CONDITION

Hashimoto's thyroiditis

Hashimoto's thyroiditis is an autoimmune condition that can gradually cause an underactive thyroid.

WHAT IT IS
Long-term autoimmune inflammation of the thyroid gland

BODY SYSTEM
Hormone system

MAIN SYMPTOMS
Tiredness, cold sensitivity, constipation, weight gain

WHAT CAUSES IT
Immune attack influenced by inherited risk

HOW IT IS DIAGNOSED
TSH, free T4, and thyroid antibody blood tests

MAIN TREATMENT
Thyroid hormone replacement and monitoring

CAN IT BE CURED?
No - autoimmune thyroid damage is usually permanent

IS IT AN EMERGENCY?
Sometimes - severe confusion, low temperature, or breathing difficulty

LONG-TERM OUTLOOK
Usually manageable with monitoring and thyroid hormone

Overview

Hashimoto's thyroiditis is a long-term autoimmune condition affecting the thyroid. It is also called chronic autoimmune thyroiditis or goitrous autoimmune thyroiditis.

The thyroid is a small, butterfly-shaped gland at the front of your neck. It makes hormones that help control how your body uses energy. These hormones affect your temperature, heart rate, digestion, muscles, mood, menstrual cycle, and many other functions.

In Hashimoto's thyroiditis, the immune system mistakenly attacks thyroid tissue. This causes inflammation and can gradually reduce the gland's ability to make hormones. The result may be hypothyroidism, which means an underactive thyroid.

The condition often develops slowly. You may have thyroid antibodies for years while your

hormone levels remain normal. Other people already have hypothyroidism when the condition is found.

Some people develop a goitre, which is an enlarged thyroid. Less often, stored thyroid hormone leaks from the inflamed gland and causes a short period of overactive thyroid symptoms. This temporary phase is sometimes called hashitoxicosis.

Hashimoto's thyroiditis matters because untreated hypothyroidism can affect your day-to-day wellbeing and, over time, your heart, fertility, pregnancy, and other parts of your health. With appropriate monitoring and treatment, most people can lead active lives.

Symptoms

Hashimoto's thyroiditis may cause no symptoms at first. When symptoms occur, they usually reflect falling thyroid hormone levels and often develop over months or years.

Possible symptoms include:

An enlarged thyroid may create visible swelling at the front of your neck. It can sometimes cause pressure, discomfort, coughing, or difficulty swallowing.

Children and teenagers may have slower growth, delayed puberty, tiredness, or difficulty with schoolwork. These symptoms have many possible causes, so testing is needed rather than assuming they are due to the thyroid.

During a temporary overactive phase, you might experience a racing heartbeat, shaking, sweating, anxiety, or unexplained weight loss. These symptoms should be assessed because other thyroid conditions can cause the same pattern.

Symptoms alone cannot confirm Hashimoto's thyroiditis. They overlap with sleep problems, anaemia, depression, menopause, medication effects, and many other conditions.

- Persistent tiredness or needing more sleep
- Feeling unusually cold
- Constipation
- Dry skin or thinning, coarse hair
- Gradual weight gain
- Muscle aches, cramps, or weakness
- Low mood, slowed thinking, or trouble concentrating
- A slower heart rate

- Heavy, irregular, or less frequent periods
- Difficulty becoming pregnant
- A hoarse voice or puffy face

Causes and risk factors

Hashimoto's thyroiditis happens when the immune system produces antibodies and immune cells that target the thyroid. Antibodies are proteins that normally help defend you from infection. In this condition, some of them react against thyroid tissue instead.

There is no single known cause. Inherited traits contribute to risk, but having a family member with Hashimoto's thyroiditis does not mean you will develop it.

The condition is more likely in people who have:

Hashimoto's thyroiditis is more often identified in women, although anyone can develop it. It can begin at any age.

Very high iodine exposure may worsen autoimmune thyroid problems in susceptible people. This does not mean you should remove normal dietary iodine. Avoid taking high-dose iodine or kelp supplements unless they have been recommended for a specific medical reason.

Hashimoto's thyroiditis is not contagious. It is not caused by stress, although stress and poor sleep may make symptoms harder to manage.

- A close relative with autoimmune thyroid disease
- Another autoimmune condition, such as type 1 diabetes or coeliac disease
- A personal or family history of other thyroid conditions
- Recently been pregnant, when immune changes can reveal thyroid problems

Diagnosis

Diagnosis starts with your symptoms, medical history, family history, and an examination of your neck. Blood tests then show how well your thyroid is working and whether autoimmune thyroid disease is likely.

The main tests are:

Some people have positive TPO antibodies but normal TSH and free T4 levels. This means autoimmune thyroid changes are present, but the thyroid is still making enough hormone. Treatment may not be needed at that point, although follow-up testing may be appropriate.

A mildly raised TSH with a normal free T4 is called subclinical hypothyroidism. Whether it needs treatment is based on factors such as symptoms, repeated test results, antibody status, age, and pregnancy.

An ultrasound is not routinely needed to diagnose Hashimoto's thyroiditis. It may be used if your thyroid is enlarged or uneven, if there is a lump, or if the diagnosis remains uncertain. A needle biopsy is generally reserved for a thyroid nodule that needs separate assessment.

Biotin supplements can interfere with some thyroid blood tests. Tell the healthcare professional arranging your test about supplements and medicines rather than stopping them without advice.

- TSH: Thyroid-stimulating hormone tells the thyroid to make hormones. A high TSH commonly means the thyroid is not producing enough.
- Free T4: This measures an available form of the main thyroid hormone. A low free T4 with a high TSH usually confirms primary hypothyroidism.
- Thyroid peroxidase antibodies: Often called TPO antibodies, these support a diagnosis of Hashimoto's thyroiditis when present.

Treatment and management

Treatment is based mainly on your thyroid hormone levels, symptoms, age, and circumstances such as pregnancy. Thyroid antibodies alone do not always require treatment.

If Hashimoto's thyroiditis has caused hypothyroidism, the usual treatment is levothyroxine. This is a manufactured version of T4, a hormone the thyroid normally makes. It replaces missing hormone rather than stopping the immune attack.

The dose is chosen using blood test results and personal factors. TSH is checked after starting treatment or changing the dose, once enough time has passed for levels to settle. When the dose is stable, testing is usually needed less often.

Levothyroxine works best when taken consistently. Food and products containing iron, calcium, or certain antacids can reduce absorption. Your pharmacist or healthcare team can explain how to separate them safely. Do not change the dose or stop treatment based on symptoms alone.

Symptoms may improve gradually over several weeks or months. Some changes, such as dry skin or hair growth, may take longer than others.

If your hormone levels are normal, monitoring may be all that is needed. Repeated antibody measurements are usually less useful than checking TSH and free T4.

Thyroid surgery does not treat the autoimmune process and is rarely needed for Hashimoto's thyroiditis itself. It may be considered for a very large goitre causing pressure, or for a separate concerning thyroid nodule.

Pregnancy changes the amount of thyroid hormone the body needs. If you take levothyroxine and become pregnant, contact your maternity or thyroid care team promptly for testing and treatment review. Do not stop the medicine.

Complications

Without enough thyroid hormone, cholesterol levels may rise and contribute to heart and circulation problems. Long-standing hypothyroidism can also affect nerve function, muscles, mood, and fertility.

An enlarged thyroid can sometimes make swallowing uncomfortable. Any new, firm, rapidly growing, or one-sided neck lump needs assessment because not every thyroid swelling is caused by Hashimoto's thyroiditis.

Untreated hypothyroidism during pregnancy can increase risks for both the pregnant person and the baby. Appropriate hormone replacement and monitoring reduce these risks.

Severe untreated hypothyroidism can very rarely lead to myxoedema coma. Despite the name, a person may not initially be in a coma. Warning signs include severe confusion or drowsiness, very low body temperature, slow or difficult breathing, and collapse. This is a medical emergency.

People with Hashimoto's thyroiditis have an increased relative risk of thyroid lymphoma, but this cancer remains uncommon. Rapid thyroid enlargement, persistent hoarseness, or worsening swallowing or breathing problems should be checked promptly.

Prevention

There is no proven way to prevent Hashimoto's thyroiditis. It results from a combination of immune and inherited factors that you cannot fully control.

A balanced diet cannot stop the immune system from attacking the thyroid. Avoiding gluten is not a treatment unless you also have coeliac disease or another confirmed reason to avoid it.

Do not take iodine, kelp, selenium, or "thyroid support" supplements to prevent the condition without professional advice. Some contain excessive iodine or unlisted thyroid hormones and may interfere with treatment.

Early testing does not prevent Hashimoto's thyroiditis, but it can identify thyroid dysfunction before complications develop. Testing may be especially relevant if you have symptoms, a goitre, another autoimmune condition, a strong family history, or are pregnant or planning pregnancy.

Living with it and what to expect

Hashimoto's thyroiditis is usually lifelong. The immune reaction may continue even when your hormone levels are well controlled.

Some people keep normal thyroid function for many years. Others gradually develop hypothyroidism. It is not possible to predict the exact pace from one antibody result.

Once the thyroid can no longer make enough hormone, replacement treatment is often needed for life. Your required dose may change with pregnancy, ageing, major weight changes, digestive conditions, or medicines that affect absorption. Periodic blood tests help keep the level appropriate.

A goitre may become smaller after hormone levels are corrected, although it may not disappear completely. Thyroid antibodies can remain positive and usually do not need to be tracked to judge whether treatment is working.

Most people can work, exercise, travel, and eat a normal balanced diet. Keeping a consistent routine with levothyroxine and checking interactions when starting new medicines can make hormone levels easier to manage.

If symptoms continue despite a TSH result in the target range set for you, they deserve review. Another health issue, a medicine interaction, inconsistent absorption, or a need to reassess the thyroid treatment may be involved. Persistent symptoms do not necessarily mean the autoimmune condition is becoming more severe.

When to get medical help

Arrange a routine appointment if you develop ongoing tiredness, cold sensitivity, constipation, menstrual changes, unexplained weight change, or swelling at the front of your neck. These symptoms are not specific to Hashimoto's thyroiditis, but they may justify thyroid testing.

Seek prompt medical assessment if:

Call emergency services if there is severe confusion, inability to stay awake, collapse, very slow or difficult breathing, or an unusually low body temperature. Sudden difficulty breathing from

neck swelling also needs emergency help.

- A thyroid swelling grows quickly or becomes painful
- You develop new hoarseness or worsening trouble swallowing
- You have persistent racing or irregular heartbeats
- You are pregnant, or find out you are pregnant, while taking thyroid medicine
- Your symptoms worsen after a medication or dose change

Common questions

Is Hashimoto's thyroiditis the same as hypothyroidism?

No. Hashimoto's thyroiditis is an autoimmune condition that can damage the thyroid. Hypothyroidism describes the result: too little thyroid hormone. Hashimoto's is a common cause, but other conditions can also cause hypothyroidism.

Can Hashimoto's thyroiditis go away?

The autoimmune tendency is usually permanent. Thyroid hormone levels may remain normal for years, fluctuate, or gradually fall. If substantial thyroid damage has occurred, hormone replacement is commonly lifelong.

Can I lose weight with Hashimoto's thyroiditis?

Weight gained because of low thyroid hormone may partly improve when hormone levels are corrected. Treatment is not a weight-loss medicine, and not all weight changes are caused by the thyroid. Taking extra thyroid hormone for weight loss can be harmful.

What foods should I avoid?

Most people do not need a special Hashimoto's diet. Normal amounts of common foods are generally suitable. Avoid excessive iodine or kelp supplements, and discuss major diet changes if you take levothyroxine because food can affect its absorption.

Can I have a healthy pregnancy with Hashimoto's thyroiditis?

Many people do. Thyroid hormone needs often increase during pregnancy, so early testing and closer monitoring are important. Levothyroxine is commonly continued during pregnancy.

Why do I still have symptoms when my TSH is normal?

Recovery can take time, and symptoms such as tiredness, weight change, and poor concentration have many causes. Medicine absorption, interactions, anaemia, sleep problems, menopause, mood conditions, or other illnesses may need consideration.

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