Hashimoto's Thyroiditis
(Lymphocytic Thyroiditis)

WHAT IS THE THYROID GLAND?

The thyroid gland is a butterfly-shaped endocrine gland that is normally located in the lower front of the neck. The thyroid's job is to make thyroid hormones, which are secreted into the blood and then carried to every tissue in the body. Thyroid hormones help the body use energy, stay warm and keep the brain, heart, muscles, and other organs working as they should.

WHAT IS HASHIMOTO'S THYROIDITIS?

The term "Thyroiditis" refers to "inflammation of the thyroid gland". There are many possible causes of thyroiditis (see *Thyroiditis brochure*). Hashimoto's thyroiditis, also known as chronic lymphocytic thyroiditis, is the most common cause of hypothyroidism in the United States. It is an autoimmune disorder involving chronic inflammation of the thyroid. This condition tends to run in families. Over time, the ability of the thyroid gland to produce thyroid hormones often becomes impaired and leads to a gradual decline in function and eventually an underactive thyroid (Hypothyroidism). Hashimoto's thyroiditis occurs most commonly in middle aged women, but can be seen at any age, and can also affect men and children.

WHAT ARE THE SYMPTOMS OF HASHIMOTO'S THYROIDITIS?

There are no signs or symptoms that are unique to Hashimoto's thyroiditis.

Because the condition usually progresses very slowly over many years, people with Hashimoto's thyroiditis may not have any symptoms early on, even when the characteristic thyroid peroxidase (TPO) antibodies are detected in blood tests. TPO is an enzyme that plays a role in the production of thyroid hormones. If Hashimoto's thyroiditis causes cell damage leading to low thyroid hormone levels, patients will eventually develop symptoms of hypothyroidism (see *Hypothyroidism brochure*). Hypothyroid symptoms may include fatigue, weight gain, constipation, increased sensitivity to cold, dry skin, depression, muscle aches and reduced exercise tolerance, and irregular or heavy menses. In some cases, the inflammation causes the thyroid to become enlarged (goiter), which rarely may cause neck discomfort or difficulty swallowing.

HOW IS THE DIAGNOSIS OF HASHIMOTO'S THYROIDITIS MADE?

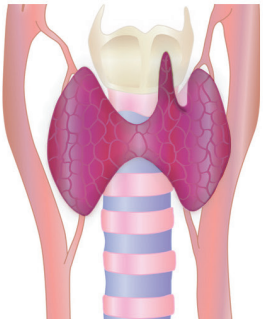
The diagnosis of Hashimoto's thyroiditis may be made when patients present with symptoms of hypothyroidism, often accompanied by a goiter (an enlarged thyroid gland) on physical examination, and laboratory testing of hypothyroidism, which is an elevated thyroid stimulating hormone (TSH) with or without a low thyroid hormone (Free thyroxine [Free T4]) levels. TPO antibody, when measured, is usually elevated.

Occasionally, the disease may be diagnosed early, especially in people with a strong family history of thyroid disease. TPO antibody may be positive, but thyroid hormone levels may be normal or there may only be isolated mild elevation of serum TSH is seen. Symptoms of hypothyroidism may be absent.

HOW IS HASHIMOTO THYROIDITIS TREATED?

Patients with elevated TPO antibodies but normal thyroid function tests (TSH and Free T4) do not require treatment. Patient with only a slightly elevated TSH (mild hypothyroidism) may not require medication and should have repeat testing after 3-6 months if this has not already been done. For patients with overt hypothyroidism (elevated TSH and low thyroid hormone levels) treatment consists of thyroid hormone replacement (see *Thyroid Hormone Treatment brochure*). Synthetic levothyroxine taken orally at an appropriate dose, is inexpensive, very effective in restoring normal thyroid hormone levels, and results in an improvement of symptoms of hypothyroidism. Most patients with Hashimoto's thyroiditis will require lifelong treatment with levothyroxine. Finding the appropriate dose, particularly at the beginning, may require testing with TSH every 6-8 weeks after any dose adjustment, until the correct dose is determined. After that, monitoring of TSH once a year is generally sufficient.

When levothyroxine is taken in the appropriate dose, it has no side effects. However, when an insufficient dose is taken, serum TSH remains elevated and patients may have persistent symptoms of hypothyroidism (see *Hypothyroidism brochure*). If the dose is excessive, serum TSH will become suppressed and patients may develop symptoms of hyperthyroidism or have other side effects (see *Hyperthyroidism brochure*).



FURTHER INFORMATION

Further details on this and other thyroid-related topics are available in the patient thyroid information section on the American Thyroid Association® website at *www.thyroid.org*.

For information on thyroid patient support organizations, please visit the *Patient Support Links* section on the ATA website at *www.thyroid.org*