 to one microgram of T3. You really cannot get away from that. But with the compounded form of the levothyroxine and the Liothyronine sustained release, you can do anything. And I have a lot of patients where they really do absorb their T4 fairly well, but they cannot convert it to the T3. So, "Hey, I can raise up the T3 in that capsule". So, that is why we are so specific with our patients and I think they get a little bit like, "No. I read on the Internet or might, you know, some might, you know — coaches or not told me that I should not take my thyroid before". Sure. Maybe with somebody else. I can understand that, but we are very specific. I need to be able to see it one way, see it another way, so I can pull that together just like Dr. Maki said is we want to have kind of a low normal TSH. And sometimes, we do not pay a whole lot of credence to the TSH because it is just a signal from the brain. But at the same time, we want to have that data, but then have a high normal T3, people feel good.

Dr. Maki: Yes. Right. Yes. So, the recommendation to take your medication that, you know, skip your medication that morning, I think, is fine for a conservative conventional mindset, right. Because they are very conservative across the board on someone's thyroid dosing. Doctors get a little freaked out by it. We are always trying to optimize those numbers. That is why we say both is, you know, there is not a hard-and-fast rule of skipping your medication that morning. It is very much patient-specific on when we say yes and when we say no. And it is not just, you know random. We actually have a very well-thought-out process of why we do that because those numbers — because of the medication types. All those medications are different, and people respond to them

differently. So, they start on something, we switch them to something else which is why people typically come to us. They do not want to be on Synthroid anymore. They have heard about some other options, whatever the other options are, you know. But we prefer the compounded thyroid and that is very much dose dependent. So, we have to try to inch a little further closer and closer. But it takes time to do that. You cannot do that in a couple of weeks or a couple of months. It does take sometimes, you know, three to six months to get those doses optimized.

Dr. Davidson: Yes. When I am, you know, where first meeting you as a patient. Yes. It is going to take a little time for me to understand your system because your system is different than somebody else's system. But once we got it down because, I mean, we have patients, we have seen, you know, since we started practice in 2004 is, you know, I will tell them do not take it. You know, I want to just see the thought, you know, just you, no thyroid that morning. Or some people, I will say, "Hey, listen. If you can, instead of four to six hours later, can you wait and do your blood work after work so I can get a good twelve hours because maybe the sustainability is not there after twelve hours", you know, I want to know where it is at all different times because we are so specific. So, I have had some patients that got it, you know, little, you know, nervous about me telling them to take their thyroid and know that I got you covered that, you know, we will do it both ways.

Dr. Maki: Yes. Right. Yes. There are situations where both are necessary. And a lot of times, there are a lot of overreaction about a patient's lab results. Their TSH is little bit too low. They are free T4 or free T3 is a little bit too high and doctors are — the patient always knows when their overmedicated. They will start having some symptoms. They will feel jittery. They will feel anxious. They might have some heart palpitations. Usually, it might be heart rate versus palpitations, which is an instant release T3 might cause some palpitations right after taking it. That is also why we use the sustained-release compounded thyroid because it eliminates some of those cardiovascular symptoms. But if you just start on one dose and let us say, "Well, a month goes by and I do not feel better. I might even feel a little worse". That is why we need some time to get to that appropriate dose because it comes down to the person and the dosage and we cannot do that. We cannot speed that process up, that process takes a little bit of time to get there. So, do you have anything else to add about that or like I said, it really depends on that. Maybe we just confuse it even more, right. Now, people really do not know what to do. But at least the way that we do it we want to see the transition, the baseline for where they were to what we are starting them on and then we kind of decide from there. As you know, as they either improve or do not improve. Now we are able to tailor that, you know, just a little bit more optimized over time.

Dr. Davidson: So, if — hopefully we did not confuse you. But if you have any questions, please email us, you know, ask your questions. That helps us kind of decide what to talk about because when we get your questions that gives us input into what people want to hear. So, if any of this about taking your thyroid before your blood test, after your blood test, any questions, just reach out.

Dr. Maki: So, until next time. I am Dr. Maki.

Dr. Davidson: I am Dr. Davidson.

Dr. Maki: See you later. Bye.