



Thyroid Disorders

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What is the Thyroid?

- The thyroid is a small butterfly-shaped gland inside the neck, located in front of the trachea (windpipe) and below the larynx (voicebox). It produces two thyroid hormones-triiodothyronine (T3) and thyroxine (t4)- that travel through the blood to all tissue of the body.
- Thyroid hormones regulate how the body breaks down food and either uses the energy immediately or stores it for the future. In other words, our thyroid hormones regulate our body's metabolism.



What is the Thyroid Cont.

- Another gland, called the pituitary gland, controls how well the thyroid works. The pituitary gland is located at the base of the brain and produces thyroid-stimulating hormone (TSH). The bloodstream carries TSH to the thyroid gland, where it tells the thyroid to produce more thyroid hormones, as needed.
- Thyroid hormones influence virtually every organ system in the body. They tell organs how fast or slow they should work. Thyroid hormones also regulate the consumption of oxygen and the production of heat.



What is Hyperthyroidism?

- Hyperthyroidism is a condition in which the thyroid gland is overactive and produces too much thyroid hormone. If left untreated, hyperthyroidism can lead to other health problems. Some of the most serious involve the heart (rapid or irregular heartbeat, congestive heart failure) and the bones (osteoporosis). People with mild hyperthyroidism or the elderly may not have any symptoms at all.



What Causes Hyperthyroidism?

- Graves' disease is the most common cause of hyperthyroidism. It occurs when the immune system attacks the thyroid gland, causing it to enlarge and make too much thyroid hormone. It is chronic (long-term) and typically runs in families with a history of thyroid disease or other autoimmune conditions. Some people with Graves' disease also develop swelling behind the eyes that causes the eyes to bulge outward.



Less Common Causes of Hyperthyroidism

- Thyroid nodules- Lumps on the thyroid gland that may secrete too much thyroid hormone.
- Subacute thyroiditis- A painful inflammation of the thyroid typically caused by a virus.
- Lymphocytic thyroiditis- A painless inflammation caused by the lymphocytes (a type of white blood cell) inside the thyroid.
- Postpartum thyroiditis- Thyroiditis that develops shortly after pregnancy.



Signs and Symptoms of Hyperthyroidism

- Feeling too hot
- Increased sweating
- Muscle weakness
- Trembling hands
- Rapid heartbeat
- Tiredness/fatigue
- Weight loss
- Diarrhea or frequent bowel movements
- Irritability or anxiety
- Eye problems
- Infertility



What is Hypothyroidism?

- Hypothyroidism means you have too little thyroid hormone. Another term is an “underactive thyroid.” Hypothyroidism is the most common thyroid disorder. It occurs more often in women and people over age 60. Hypothyroidism tends to run in families.



What causes Hypothyroidism?

- In adults, hashimoto disease is the most common cause of hypothyroidism. In this condition, your immune system attacks and damages your thyroid, so it can't make enough thyroid hormone. Hypothyroidism can also be caused by radioactive iodine treatment or surgery on the thyroid gland, which are used to treat other types of thyroid disorders. A problem with the pituitary gland is another rare cause. Congenital hypothyroidism is present from birth and occurs when the thyroid gland does not develop properly.



Signs and Symptoms of Hypothyroidism

- Tiredness/sluggishness
- Mental depression
- Feeling cold
- Weight gain
- Dry skin and hair
- Constipation
- Menstrual irregularities

These symptoms are not unique to hypothyroidism. A simple blood test can tell whether the symptoms are due to hypothyroidism or some other cause. People with mild hypothyroidism may not have any symptoms at all.



What is Hashimoto disease?

- Hashimoto disease, also called Hashimoto's thyroiditis, is an autoimmune disease. This means your immune system, which normally protects your body and helps fight disease, produces antibodies and attacks the thyroid gland. The damaged thyroid gland is less able to make thyroid hormone and hypothyroidism can result.
- Anyone can develop Hashimoto disease, but it occurs more often in women and those with a family history of thyroid disease. It occurs more often as people get older. People with other autoimmune disorders are more likely to develop Hashimoto disease. The hypothyroidism caused by Hashimoto disease progresses slowly over months to years. Its symptoms vary from person to person.



Signs and Symptoms of Hashimoto Disease

- Enlarged thyroid (or goiter)
- Trouble swallowing
- Intolerance to cold
- Mild weight gain
- Fatigue
- Constipation
- Dry skin
- Hair loss
- Heavy or irregular menses
- Infertility
- Decreased libito



Complications of Hashimoto Disease

If left untreated, hypothyroidism caused by Hashimoto disease can lead to serious complications:

- Goiter, which can interfere with swallowing and breathing.
- Heart problems such as enlarged heart or heart failure
- Mental health issues such as depression, decreased sexual desire, slowed mental functioning.
- Myxedema coma, a rare life threatening condition that can result from long-term untreated hypothyroidism. Myxedema coma requires immediate emergency treatment.
- Birth defects. Babies born to women with untreated hypothyroidism are more likely to be stillborn or premature.



What is Graves Disease?

- Graves disease is an autoimmune disease. The antibodies produced act like TSH and cause the gland to make too much thyroid hormone. This condition is called hyperthyroidism. Although it can occur at any age in men or women, Graves disease is more common in women between age 20 and 50, who often have a family history of thyroid disease.



Complications of Graves Disease

- If left untreated, hyperthyroidism can lead to heart failure or brittle bones (osteoporosis). Pregnant women with uncontrolled Graves disease are at greater risk of miscarriage, premature birth, and having a baby with low birth weight.

Graves disease can also cause swelling behind the eyes that sometimes makes the eyes bulge outwards.



What to do?

- If your client, family member, or yourself experiences symptoms that may be your thyroid, contact your family physician and let them know. Approximately 20 million Americans live with some sort of thyroid disorder. If treated properly you can function normally with most of these disorders.