So now we're going to talk about treatment for hypothyroidism. Now, there is the conventional approach-- we'll talk about that briefly-- and that is Levothyroxine T4 monotherapy. And that's pretty much the initiating drug that is recommended by all the-- the ATA and other thyroid organizations, not just in this country, but also in Europe as well.

But I want you to understand that there is also discussion going on and some consensus reports that say, all right, start with that but it may not be-- monotherapy of LT4 may not be sufficient for all patients. And we're going to discuss that because this is a real issue. And one we cannot ignore so there's a lot of discussion going on what do you do when we look at adding not just monotherapy with T4, but when we look at combination therapy when the patient appears to need more of that metabolically active thyroid hormone T3 and how we do that with both synthetic and also-- synthetic forms of T3-- in combination and also dessicated thyroid extract. So we'll get into that just briefly.

When the patient's first identified as hypothyroidism overtly-- you've got the lab data that's there, it's very clear, it's diagnosed, the patient is symptomatic. So we're going to initiate treatment. And typically the majority of adults who are not over 65 and older, we look at going ahead and initiating by guideline 1.6 micrograms per kilogram. And for most patients who have mild to moderate hypothyroidism, usually between 50 and 75 mics a day is a good place to start. You might need a little bit more in pregnant women who are hyper dynamic and clear it, but don't ever make the mistake of treating, as I did, I would start too low. I had patients who are special ops patients who have more muscle than Schwarzenegger-- make him look petite-- and start on something as low as 75. You go ahead and start at 100 and higher, these patients will love you for it because they'll feel better quicker. So you have to look at the weight and how you treat, how you manage them.

Older patients, of course, you're going to have half the dose. You want to be cautious. And in patients with ischemic heart disease.

So we look at-- we started on Levothyroxine, we do the assessment and how it's doing in about four weeks, maybe make some up ramping the dose in about six to eight weeks is needed to get where. Oh, well we look at the labs, right? Well yeah, we can look at the labs-- where's TSH, which direction is it going. There's going to be a lag time, how the TSH responds a little bit slower to changes in doses than T4 does. So we want to make sure they're going in the right direction-- T4 going up and TSH going down.

But you don't stop with just the labs. You've got to see how they feel. Remember, one of the goals I mentioned earlier is the alleviation of symptoms of the hypothyroidism. Which is hypo T3, OK? So it may not be sufficient for symptom alleviation and so we have to look at when we want to look at bringing in T3 in combination-- Either synthetic form is just pure T3 that is given as an extra dose, usually multiple doses of T3 with the Levothyroxine or LT4 in combination. Very tricky to do in primary care, I will tell you that. Oftentimes they need multiple doses. The other one could be synthetic doses where you have T3 in combination already in ratio for T4/T3 and that is also used synthetically but there's also another option out there. And that's dessicated thyroid extract, which many of you may have had experience with. It's been around for 130 years and we'll be talking more about that later.