

So we've looked at hypothyroidism as a disease that is very common and is in your clinic within you and your employees, perhaps, and also your patients. You're dealing with it certainly on a weekly basis.

We've talked about the burden of the disease. We've talked about how it affects so many important systems in the body when you have either an excess but in this case a positive or deficit in thyroid hormone, particularly the metabolically active thyroid hormone of triiodothyronine, or T3.

We've talked about it being a major cardiovascular disorder-- very important. We talked about it having concomitance with metabolic syndrome, which is now known as cardio dysmetabolism. It's right up there. We talked about how it's important to look at that. In fact, when we're assessing patients, we need to look not only at some of the issues that patients have certainly with heart failure, dysrhythmias, bradycardia last week-- We've talked about that.

We talked about the terrible impairment on mood and neural cognition that utterly affects quality of life, even more than heart failure or some of these other big events or increased risk for MIs. It's that what's going on between the ears. It's a really dangerous place for many of us to go. And for the patients with hypothyroidism untreated, it truly is. So that's a problem with thermogenesis.

And those of you who do a lot of well women work, you understand the problem with poorly managed hypothyroidism when it comes to successful pregnancy and when it comes to fertility issues So there's a lot of adiposity in the like.

So there's a lot of reasons why this carries a burden not just with quality of life that affects patients with a lot of concomitant morbidities or complications related to hypothyroidism that's driving them to providers, driving healthcare costs, and also causing missed work days. So that is pretty clear. It is common. And it's in your wheelhouse in primary care-- mostly to take care of these patients.

We know that a lot of the guidelines say when we identify these patients that we want, you identify the guideline state. Is we treating them with monotherapy, LT4? We also know that some would say 10 to 15, and I will say depends of the population-- much higher than that, 19, 20. I mean, who knows? It's not really quite there.

There's a number of patients that monotherapy though good therapy-- and it's done a great job for a number of patients. There is a number of patients it just doesn't do it, despite reaching laboratory goals for a euthyroid state. We can get patients to appear euthyroid on the labs, but they're not. They're still symptomatic.

And so we've talked about how we identify these patients. And these patients who you might see normal labs or euthyroid labs but yet they are still symptomatic, look at their blood pressure. Look at their heart rate. Look how they're feeling subjectively. That's very important. Make sure you write that down in your records, because that's going to be what you'll be using to see with the patients to tease out how much better they're doing.

We know there's a patients for a variety of reason. It could be genetic polymorphisms. We know medications. We know that as disease progresses over time, again, autodiseases that can impair this. We know that for some reason we're not getting sufficient activation, production, and/or tissue penetrance of T3, the metabolically active thyroid hormone.

So we know that. We identify, as we mentioned-- it's going to be those symptoms, the symptoms they have, what's driving them to you. These patients will come to you.

It's a diagnosis that when you rule it out you almost feel bad. Sorry. You're don't appear to have-- thought maybe you have hypothyroidism. But it's one of those that we really need to look at and make sure we diagnose efficiently. And we should actually keep in back of mind is a differential diagnosis-- so once we do that.

We do know that because not all patients seem to have low thyroid T3 with the labs but they have subjective symptoms-- we know that monotherapy does not work. And we need to be looking at other options. We must look at other options.

And there is now a conversation about those options-- that there's patients we need to look at combo therapy. Yes, they're synthetic short varieties, short-term T3 varieties that we can have. But it's also time to look at dessicated thyroid extract as another avenue to help alleviate symptoms.

There'll be more studies going on about this, because there's been such enticing data that we are seeing that when we do have the lab biomarkers and the other things that we can tangibly touch and see-- when those look normal, the patients still don't feel normal. So that is where this may be an option that we should look at this and critically look at this.

We also mentioned that no matter what you use or choose to use in your thyroid replacement hormone therapies-- and we will be giving you options-- identify those patients who need the combo drugs and how to give them. We need to again remember, primarily, number one, when we treat patients with thyroid disease, it's a highly subjective.

It's their symptoms, not just the metabolic symptoms that we see-- EKGs, bowel movements, and the like-- but there is subjective symptoms that we can't measure. And so we want to alleviate their symptoms. And then we also want to prevent. That's why we have to intervene early. Identify them quick. Prevent and mitigate complications of hypothyroidism.

And if anybody seen what it looks like down the road with hypothyroid-- and I have in fixed edema-- and the pathologies that goes with it that we could have maybe stopped along the way, because we paused to see that there might be another option out there. Then maybe there's more we can give these patients.

And I think and I hope that I've been able to share with you what those options can be. And I encourage you to look and get a look at another avenue for adding combination therapy, T4 and T3 in the form of dessicated thyroid hormone.

I've been using it off and on for many, many years. I go right along with the ATA guidelines. I do, do that. And being a pathophysiologist as well, I'm very interested in how things work. But I want you to know that as an option. And it can be used very safely and surprisingly easily in your clinics.

Just make sure the patients understand what you're trying to do, that it takes time for there is thyroid hormone penetrating the body-- these hormones affect every cell in the body; so it takes a while to get there-- to be patient but that you care. You understand, and you want to help them. And that will go a long way for not only getting good laboratory biomarkers but you're also going to get a patient who feels better quality of life and a patient who you may just be able to live not only better but longer.