OPEN ACCESS Freely available online

Journal of Thyroid Disorders & Therapy

Commentary

Hashimoto Thyroiditis (HT) is an Autoimmune Disease that Causes Insufficient Thyroid Hormone Synthesis

Cheean Ly*

Department of Biomedical Sciences, Yonsei University, Seoul, South Korea

DESCRIPTION

Hashimoto Thyroiditis (HT) is an autoimmune disorder characterized by inadequate thyroid hormone production. A fibrous variant is one of the rarest entities of Hashimoto's thyroiditis disease. A 42 years old female patient presented to our service with neck swelling associated with difficulty swallowing; she was discovered to have an enlarged thyroid gland with mass effect. She underwent an ultrasound and Fine Needle Aspiration (FNA), which was consistent with Hashimoto's thyroiditis bethesda category II. Due to compressive symptoms, we proceeded to total thyroidectomy. The final histopathology revealed numerous polymorphic lymphoid cells, plasma cells, follicular cells, and scattered Hurthle cells, characteristic of fibrous variants. Hashimoto's Thyroiditis (HT) affects 1%-2% of the pediatric population. In adults with HT, thyroidectomy is considered challenging and prone to postoperative complications due to the chronic inflammatory process. However, the complications of thyroidectomy among children with HT have not been established. The objective of our study was to evaluate whether children with HT undergoing total thyroidectomy for presumed thyroid cancer have higher complication rates than children without HT. Hashimoto's Thyroiditis (HT) is the predominant cause of primary hypothyroidism. Interleukin (IL)-36γ is a member of the IL-36 family. Recently, IL-36γ was shown to possess pro-inflammatory properties in autoimmune diseases. However, the role of IL-36γ in HT is insufficiently understood. The purpose of the present study was to investigate the potential relationship between IL-36γ and HT. Hashimoto's Thyroiditis (HT) is one of the commonest autoimmune disorders. This study was performed to investigate the potential effect of Histone Deacetylase 6-specific inhibitor (HDAC6i) on Th17 cell differentiation in animal model and the underlying mechanism. Hashimoto's thyroiditis, characterized by thyroid specific autoantibodies, is one of the commonest autoimmune disorders. Although the exact etiology has not been fully elucidated, Hashimoto's thyroiditis is related to an interaction among genetic elements, environmental factors and epigenetic influences. Cellular and humoral immunity play a key role in the development of the disease; thus, a T and B cells inflammatory infiltration is frequently found. Histopathologic features of the disease include lymphoplasmacytic infiltration, lymphoid follicle formation with germinal centers, and parenchymal atrophy. Moreover, the occurrence of large follicular cells and oxyphilic or askanazy cells is frequently associated to Hashimoto's thyroiditis. Clinically, Hashimoto's thyroiditis is characterized mainly by systemic manifestations due to the damage of the thyroid gland, developing a primary hypothyroidism. Diagnosis of Hashimoto's thyroiditis is clinical and based on clinical characteristics, positivity to serum antibodies against thyroid antigens (thyroid peroxidase and thyroglobulin), and lymphocytic infiltration on cytological examination. The mainstream of treatment is based on the management of the hypothyroidism with a substitution therapy. A relationship between Hashimoto's thyroiditis and a possible malignant transformation has been proposed in several studies and involves immunological/hormonal pathogenic links although specific correlation is still debated and needs to be further investigated with prospective studies. Hashimoto Thyroiditis (HT), also called chronic lymphocytic or autoimmune thyroiditis, is an autoimmune thyroid disease characterized by increased thyroid volume, lymphocyte infiltration of parenchyma, and the presence of antibodies specific to thyroid antigens. HT is considered, together with Graves' Disease (GD), an Autoimmune Thyroid Disorder (AITD) whose frequency has increased considerably in the recent years HT is currently the leading cause of hypothyroidism moreover; patients with HT are more likely to be affected by cardiovascular diseases and malignant neoplasms. Hyposplenism is associated with autoimmune diseases, inflammatory bowel disease, severe celiac disease, autoimmune thyroiditis, untreated HIV infection and chronic graft-versus-host disease. The aim of this study was to review the existing data on hyposplenism associated with celiac disease and Hashimoto's autoimmune thyroiditis. Our research was based on a clinical case concerning a 41 years old female who presented with asthenia, fatigue, dyspepsia and chronic diarrhea. The medical history revealed autoimmune Hashimoto's thyroiditis, type 2 diabetes, fatty liver disease, chronic gastritis and thrombocytosis. Multiple investigations showed hyposplenism and complex autoimmune

Correspondence to: Cheean Ly, Department of Biomedical Sciences, Yonsei University, Seoul, South Korea; E-mail: Cheean@Ly.kr

Received: 03-Apr-2023, Manuscript No. JTDT-23-22999; **Editor assigned:** 05-Apr-2023, PreQC No. JTDT-23-22999 (PQ); **Reviewed:** 19-Apr-2023, QC No. JTDT-23-22999; **Revised:** 13-Jun-2023, Manuscript No. JTDT-23-22999 (R); **Published:** 20-Jun-2023, DOI: 10.35841/2167-7948.23.12.305

Citation: Ly C (2023) Hashimoto Thyroiditis (HT) is an Autoimmune Disease that Causes Insufficient Thyroid Hormone Synthesis. Thyroid Disorders Ther. 12:305.

dysfunction with positive serum markers for celiac disease and type 1 autoimmune hepatitis along with minor symptomatology. The intestinal symptomatology of celiac disease is often hid by hypothyroidism associated autoimmune thyroiditis. Asymptomatic or minimally symptomatic celiac disease associated with Hashimoto's autoimmune thyroiditis is diagnosed by biomarkers. Hyposplenism in celiac disease can occur regardless of the disease stage, latent or symptomatic.