

Hashimoto's Thyroiditis

Hashimoto's Thyroiditis (hah-she-MOH-toes thyroy-DIE-tuss) is the common name for autoimmune hypothyroidism. It is one of the most common causes of hypothyroidism in school age children and can result in an underactive thyroid gland. It occurs more often in children who already have other auto-immune conditions, such as Type 1 Diabetes and celiac disease.

Cause

The immune system works to protect the body from illness and germs caused by viruses and bacteria. It makes proteins, such as antibodies, that recognize and attack the germs to protect the body from illness. Autoimmune diseases occur when the body attacks itself by mistake. Hashimoto's results from attacks by anti-thyroid antibodies. As a result, the thyroid gland becomes inflamed and sometimes swollen and enlarged. An enlarged thyroid gland is often called a goiter. The autoimmune damage can also affect the thyroid gland's ability to function and make thyroid hormones. This can cause the symptoms seen in Hashimoto's.

Researchers are not sure what causes Hashimoto's, but it could be related to genetic and/or environmental factors.

Risk factors

Children who show one or more of these signs are at greater risk of developing Hashimoto's:

- having other auto-immune diseases
- family history of Hashimoto's
- being female
- radiation exposure

Signs and symptoms

Hypothyroidism can affect many parts of the body and can result in many different symptoms. Some can be very subtle, and some are not very specific. These are the most common:

- fatigue (feeling tired)
- hair loss
- dry skin
- constipation
- enlarged thyroid gland
- slow height growth
- increased sensitivity to cold
- frequent headaches
- trouble swallowing
- brittle nails
- unexplained weight gain (mild)
- puffy face
- depression
- heavy or irregular menstrual cycles (periods)
- memory problems

Diagnosis

Your child will go to a doctor called an endocrinologist, who will ask about their medical history and their family's medical history. Your child's endocrinologist will also ask about specific symptoms that your child may have. After gathering that information, they may order blood work, including the following lab tests:

TSH (thyroid stimulating hormone): Blood test for a hormone made in the brain (pituitary gland). It tells how hard the body is working to try to get the thyroid to make more hormone.

Free T4: Blood test for a hormone made in the thyroid gland that shows how well the thyroid is already working.

Anti-TPO Antibody: Blood test for a type of antibody that attacks the thyroid gland. Having these antibodies in the blood is what is used to diagnose Hashimoto's thyroiditis. "TPO" stands for Thyroid Peroxidase, an important enzyme for how the thyroid gland works.

Anti-thyroglobulin Antibody: Blood test for a type of antibody that attacks the thyroid gland. Having these antibodies in the blood is what is used to diagnose someone with Hashimoto's thyroiditis.

Other tests: Your child's doctor may also have them get an ultrasound. This gets a better picture of the thyroid, especially if there is concern for any thyroid nodules.

Please note that although lab results are typically back in 2 to 4 days, it can take longer for your provider to be able to review your child's labs and get recommendations back to you and your family.

Treatment

Treatment is not always needed for Hashimoto's. It depends on the thyroid hormone levels. In these cases, your child may just need to be monitored by the endocrinologist. If they do need treatment, the most common and effective treatment is a medicine called Levothyroxine (generic for Synthroid®). It is medicine your child takes one time each day by mouth.

Levothyroxine is a thyroid hormone replacement. Once your child starts this medicine, they usually take it for life. They will need regular monitoring of thyroid labs (TSH and Free T4; see above) to make sure the dose of Levothyroxine is working well for their body.

What to do and watch for at home

If you notice your child is having trouble swallowing or feels like their neck (and thyroid gland area) may be getting larger, please call your child's health care provider.

Activity and diet

There are no diet restrictions for patients with Hashimoto's. A healthy diet and active lifestyle are encouraged for everyone. In the United States, iodine is added to most of the salt that is sold in stores. Because of this, iodine deficiency is not a common issue or cause of thyroid disease in this part of the world. There is also salt that is sold without iodine. Read the label to be sure you buy salt with iodine.

Follow-up appointments

You can expect to have regular follow-up appointments with your child's health care provider. Your child may have blood drawn at each follow-up visit to check the TSH and Free T4 to make sure the medicine is working well.

Write down all your questions as you think of them. Bring this list with you when you see your health care provider. Be sure to call if you cannot keep your appointment.