

Once you start treating a patient with whatever medicine of choice, what should we be on the lookout? Now, we are going to give, if it's levothyroxine-- and that's what we do according to guidelines-- it's about 1.5 micrograms per kilo per day. And if the patient is young, meaning younger than 50, we should go and calculate the full dose and start with the full dose, provided that that patient has no cardiac conditions.

If they do or if the patient is older, we should start with a fraction of the dose. Usually 50%, 60% of the calculated total dose should be a start. And then we would make changes every six weeks. So every six weeks, you-- six to eight weeks. It doesn't have to be right on six weeks. But you would ask the patient for a new TSH and free T4, until you normalize TSH and free T4 is within the normal range.

Now, what are the pitfalls? Number one, patient needs to take the medication. And this is a medication that if you have to take every day, sometimes patients will forget. If they don't establish a good routine, that's going to be a problem. So they might forget. The second thing is patients might not be observing a period of fasting in the morning after they took the tablet. As we know, not so much with T3 but with T4, with thyroxine, that's a problem.

Different foods, types of foods, will interfere with the absorption of levothyroxine. And therefore, the patient is taking the tablet, thinking that I'm putting 150 micrograms here, but right afterwards, they have a huge breakfast with eggs, and muffin, and stuff. And therefore, the levothyroxine is not going to be absorbed. Only a fraction of the 150 micrograms are going to be absorbed. Therefore, we should always tell patients to observe a period of fasting after taking the tablet.

Many of my patients, what they do is when they go to sleep, they leave a glass of water by their bed. And they wake up early. They take the pill, and stay in bed, and continue in bed waiting for those 30, 45 minutes that we ask the patients to take before eating. And then, after 30, 45 minutes, they wake up. They get off bed and go about their businesses, have their breakfast. So I think that is a frequent pitfall. We should always ask.

The other thing is the medications that patients might be taking, especially if older patients take a list of medications, if they take together in the morning levothyroxine with other pills, and that might be a problem. And that might interfere with the absorption. Different classes of medications will have different abilities to interfere with the levothyroxine.

And what I tell them is, take your levothyroxine, wait 45 minutes, and then you take the other pills, unless it's something like cholestyramine, which traps cholesterol to lower your cholesterol. That thing is not good at all for levothyroxine. They should wait four hours after they took the levothyroxine to take something like that.

Also, as far as food is concerned, the real important foods that it's products with soy and many patients take milk, soy milk, in the morning. And that's also a sponge for thyroid hormone. So if that's the case, they should try to put as much as possible time between taking the pill and those types of food or medications that really impair absorption of levothyroxine.

Now, many patients will say, can I take the pill at night, because that's going to be much easier? Yeah. I always said, no, you should take it in the morning. But there are some studies showing that patients take the pills at night after they go to bed, and it works very well, especially if they have an early dinner. If you eat dinner at about 7:00 and go to bed at 11:00, I think that that would be OK.

And the key element here is consistency. So what works is if you have your dinner at 7:00, and then you have the pill at 11:00 right after you go to bed, and you keep doing that consistently, when the physician works with the patient to adjust the dose of levothyroxine, of course, the dose is going to be appropriate for that type of routine.

Now, let's say following that routine, the dose of levothyroxine turns out to be 75 micrograms per day. That's the one that normalizes TSH. Now, if the patient changes the routine or starts taking the pill in the morning, then those 75 most likely will not be as effective as they were. They could be more effective. They could suppress the TSH. Or they could be less effective.

So I always tell my patients, decide how you're going to do it, and we will adjust the dose according to your routine. But once you establish that dose for that routine, we should not change the routine. Otherwise, that might affect your level of TSH and free T4.