



# What Is Hashimoto Disease?

## Patient Education Sheet

This sheet focuses on signs and symptoms of, and treatment options for, hypothyroidism due to Hashimoto disease.

### An Overview of Hashimoto Disease

- Hashimoto disease is an autoimmune condition in which the immune system attacks the thyroid gland because the gland is mistakenly identified as a group of foreign cells. As a result of the damage, a person may become hypothyroid because he or she may not have enough normal thyroid cells left to make the amount of thyroid hormone the body needs to work properly.

### The Thyroid Gland—The Basics

- The thyroid is a butterfly-shaped gland located at the base of the neck that lies on either side of the windpipe. It produces and releases thyroid hormone.
- Thyroid hormone affects every cell in the body and controls most of the body's functions.
- The amount of thyroid hormone made by the thyroid gland is regulated by the pituitary gland and the hypothalamus in the brain.
- The pituitary gland releases thyroid-stimulating hormone (TSH), which signals the thyroid to produce more thyroid hormone. When the pituitary gland senses that there is the right amount of thyroid hormone in the body, it will decrease thyroid hormone production.
- Physicians can measure the health of the thyroid gland by measuring levels of TSH.
- Too little thyroid hormone production causes a condition known as hypothyroidism.

### Hypothyroidism and Mild Thyroid Failure

- When a patient has hypothyroidism, he or she may feel tired and cold, have a slow heartbeat, or feel depressed.
- Mild thyroid failure is a mild form of hypothyroidism. In patients who have mild thyroid failure, the thyroid hormone levels are normal, but the TSH level is elevated.
- Patients with mild thyroid failure often do not show any obvious signs or symptoms, but untreated mild thyroid failure may lead to hypothyroidism.

### Diagnosing Hypothyroidism

- People who are most likely to develop Hashimoto disease and hypothyroidism include: women who are age 30 and older, women who are pregnant or have given birth within the last 6 months, people who have autoimmune conditions, such as Addison disease, type 1 diabetes, pernicious anemia, rheumatoid arthritis, or lupus, and anyone with a family history of thyroid disease.
- To diagnose Hashimoto disease, a physician will conduct a physical examination to look for signs and symptoms of hypothyroidism. The physician will examine the patient's neck, where the thyroid is located, to determine whether a goiter is present (a goiter is an enlarged thyroid gland).
- Weight, blood pressure, and pulse will be measured, and eyes, skin, heart, and the nervous system will be examined as well.
- A physician will also conduct laboratory tests, such as blood tests, to diagnose hypothyroidism. The TSH test is the best test for determining thyroid function or the severity of hyperthyroidism. If the patient's TSH level is higher than normal, he or she may have hypothyroidism.
- Thyroid antibody tests will help a physician determine whether a patient's immune system is affecting thyroid function, as is the case with Hashimoto disease. A radioactive iodine uptake test is used to test iodine absorption. The test begins with the patient swallowing a radioactive iodine pill; 6 to 24 hours later, the physician will determine how much of the radioactive iodine was absorbed.

### Treating Hypothyroidism Due to Hashimoto Disease

- To treat hypothyroidism, a physician will most likely prescribe thyroid hormone replacement therapy with a synthetic thyroid hormone called levothyroxine sodium. Treatment will continue for the rest of the patient's life, with a physician monitoring thyroid levels once a year after the correct dose is achieved.

### More Information

- Patients who have further questions should contact their physician.