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Q & AS Dr. John C. Lowe

How to Know when You're Overstimulated by Thyroid Hormone Aug.8, 2009

Q: My family doctor is wonderful. She agreed to take me off Synthroid and help me in using Thyro-Gold. I'm doing so much better on HSF that she and I are excited. She's on board with my HSF treatment, but has a question. She asked if we're not to use my TSH and thyroid hormone blood levels, how can we tell if I take too much thyroid hormone and get hyperthyroid?

Dr. Lowe: Please give your family doctor my best regards and my thanks for her cooperating with you. I hope more clinicians will emulate her and help their hypothyroid patients by taking them off T4 products and having them use Thyro-Gold or prescription desiccated thyroid products, such as [Armour Thyroid](#). Before I address what you're concerned about, I'd like to clarify a point; by clarifying it, I'll have to rephrase your question.

Proper Terms. You mention possibly becoming "hyperthyroid" from taking too much Thyro-Gold. Some people occasionally do take too much of their thyroid hormone product. The product might be Thyro-Gold or any other one on the market. When someone takes too much, the excessive exposure of his or her tissues to thyroid hormone overstimulates some of them. However, the proper term to describe the tissue overstimulation is not "hyperthyroidism."

Hyperthyroidism is the production of excessive amounts of thyroid hormone by the thyroid gland. That's all the term denotes. The term does not mean that the person's tissues are Overstimulated. When someone's tissues are overstimulated by thyroid hormone, we call the syndrome "thyrotoxicosis." This term literally means tissue overstimulation by thyroid hormone.

Most clinicians I've talked with haven't understood the distinct meanings of the terms hyperthyroidism and thyrotoxicosis. I believe it's important, however, for patients who are guiding their own treatment to know the difference.

The reason it's important to know the difference is that not understanding it can lead to false beliefs. The person who has an overly active thyroid gland and is in fact overstimulated by too much thyroid hormone typically has a low TSH and high thyroid hormone levels. The low TSH and high thyroid hormone levels in his or her case, are truly due to hyperthyroidism. From this fact, a false belief can arise: that is, anybody who has low TSH and high thyroid hormone levels must be hyperthyroid.

Another false belief also arises: that "hyperthyroid" blood levels of TSH and thyroid hormone and tissue overstimulation are one-and-the-same. But this is *not* the case. *Many* people who have low TSH and high thyroid hormone levels are actually *underregulated* by thyroid hormone. I know this from performing comprehensive metabolic evaluations for hundreds of patients and documenting this pattern of lab values in many of the patients. Unfortunately, though, most conventional clinicians today falsely believe that anyone who

has the lab test pattern characteristic of hyperthyroidism is *unequivocally* overstimulated by thyroid hormone. This, however, is nothing more than an institutionalized falsehood we can thank the endocrinology specialty for.

The endocrinology specialty has a conspicuous discrepancy none of its members have stepped before microphones to explain: according to the specialty, low TSH and higher-end thyroid hormone levels are harmless to scores of thousands of thyroid cancer patients; for everyone else, however, these blood hormone levels portend devastating adverse effects. If high-enough thyroid hormone dosages to produce these blood levels are safe for thyroid cancer patients, why aren't they safe for other hypothyroid patients?

The endocrinology specialty doesn't have to explain. The evidence is readily available to anyone interested in learning the truth. The fact is that low TSH levels and higher-end thyroid hormone levels are no more harmful to the vast majority of hypothyroid patients than they are to thyroid cancer patients. This lab test pattern clearly is *not* one-and-the-same as tissue overstimulation.

How Best to Test for Overstimulation. If your family doctor and you suspect that you're overstimulated by Thyro-Gold—that is, that you're thyrotoxic—she and you can verify or refute the suspicion easily enough. You can test at home to see whether your basal temperature is too high and your basal pulse rate too fast. And you can lightly touch the palmar parts of your finger tips to your chin to see whether they tremor. (Many of my consulting patients and I called this latter procedure the "Tammy fingertip test" for overstimulation. Tammy discovered and introduced me to the test, and I've never found where anyone else described the test before.)

Your doctor can do an ECG (EKG) to see whether the voltage of the QRS complex is high compared to the voltage on your previous EKGs. She can also test your Achilles reflex to see if it's too fast.

The tests you can do at home and those your doctor can do are far more meaningful tests than your TSH and thyroid hormone levels. If your TSH level is suppressed, or if your thyroid hormone levels are high, you *might* be over-stimulated, but then you *might not* be. I have no confidence in these lab tests as indicators of tissue over-stimulation by thyroid hormone.

The reason I don't trust the lab tests is that I've done hundreds of comprehensive metabolic evaluations for patients. I've run statistics many times to see whether the patients' TSH and thyroid hormone levels correlate with their measures of metabolism. What I've consistently found is that the lab levels *don't* accurately predict which patients have low, normal, or high metabolism. The lab tests therefore don't tell us which patients are understimulated by thyroid hormone, properly stimulated by it, or overstimulated by it.

The TSH and thyroid hormone levels are virtually useless for learning whether a patient is on his or her optimal dose of thyroid hormone. It's far better to use the types of tests I suggested above for your doctor and you to perform.

Overstimulation Form. There is one other step you can take to get a good idea as to whether you're overstimulated or not. That is to fill out a form I created, check off any of the 20 symptoms of overstimulation I listed, and estimate the intensity of those symptoms. By comparing copies of the form you filled out before you started Thyro-Gold and when you were on lower doses, you may see indications of developing overstimulation.

If symptoms of overstimulation develop or become more intense, you should do the home tests I recommended (your basal temperature, heart rate, and a tremor check). Positive test results may be enough evidence for you to decide to reduce your Thyro-Gold dosage. But you may want possible verification by having your doctor follow up with the tests I

recommended she do.

If you do appear to be overstimulated, then it's appropriate to reduce your Thyro-Gold dosage somewhat, perhaps by one capsule. But I caution you not to overdo it and reduce your dosage too much. Too little thyroid hormone regulation can be as harmful as too much. Because of that, finding your optimal dosage is important. That dosage for most people is just short of mild overstimulation, which the overstimulation form can help you identify.

[Thyroid Hormone Overstimulation Form](#)
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