Thyroid Disorder: Why Your Doctor Won't Find Yours Even Though You Have All The Symptoms

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Introduction

I have never let my schooling interfere with my education.
Mark Twain

Early in my medical career at a routine GYN visit, I was told that I had a mass in my right ovary and needed surgery.

What?! I thought, and undoubtedly said. Laparoscopic surgery was not offered as an option. At the time, I lived alone, ran my own medical practice, and was my sole financial support. There was no way I could, or would, put myself in dry dock for gynecologic surgery. I was very familiar with hospitals and their routines. I did not have any romantic notions about what the experience was going to be. I would be a huge chunk of meat on a slab, one of many that got 'processed' through the OR every day.

I run high anxiety on an average day. This event would trigger absurd levels. I would be spring-loaded. It would be difficult for the hospital staff to understand me, and for me to identify with their perspectives. It would be an interpersonal disaster.

I was having no symptoms whatever from this mass. Couldn't we slow this down a bit and get some idea of a diagnosis without a major, life-disrupting event? Apparently we could not, in the opinion of the professional with whom I spoke.

The usual pressure was being applied. The C word was being liberally invoked. I would have had to be a lot more scared of cancer than I was of surgery or of going into a huge financial hole to have that influence me. I would have had to know nothing about pathology or any of the other things that I had studied in medical school.

There were many things that right lower quadrant masses could be. The surgeon really could not relate to the idea that I would sooner have catapulted myself into lunar orbit than experience major surgery. So we had a friendly, collegial parting of the ways.

I figured that if I had cancer, I should be sick. I never did believe the 'silent killer' propaganda. I had interviewed lots of patients with cancer. They were sick. They had been having symptoms for years. Either they, or their doctor, or both, had been ignoring them.

There were three terribly lonely years after that while I watched what evolved and

thought about what to do. I spoke to no one, because I knew if I said one word to anybody--parents, friends, colleagues -- the pressure would be on again. I was concerned, but I am also strong-willed. My medical degree had to mean something.

I researched the possibilities for right lower quadrant masses. I read about the common tumors, and the more grisly, rare ones. It could be anything, but it probably wasn't. It was probably some ordinary, garden variety mass.

I researched the percentage chances for each of these. I had some background in the human body, and I certainly had final say over what was going to happen to me. I stayed silent until I knew that if the mass had been cancer, I would have been dead already. That was it. From the information I had gathered and the symptom complex as it evolved, the diagnosis was made. It was endometriosis.

So now I had a diagnosis, but I still had endometriosis. The mass was getting larger and more tender, no question about that. I had been taking the vitamins and herbs that were supposed to help. They had no impact. I was starting to accept that I might have to calm down and choose surgery, when my mother came to visit.

My mother handed me a book called *The Immune Power Diet* by Thomas Berger, MD. She often gave me books that she was curious about but did not have the time to read. I devoured them. Berger claimed that there are seven foods that frequently provoke symptoms. These foods are wheat, corn, soy, sugar, dairy, eggs, and Baker's and brewer's yeasts. He called them the 'sinister seven', and he listed the symptoms and disease states that these foods could cause in a sensitive individual.

The list was long and included may organ systems. I was stunned. I had heard nothing about this in medical school or from mainstream therapeutics. The list included pre-menstrual syndrome, but not endometriosis. Never at a loss for clinical innovation, I reasoned that if these foods could cause all these other symptoms, perhaps they could cause endometriosis. I stopped eating them immediately. Within twenty-four hours, the right lower quadrant pain that had been backing me into a corner was gone. *GONE!* - the sword of Damocles that had hung over my head for three years!

And then I got it:

They really don't know all there is to know about healing the body in mainstream medical circles….

What else don't they know?

Now I was on fire. I researched the Internet and took every course I heard about. I took courses in Functional Medicine, Orthomolecular Medicine and Psychiatry, Naturopathy, Chiropractics, Nutrition, Homeopathy, and Herbal and Energy Medicine. If it seemed at all rational to me, I studied it.

I met a lot of like-minded people along the way and learned that many people were discontent with mainstream therapeutics. I learned about the objective problems and conflicts of interest with which the industrial medical complex is riddled. I learned that mainstream medicine and all of its major journals ***are owned*** by the pharmaceutical industry, through its powerful lobbying, grants for research, funding chairs at universities, impact on medical literature, and the phenomenal amount of money it can afford to spend on advertizing. Pharmaceutical firms charge extremely inflated prices for their products, no matter what they say about how much it costs to bring a new drug to market.

I have seen thoughtful people go through agony because they differed with their mainstream clinician. With or without medical background, I have seen parents make the wrong choice, vaccinate for example, and have their child descend into autism. I have stood by while friends and neighbors followed mainstream advice and developed autoimmune and inflammatory disorders. Once a patient has

come to clarity about taking a position that differs from the mainstream recommendation, any interaction with a mainstream clinician can result in contention and assault.

This e book addresses fundamental issues that are important for the diagnosis and the resolution of your thyroid symptoms. It covers how your thyroid gland functions, how thyroid hormone impacts your cells, and why common thyroid symptoms such as low energy, falling hair and inability to lose weight can worsen at menopause.

This is an e-book for any person who wants to take greater responsibility for their own health.

Since no book can possibly anticipate all of your questions, I am offering you an Exploratory Conversation. This is an easy to get, thirty-minute conversation with me. It can clarify the confusion you may have about your health issues. You get my direct input on your thyroid and other symptoms. I answer your questions, make recommendations, and point you towards your next step. My fee for this service is $119. Email me at NancyMullanMD@aol.com and ask for an Exploratory Conversation. It will be straight talk about getting relief and getting rid of your symptoms.

Thyroid disorder -- What is the story?

Thyroid disease is the most common problem affecting your body's hormone secreting glands. An estimate based on statistics gathered by the American Association of Clinical Endocrinologists indicates that approximately 27 million Americans — as much as seven to eight percent of the population — have some form of thyroid disorder. And, according to this estimate, roughly half of these sick and suffering people remain undiagnosed.

Eighty percent of thyroid problems produce an underactive thyroid gland, or hypothyroidism. The other twenty percent produce over activity, hyperthyroidism. Women constitute about 80% of Americans with thyroid disease. Women are also five times more likely than men to develop an underactive thyroid.

Thyroid *autoimmune* disease is a condition in which the body makes antibodies that attack the thyroid gland and its function. This is the most common autoimmune disease in the US. Only one-third of those with thyroid autoimmune disease are ever diagnosed. Runaway environmental pollutants and the tens of thousands of new chemicals in our environment are one cause of autoimmune thyroid problems.

Another cause is a genetic mutation which leaves your body unable to silence

your immune system adequately to keep it from attacking the cells of your thyroid. Your body wrongly attacks your thyroid gland, which becomes inflamed, ultimately producing non-optimal amounts of active hormone.

Why is thyroid hormone so important?

The function of your thyroid is central to your overall well-being. Every cell in your body, including the cells in your brain, needs miniscule amounts of thyroid hormone to function properly. Thyroid hormone regulates cell temperature, energy production, cell function, cell growth and your body's metabolic rate.

When your thyroid hormone is low or not functioning optimally, you may experience decreased energy, unstable or unpleasant mood, decreased resistance to infection, increased inflammation, altered fat metabolism or one of many other problems.

Diminished active thyroid hormone levels in the elderly are associated with lowered attention, depression, increased mortality, and lowered ability to perform the activities of daily living. Low thyroid makes any illness worse.

Why there are so many problems diagnosing thyroid disease?

Twenty-six thousand people at a Colorado State Fair volunteered to have their thyroid function tested. They submitted to routine blood testing and filled out a short questionnaire. The blood tests used were not highly sophisticated tests; they were just traditional testing for thyroid problems.

The subsequent study was published in 2000. The Colorado Thyroid Disease Prevalence Study disclosed that 10% of the study participants had abnormal thyroid function that had not been discovered by that person's doctor. So, **thirteen million** people nationally may have undetected thyroid disorder, most of them being women.

The model that doctors are still using to describe to patients how the thyroid gland works is hopelessly old and simplistic. Doctors use this traditional model because it is true, in part. But it is only a very small part of the big picture of how thyroid hormone is made, regulated and functions in your body.

Thyroid stimulating hormone (TSH) is produced in a part of your brain called the anterior pituitary. TSH from the anterior pituitary then stimulates your thyroid gland to produce thyroid hormone. When a sufficient amount of hormone is produced, a feedback loop tells your brain to slow down the production of TSH.

When TSH production is diminished, the stimulation of your thyroid gland to produce hormone is lessened. When the amount of thyroid hormone in your blood drops too low, your brain gets the signal to produce more TSH, and the production of thyroid hormone goes back up again.

This model is being used to justify the common practice of testing **only TSH level** to screen for thyroid disorder. The function of the most central metabolic gland in your body, the gland that regulates your cell temperature, energy production, cell function, cell growth and the metabolic rate of your entire body, is being assessed by **one test only**. This is the current standard of care. With increased medical test rationing under the impetus of medical care cost containment becoming mandatory, there is little hope of getting comprehensive thyroid testing from the usual health care provider.

If you go to your doctor with the most obvious symptoms of low thyroid function and your TSH measurement comes back normal, he will tell you that your problems are not due to low thyroid. You then may go on a years-long wild goose chase trying to find out why your hair is falling out, you are tired all the time, you can't lose weight, and your skin is sagging.

Cholesterol is one of your body's important fatty acids. Thyroid hormone

balances fatty acid metabolism. So, if you are low thyroid and your doctor has not figured that out, your high cholesterol will be treated with pharmaceuticals instead of diet, exercise and corrected thyroid hormone levels.

Basing thyroid treatment decisions on TSH measurement alone is totally unsuited for detecting subtle thyroid failure. The thyroid system in your body is much more complex than the current model describes. TSH reflects the status of only one kind of thyroid hormone receptor, the one in the anterior pituitary of your brain. There are different types of thyroid receptors on different organs in your body, in different areas of your body, and even in different areas of a particular organ in your body. Using TSH from the anterior pituitary alone to determine the status of thyroid hormone function in your entire body is simplistic, to put it mildly. It is analogous to using the thermostat in one room of a hotel to decide the temperature for every single room in the building.

Thyroid receptor sites come in different varieties even when they are on the same organ. They differ in the ways in which they bind thyroid hormone and the ways in which they send the signal that the binding of the hormone initiates. Certain substances can block the binding of active thyroid hormone to its

receptor site. And what these substances are can be different for different body sites.

These are among the many factors that impact the way thyroid hormone works in your body. It is complicated, and it gets even more involved. The thyroid gland produces T4 that is the storage form of thyroid hormone which is found in your bloodstream. T4 circulates around in your blood until it is transported into one of your cells. Inside the cell, T4 is converted into T3. The 'four' and 'three' refer to the number of iodine molecules that the thyroid hormone contains. T3 is the active form of the hormone. Iodine is central to both the formation and the activation of thyroid hormone. Iodine deficiency in patients is rarely diagnosed, yet it is a common cause of low thyroid and thyroid gland dysfunction.

There are many factors that can inhibit the conversion of T4 into T3. Nutrient deficiencies, fasting, certain medications, aging, alcohol, cigarette smoking and stress, will all inhibit this conversion, as will fluoride and non-fermented soy products. The conversion can be deterred by any agent that displaces iodine from the thyroid hormone molecule. One example is fluoride, the aluminum industry waste product alleged to prevent tooth decay. The scientific evidence for

its actually preventing tooth decay is scant. (See www.drmercola.com) What using it in dental materials and municipal water supplies prevents for sure is the producers of aluminum's having to spend money to dispose of this toxic chemical. Instead, it is sold to toothpaste manufacturers, dentists and municipalities that put it in their water supplies. I am continually stunned at how literate people, speaking the same language, living in the same country, can view this issue from such divergent viewpoints. Well, follow the money, as they say.

Other factors can impact either the formation or the function of thyroid hormone. They include

- the effective transport of T4 to into the cell
- the capacity of T3 to function actively once it returns to the intercellular environment, i.e. once it gets back out of the cell into the blood stream
- the responsiveness of the thyroid receptor sites on the different organs of the body to the T3
- and, finally, the presence or absence of other hormones and neurotransmitters that are important for thyroid hormone function. For example, estrogen is a synergist for thyroid hormone. It makes the function of thyroid hormone stronger. When estrogen levels drop at

menopause, thyroid hormone potency is negatively impacted. So, you get the symptoms of menopause and low thyroid at the same time.

The conversion of T4 into T3 inside the cell is also not so simple. When T4 goes into a cell, an enzyme called a de-iodinase must remove one iodine molecule to make it intoT3. Then T3 comes back out of the cell and goes into the blood stream to its end site, the place in your body where it works.

There are different types of de-iodinases that function in different organs. There are different de-iodinases for different areas of your body. And the ability of any of these de-iodinases to function will depend upon the environmental conditions they encounter at that particular location in your body, such as pH and the ratio of pro-oxidants to anti-oxidants.

Finally, in 2003, the British Medical Journal acknowledged that, "…A judicious initiation of [thyroid hormone] treatment should be guided by clinical and metabolic presentation and thyroid hormone concentrations and not by serum TSH concentration." (British Medical Journal 2003; 326:311-312).

This medical authority is acknowledging that the treatment of hypothyroidism is much more complex than giving a standard dose of the standard form of thyroid

hormone if your TSH is high. Proper treatment also involves the correction of whatever condition has put you into the low thyroid state. Appropriate treatment may involve careful trials of different forms of thyroid hormone to find the one that is right for you.

If your thyroid disorder is missed, not only do you feel ill, but also you may have other symptoms that get treated inappropriately. The most egregious of these is high cholesterol. Fatty acid metabolism depends upon appropriate thyroid hormone activity. Cholesterol is a fatty acid. High cholesterol can be a symptom of low thyroid hormone, but if your doctor does not find your thyroid disorder, you are liable to be given many pharmaceuticals for multiple problems. Some of these medications interfere with important biochemical processes in your body and have dangerous side effects, like drugs for lowering cholesterol. These medications famously interfere with the production of Coenzyme Q 10, which is needed for your body's energy production. So now you have low thyroid hormone activity and are also on a medication that interferes with energy production. It's no surprise if you cannot get yourself off the floor.

Below are the common symptoms of low thyroid hormone. If you have these symptoms, do not let your doctor tell you that your thyroid is OK unless he has

tested thoroughly and is aware of the facts I have just outlined for you.

- Significant fatigue, lethargy, sluggishness, or history of low thyroid at an earlier age
- Hoarseness for no particular reason
- Chronic recurrent infection(s)
- Decreased sweating even with significant exercise
- Depression, to the point of being a bothersome problem
- A tendency to be slow to heat up, even in a sauna
- Constipation despite adequate fiber and liquids in diet
- Brittle nails that crack or peel easily
- High cholesterol despite good diet
- Frequent headaches (especially migraine)
- Irregular menses, PMS, ovarian cysts, endometriosis
- Unusually low sex drive
- Red face with exercise

- Accelerated worsening of eyesight or hearing
- Palpitations or uncomfortably noticeable heartbeat
- Difficulty in drawing in a full breath for no apparent reason
- Mood swings, especially anxiety, panic or phobia
- Gum problems
- Mild choking sensation or difficulty swallowing
- Excessive symptoms of menopause, not well relieved with estrogen
- Major weight gain
- Aches and pains in limbs unrelated to exertion
- Skin problems like adult acne, eczema, or severe dry skin
- Vague and mildly annoying chest discomfort, unrelated to exercise
- Feeling off balance
- Infertility
- Annoying burning or tingling sensations that come and go

- The experience of being colder than other people around you
- Difficulty maintaining standard weight with a sensible food intake
- Problems with memory, focus or concentration
- Excessive amounts of hair that come out in you brush or in the shower drain, hair loss
- Difficulty maintaining stamina throughout the day

Have you heard enough to be convinced that it is really important to diagnose thyroid problems accurately?

The physical signs of low thyroid hormone function include:

- low basal temperature in early morning (average of less than 98.0 degrees over 7 days)
- slow movements, slow speech, slow reaction time
- muscle weakness
- thick tongue (tongue seemingly too big for mouth)
- swelling of feet

- swelling of eyelids or bags under eyes
- decreased color of lips or yellowing of skin
- swelling at base of neck (enlarged thyroid gland)
- asymmetry, lumpiness, or other irregularity of thyroid gland
- swelling of face
- excess ear wax
- dry mouth and/or dry eyes
- noticeably cool skin
- excessively dry or excessively coarse skin
- especially low blood pressure or slow pulse rate
- decreased ankle reflexes or normal reflexes with slow recovery phase
- loss of outer one-third of eyebrows

You can have these symptoms and see these physical signs with conditions other than thyroid disorder. Also, you can have syndromes that may exist concurrent with thyroid disorder. So, you really need a thoughtful, concerned,

well informed clinician to look at this with you.

The connections between hypothyroidism, autism and other psychiatric/neurologic disorders

Balanced thyroid hormone is intimately connected with brain development during the period beginning when you are still unborn and extending through the first two to three years of your life. Thyroid hormone regulates the number of brain cells you develop, their migration to the right site in your brain, and their differentiation into the kind of cell appropriate for that region. Thyroid hormone also regulates development of cells that make neurotransmitters, important communication molecules in the brain.

Evidence supports a link between hypothyroidism and autism. One of the most effective therapies for autism spectrum disorders and pervasive developmental delay is a gluten-free diet. Recent studies indicate that gluten free diets can also resolve the antibodies that form against the thyroid in autoimmune thyroid disorder.

Mitochondria are the energy producing units in your cells. Mitochondrial function

and the ability to form and absorb appropriate forms of folic acid are regulated by thyroid hormone. Mitochondrial disorder and autism frequently occur together.

The role of thyroid hormone in psychiatric disorder is also pivotal. Besides the obvious correlation between the symptoms of low thyroid and psychiatric symptoms, there are other ways in which disturbed thyroid hormone function can produce psychiatric or neurologic disorder.

Hypothyroidism, cholesterol lowering medications, and dementia

Estrogen is especially important to your brain. It maintains the integrity of your brain's tissue. You lose function in key neural structures when estrogen levels drop. Either too much or too little estrogen can cause depression, which is related to why women are twice as likely as men to get depressed.

Estrogen is known to have a protective effect on the motor system involved in Parkinson’s disease. Low estrogen may lead to muscle twitches and restless legs, among worse symptoms and disorders.

Estrogen also selectively enhances the main site of memory in your brain. Earlier

I discussed the medications used for high cholesterol, some of which are called 'the statin drugs'. These drugs interfere with estrogen production by inhibiting the enzyme HMG-CoA-reductase. This enzyme is necessary for cholesterol production in the brain. Patients taking HMG-CoA-reductase inhibitors get dementia at an earlier age than those not using these medications.

Hormones and neurotransmitters

Cholesterol is the precursor needed to make estrogen, progesterone and testosterone, your sex hormones. Sex hormones are essential to proper neurologic and psychiatric function. Hormones impact your mood and brain via important communication networks in your body. Every biologic function, every brain function, every cell function, is under nervous system control by way of small protein molecules called neurotransmitters (NTs). NTs are the messenger molecules in your nervous system's network that coordinate all of the various functions in your body.

NTs function like a key. The receptor for the neurotransmitter (NT) embedded in your cell wall is like the lock. When the NT fits into the receptor, it induces your

cell to perform the function involved with the particular NT/receptor system.

NT receptor sites are present in every organ and system, just as estrogen receptors are. There are receptor sites for NTs located in your gastrointestinal tract, on your heart and circulatory system, your endocrine organs, and your immune system. Receptor sites for NTs are everywhere.

Your most important relaxing NT is serotonin. It is your 'feel good' NT. It modulates mood and pain pathways. When serotonin drops, it causes depression, anxiety, sleep disturbance, memory loss, impaired concentration and increased pain sensitivity.

Estrogen supports serotonin. They strengthen one another. So, when menopause causes your estrogen levels to drop, your brain function actually declines, and your emotions may become erratic as well.

Serotonin impacts your thyroid gland also. Estrogen and serotonin both enhance thyroid hormone production. There are receptor sites for serotonin in your brain that have a direct effect on how much thyroid stimulating hormone (TSH) your anterior pituitary can produce when it gets a low thyroid hormone signal. When your body needs thyroid hormone, you would expect your TSH level to be

elevated. Elevated TSH is still the only test for low thyroid function that many doctors acknowledge.

But, if you do not have enough serotonin, the ability of your brain to make TSH is blunted. This is scientific fact. There is no dispute about this. With too little serotonin, you may have low thyroid hormone, but your brain cannot make TSH. So your TSH level will be low. And because your TSH is low, your doctor will assume that your thyroid is fine.

Thus, the <u>one test</u> that your doctor relies on to detect thyroid disorder may actually reflect only low serotonin.

Beyond that, when thyroid function is diminished, your adrenal gland function is reduced as well. So now you are low estrogen, low serotonin, low thyroid, and low adrenal. In all, you feel terrible. And your doctor does not have a clue.

Convinced?

The thyroid/adrenal/estrogen/serotonin connection is only one of many important molecular biologic connections in your body. Every day scientists learn more about these important interconnections. It can take absurd lengths of time for this information to filter down to the doctor treating you.

YOU are the one responsible for your own health. Do not delude yourself about which direction healthcare is taking. Medical care cost cutting has just begun. Not only are doctors using only one inappropriate test to uncover dysfunction in the most central metabolic gland in your body, but in time they may need permission to do even this one test.

If you think you may have undiagnosed thyroid disorder, or inadequately treated thyroid disorder, get an Exploratory Conversation with me. I will

- speak with you about the symptoms you are having
- give you an idea of what may be causing them
- address the interventions that you may have already tried
- give you information about why they may not have worked, and
- discuss what you need to do next to make progress.

Get my input on your healthcare issues, thyroid or not. Contact me at NancyMullanMD@aol.com. You can get an Exploratory Conversation with me In which I will go over your symptoms, review whatever lab tests you send me, make recommendations for you and give you a direction in which to go. I will leave you feeling less confused or hopeless. An Exploratory Conversation does not involve becoming my patient or any significant commitment to me. The fee is $119. It is an incredible value for 30 minutes of my

clarifying input.

If you are feeling lost about your healthcare direction, or you are just not getting all of the answers you need to get well, please contact me at NancyMullanMD@aol.com. I can give you information that will relieve you. It will reduce the burden that you are experiencing. There is a way to get well. Let me point it out for you. Get started right away!

Biography

Dr. Mullan is well known for being able to solve difficult health problems. She works with people who are struggling with thyroid and other significant illness, who are willing to use diet and genetics based nutritional supplementation, and who want to increase well being and energy, enhance immunity, lift mood, fine tune genetic function, and get their lives back.

Dr. Mullan has a passion for precision and getting it right. She states, “People who are sick with thyroid problems can be desperate for symptom resolution. Their lives can be devastated by fatigue and other impairments. I want to offer them something better than mainstream misdiagnosis.” And she does this. Dr.

Mullan negotiates the labyrinth of thyroid illness to finally get symptom resolution.

Dr. Mullan has studied at a number of exceptional institutions: the University of Pennsylvania, Tufts University School of Medicine, and the University of Chicago Hospitals and Clinics. She excels at integrating the results of biochemical and genetic testing into sustained clinical improvement for you. She has succeeded with patients who confounded the specialists at Massachusetts General Hospital, the Mayo Clinic, the Cleveland Clinic, Stanford, and many well-known integrative medical doctors. When recommending her, her patients say, “This is the woman you need to talk to. She really knows how to handle tough clinical problems.”

Dr. Mullan’s specialty areas are MTHFR+, Methylation Genetics, and genetics based nutritional supplementation. Within this context, she most often works with Thyroid Disorder, Chronic Fatigue Syndrome, Lyme Disease, Psychiatric Disorders, Autism Spectrum Disorders, Women’s Health Issues, Gastrointestinal Disorder, and Heavy Metal Toxicity. She can teach you what you need to know about how to get well!

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