

# Are you being Treated Correctly for Hashimoto's: Which may in Fact be Secondary to the Fact that an Autoimmune Disorder/Disease may be the Primary Cause of Your Problem

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## Review Article

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## ABSTRACT

The production of Antibodies is produced by your own body's immune system that recognizes the Thyroid gland as an invader and then attacks it. Thyroid gland is responsible for the production of hormones that control your metabolism. Even when the correct diagnosis of Hashimoto's is diagnosed, there are failed treatments, too many to name, and expensive medications, some of which have very scary side effects.

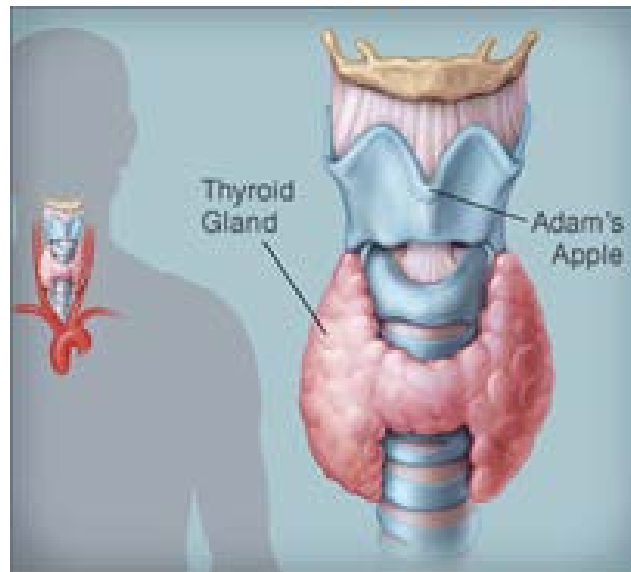
## INTRODUCTION

So, let us begin with, just what is an autoimmune disorder/disease? An Autoimmune disorder/disease often causes either an underactive or over active auto-immune system.

In studies conducted where the auto-immune system is being overly active, the patient's own body will launch an assault against itself and cause destruction even though it is there to protect you. Thus: It is named as an (autoimmune disease). Illnesses that lack immunity are diseases which can reduce the body's ability to battle these aggressors and will result in the body developing infections. In essence it begins to slowly destroy the targeted area in the Body <sup>[1]</sup>.

In studies of Hashimoto's thyroid disorder; the production of Antibodies are produced by your own body's immune system that recognizes the Thyroid gland as an invader and then attacks it. This constant attacking by the immune system on the Thyroid gland will gradually destroy the very cells, which makes your actual thyroid hormone. It is this small concentration of thyroid hormone, that creates the hypothyroidism, usually over time though, which could take many months or even years. Symptoms can often include but not limited to a complaint of low energy, sadness, reduced or slower bowel activity, excessive weight gain, parched skin, and subject to being susceptible to colder temperatures. A daily dosage of artificial thyroid hormone medication will help in reestablishing normal body levels and functionality, but it will most certainly not cure your problem <sup>[2]</sup>.

Looking at the picture to the right, you can see that the Thyroid gland is positioned at the front base of your neck, just below the Adams apple (**Figure 1**). This gland is responsible for the production of hormones that control your metabolism. This includes your heart-rate and how quickly your body converts calories to energy from the foods that you consume. How Hashimoto's disease occurs is still an uncertainty; however, researchers believe there are several main reasons that must be studied, including genetic and hormones <sup>[3]</sup>.



**Figure 1.** Thyroid gland and Adams apple.

Hashimoto's affects nearly seven times more women than it does men, which has led to the belief that sex hormones may be an important reason. For example: some patients develop thyroid disorders during the first twelve months after giving birth. Even though this problem usually resolves itself, up to 20% of these women will go on to contract Hashimoto's, even up to years after the fact <sup>[4]</sup>.

Also, there are some types of medications as well, that may influence the initial thyroid disease, such as too much or too little iodine. Small quantities of iodine are required to help balance the production of thyroid hormones. Conversely, too much iodine, can lead to hyperthyroidism, or "Graves' disease", which is also considered as an auto-immune disease <sup>[5]</sup>.

In the beginning symptoms may be absent of having Hashimoto's disease or may not register with blood tests or if they do, may be so innocuous that the provider doesn't suspect anything until many years afterward. You may notice that during a routine examination the provider will feel around the base of your neck/throat. This is when any enlargement or swelling around the base of your neck could be detected and alert the provider that this swelling or often referred to as a goiter, is the first indication of a potential Thyroid problem. You may even experience difficulty in swallowing <sup>[6]</sup>.

Unfortunately, women are more prone to being detected with Hashimoto's than men by at least a ratio of 10:1 and are between the ages of 30 and 50. Many women who visit their primary care giver, will try to explain their condition, but usually, once lab results come back and the Physician see's normal TSH levels, they will immediately be convinced that the woman is in need of psychological treatment and nothing more. This is where modern medicine is failing in helping many women who attempt to receive medical help for their condition <sup>[7]</sup>.

As stated earlier, Hashimoto's disease causes your body to continually attack itself, which eventually will render your Thyroid gland inactive or even "kill" it. This continual assault on your Thyroid gland, which can be on-going for a long time, including "years", will cause your hormone levels to swing like a pendulum from high AND then to low, giving you the initial feelings of different emotions, such as depression, sadness and many other emotional issues, that can be considered as different mental or emotional symptoms, that are really being influenced by your levels of Thyroid hormones <sup>[8]</sup>.

When the pendulum swings low, during the time when the thyroid hormone is in low production, you may feel a severe "low energy" level, unexplained sadness and susceptibility to the cold and do not think clearly and are in a constant state of what is considered as a "brain fog" and when the pendulum swings high, during the time with the thyroid hormone is elevated, you may feel stressed out, sweaty and nervous and you probably have sleeping problems as well <sup>[9]</sup>.

Just because you are diagnosed with Hashimoto's, doesn't mean the regiment of treatment will always work, as there are far more treatment failures than there are of successes, and with high costs of treatment/medications in some instances, and some of those medications have very frightening side effects. They will tell you there is no known cure for Hashimoto's or any other autoimmune disorder, and that the best you can ever expect is some sort of remission, but I for one do not agree with this.

So, just what are some of the signs of Hypothyroidism, which would indicate Hashimoto's?

- Multiple sensitivities to certain foods; premature hair thinning or even hair loss.
- Intestinal problems such as a leaky gut (we'll discuss this more in detail later on), diarrhea, constipation or sometimes both; Tenderness and painful joints.

- Unexplained weight gain; challenges with being sad a lot, and many other emotional issues that you may be struggling with; also, High Blood Pressure; note, in a blood pressure reading, the diastolic number represents the force of blood against your artery walls while your heart is at rest or in between heartbeats. The systolic number on the other hand, is the number that represents the pressure on artery walls while the heart is beating. Your blood pressure reading is normally expressed as the systolic over the diastolic, such as 120/80 mmHg.

- Your voice may become somewhat hoarse and your muscles might ache or become weakened; and brittle or thick nails.
- Generally, there is sensitivity to colder temperatures, swollen facial features and even heavy or extended menstrual cycles called (Menorrhagia).

Usually, with ANY sort of autoimmune disorder, you may experience lower GI issues. This is because the autoimmune disorder is causing you intestinal disorders. This is called a “Leaky Gut”. Remember, I said, I would explain what a “leaky gut” is. So, what exactly is a “leaky gut”, well, this is what people have with this type of disorder, it is due to food particles that are not fully or totally digested properly and pass through intestinal spaces, of the epithelial lining which becomes more permeable, thus allowing for these food particles to pass easily through your gut and into your intestines. What passes through are usually as I said, food particles, but to further define those food particles, we are talking about bacteria, viruses and toxins <sup>[10]</sup>.

If you do have a leaky gut, then you will probably have a leaky brain as well. This is why your digestive problems may be associated with your brain issues as well, i.e. loss of memory, or being in a haze with erratic mood swings and also not being able to sleep well, not to mention unexplained anxiety, and even stress <sup>[11]</sup>.

With Hashimoto’s you can experience incapacitating symptoms which can include:

- Nervousness and abnormal worrying, that can lead to frequent crying at any moment without reason; there is also irritability, stress, fatigue (often referred to as just “low energy” or complete exhaustion and uncontrollable mood swings

The incomplete digestion of certain food proteins, for example, glutens, is just one of many that contribute to an overweight condition, while at the same instance can be responsible for malnourishment at the cellular level. These food proteins always eventually find an organ in which to adopt as their dwelling site.

So, when these incomplete digested food proteins end up on your thyroid, the result will most likely be “Graves” or Hashimoto’s. Additionally, a similar situation will hold true if the proteins conceal themselves in your joints, it will likely create a situation leading to rheumatoid arthritis, and we can go on and on, but I believe you are starting to get the picture?

The body’s immune system starts to react just as it should and seeks out the unfamiliar food proteins to destroy them, but unfortunately, they also attack to the organ or gland they have landed on as well. This is also the root-cause of all pro-inflammatory cytokines, which make you feel as though you are on fire.

But wait, there’s still even more; not only are food proteins a culprit, but so are peroxides, which is another major problem. Hydrogen peroxide,  $H_2O_2$ , a very common product lying around everyone’s home. Well, peroxide only exacerbates the condition. You may not know this, but your body’s cells are constantly producing these peroxides as a normal by-product during the metabolism phase. Once the usefulness of the peroxides are completed in the metabolism phase, the body is supposed to be eliminate them, converting hydrogen peroxide to just simple water and oxygen, however, when you are stricken with Hashimoto’s, this process can then be interrupted, allowing for the peroxides to accumulate as Free Radicals. This in turn will cause elevated levels of antibodies and cytokines, responsible for the inflammation that occurs. So, lowering these hydrogen peroxide levels is imperative to you feeling better.

Are you starting to see the problem why physicians are misdiagnosing and treating only the failing organ/gland, when in fact, they should be conducting tests in order to get to the root cause or source of your problem, because when you suffer with these problems, it becomes a full-blown body experience and not just the thyroid alone? Unfortunately, this is what physicians have been taught to do, i.e., treat the failing organ/gland, NOT the root cause of your medical condition, which you may have now guessed, is in fact your body’s immune system is reacting to the free radicals, which in turn can be from the leaky gut, which allows these undigested food particles, which are those proteins we discussed earlier, that leak through your intestine and wind up on the targeted organs or glands and as I stated early on, just taking a synthetic thyroid does not always resolve your problem, it only masks the real problem and eventually even if you have positive results, it will only be for a short period of time and then your right back to the start of it all again, wondering what’s next (**Figure 2**).

## Symptoms of HYPOTHYROIDISM



Figure 2. Symptoms of Hypothyroidism.

I am certainly not trying to suggest you shouldn't rebuild your thyroid hormone to normal levels, I am only pointing out though that this will not resolve the root cause of your problem, which has to be found in order to understand the cause of the auto-immunity disorder.

Additionally, you may be told that you have a hypothyroid condition, which may be caused by an iodine deficiency or perhaps a cortisol imbalance or even much more. If only more primary care providers would start administering and evaluating more specific testing as a routine procedure, such as testing the antibody levels as compared to your enzyme TPO (thyroid peroxidase) or TG (thyroglobulin). The reason for this is quite simple, because, those antibodies are those proteins in your blood that will look as though they are in the shape of a "Y". They are in the body to watch for foreign invaders that shouldn't be there. Antibodies will seek out these foreign invaders and target them for destruction. This is a good thing, as you need these antibodies.

However, as we discussed earlier, when your immune system is healthy, it targets "self" and "nonself", unless there are invaders, such as bacteria, or toxins, which have found their way onto your thyroid gland. This is when your antibodies recognize a foreign intruder and will then set out to obliterate it as it does for any foreign intruder. This is what your antibodies are there for to do. It's like the body's immune system has received a danger alert and is being called upon to destroy whatever it is, that appears now as the harmful intruder. Unfortunately, though in this case, your antibodies have been tricked into thinking a foreign intruder has arrived, when actually it's your own thyroid gland that is being destroyed and that is when your symptoms will begin.

Part of the action plan by the physician should be to reduce these microscopic food particles (proteins) that get lodged within your thyroid. It will take some time, but an initial start should be to reduce all gluten and dairy products. Additionally, taking digestive enzymes would be excellent for support as well.

So, when your immune system targets thyroid peroxidase enzymes, it is the influence or cause of the Hashimoto's, which over a period of time will cause the hypothyroidism, and unfortunately there's a good chance you will have that condition permanently.

The good news is that there are several supplements you can start on to help get to the source of you own immune disorder:

1. **Pancreatin:** Is often considered a first line of defence that can help reduce intestinal gases or "flatulence" or even just as a digestive aid; especially if you have had your pancreas removed or it fails to function properly. Remember, these undigested particles of proteins are the cause of your "leaky gut". The mechanism of action is to assist and support the improvement of fat absorption, protein and help improve your energy level.

2. **Glutathione:** This is a simple acting molecule but yet is the most crucial molecule your body can have in order to maintain a homeostasis and helps prevent certain diseases, such as “Leaky gut”, Certain Cancers, aging and dementia as well as to promote a healthy heart and prevent many other chronic diseases and much, much more. Glutathione consists of cysteine, glutamine and glycine, all of which is naturally produced in your body.

This supplement has often been referred to as the “master antioxidant” because of its ability to be regenerate on its own in the Liver once a number of free-radicals begin to appear. Again, we must remember, Peroxidase is occurring everywhere in the body to help with the metabolism phase, but once that has happened, we need the ability get rid of the  $H_2O_2$ , by breaking it down to a simple by-product of water and oxygen.

Lastly, glutathione supports and maintains healthy mitochondria, which supports your immune system. Think of glutathione as a recycling plant for antioxidants. Just remember this, Glutathione supplements will not pass the stomach acid unless you use the S-Acetyl L-Glutathione form, which is acid resistant and is absorbed in the intestines much better. The same holds true for the brain barrier, you must use the “acetylated” form as stated above, for optimal neuro support.

3. **Catalase:** Also known as the “anti-rusting” enzyme. Every living organism that is exposed to oxygen has “Catalase.” Again, this enzyme is crucial in converting the free radicals of  $H_2O_2$  to simple water, but note, as I pointed out earlier, the human body needs  $H_2O_2$  for cell metabolism, but once it serves that useful purpose, we must break it down into simple water to avoid any potential harm to our organs or glands, such as the Thyroid gland. Of all the anti-oxidants, Catalase works the hardest. Studies have shown that in just one simple second, one catalase molecule can convert millions of  $H_2O_2$  molecules to simple water. In addition to converting  $H_2O_2$  into simple water, it also converts many other toxins to harmless by products such as nitrites, formaldehyde, ethanol and formic acid.

4. **Vitamin D:** Is often referred to as the “Sunshine Vitamin. Vitamin D is a big supporter of a healthy immune system. Most patients will show a blood level of Vitamin D in the mid-to high 20’s range. Everyone should actually have Vitamin-D3 levels between 60-70 ng.ml for a healthier life.

Currently nearly 80% of the world's population do not maintain adequate Vitamin D levels. This is partly due to Sun Screens that have been used for many years, which are supposed to block out the harmful Rays of the sun, but actually, many people do not realize, Sun Screens, have been over used by people due to fear of too much sunlight.

If you research the truth, about Sun Screens, you will find that we have been blocking the wrong UV ray that can cause Skin Cancer. The UV B is the good UV rays, which allows the conversion of Vit. D3 in the body and protects our skin against skin Cancer, and the UVA we have been letting through, which ARE the Cancer-causing UV rays, which only recently in the last couple of years have Sun Screen producers added the blocking capability of both UVA and B rays. Additionally, Vitamin D can help fight off depression as well, and even the flu.

5. **Selenium:** Selenium (SE) is a trace element in the body, but its function is tremendous. There are many different enzymes in our body called selenoproteins and these require selenium to perform properly. One importance they play is in the Thyroid’s ability to function properly. It also has an importance in DNA replication and the ability to repair damaged DNA, which is an added protection for all cells. One of the Selenium enzymes is named iodothyronine deiodinase, which is there to help the conversion of the thyroid hormone, thyroxine or (T4) into the active thyroid hormone of triiodothyronine or (T3). This is accomplished by the removal of just one iodine ion. So, this is why Selenium is so important for a healthy thyroid.

Selenium is also an excellent anti-oxidant, which can protect against free radicals that exert wear and tear on the human body as we age.

Selenium does not always get enough recognition for healthy Lung support, but selenium helps reduce asthma conditions in many people. Studies have shown that people with lower levels of selenium have more asthma symptoms. The verdict is still out as to whether the low levels of selenium are the core problem of asthma or just the effect on the asthma condition.

## **CONCLUSION**

The purpose of the article is to encourage patients, especially, women, to not be shy or afraid to ask questions AND to challenge your physician, whenever you feel he/she is not listening to you. After all, it is your body and your health that’s at stake.

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