

Hashimoto's Thyroiditis

Hashimoto's thyroiditis is an autoimmune disease characterized by hypothyroidism with bouts of hyperthyroidism, along with an enlarged, nontender thyroid gland. Patients have antibodies such as anti-thyroid peroxidase and anti-thyroglobulin. Cytology shows Hürthle cells and lymphoid follicles. This disease is associated with HLA-DR5 and HLA-DR3 and an increased risk of non-Hodgkin lymphoma.



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Symptoms

Hypothyroidism with Bouts of Hyperthyroidism

[Hippo-thigh-droid](#) atop [Hiker-thigh-droid](#)

As this is an autoimmune disease with destruction of thyroid tissue, patients display **hypothyroid symptoms**. These include lethargy, weakness, hypoactivity, cold intolerance, bradycardia, myxedema, coarse skin and brittle hair. Bouts of **hyperthyroidism** sometimes occur due to thyrotoxicosis during follicular rupture.

Enlarged, Nontender Thyroid

[Large Broken-tenderizer Thigh-droid](#)

Patients typically present with an enlarged, nontender thyroid gland, which is also known as a goiter. These goiters occur due to lymphocytic infiltration and fibrosis, rather than hypertrophy.

Mechanism

Autoimmune

[Auto-in-moon](#)

Most commonly, this disorder arises from various auto-antibodies which target thyroid peroxidase, thyroglobulin and TSH receptors. These antibodies then lead to an antibody-dependent cell-mediated cytotoxicity.

Anti-Thyroid Peroxidase (TPO)

[Ant-tie Thigh-droid H₂O₂](#)

A common antibody present in Hashimoto's thyroiditis is anti-thyroid peroxidase, or TPO.

Anti-Thyroglobulin

[Ant-tie Thigh-droid-goblin](#)

Another group of auto-antibody found in Hashimoto's thyroiditis are anti-thyroglobulin antibodies.

Lab Findings

Hürthle Cells

[Hurdles](#)

Upon histological examination, Hürthle cells can be seen in Hashimoto thyroiditis. These cells line atrophied colloid bodies and have eosinophilic, granular cytoplasm, along with metaplasia.

Lymphoid Follicles

[Lymph-lime follicles](#)

Lymphoid follicles can be seen in histological examination of patients with this disease. These are characterized by lymphoid aggregate with germinal centers.

Associations

HLA-DR5 and HLA-DR3

[HLA \(hula\)- Doctor-giving-High \(5\) and HLA \(hula\)- Doctor with \(3\) Tree](#)

Patients with the HLA-DR5 or HLA-DR3 haplotypes have a higher relative risk for developing this thyroid disorder.

Increased Risk Of Non-Hodgkin Lymphoma

[Up-arrow Nun-on-Hog-King with Lime-foam](#)

Thyroid lymphomas are almost always the non-Hodgkin type. The risk of developing thyroid lymphoma is associated with Hashimoto thyroiditis.