



CASE REPORT ON HASHIMOTO'S THYROIDITIS FROM THE DEPARTMENT OF OTORHINOLARYNGOLOGY, PDU MEDICAL COLLEGE, RAJKOT

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KEYWORDS :

INTRODUCTION:

Hashimoto's thyroiditis is a chronic autoimmune disorder that primarily affects the thyroid gland, often leading to hypothyroidism (underactive thyroid). It is one of the most common causes of thyroid dysfunction worldwide. In Hashimoto's thyroiditis, the body's immune system mistakenly attacks the thyroid, resulting in inflammation and damage. Over time, this can reduce the gland's ability to produce thyroid hormones, which play a crucial role in regulating metabolism, energy production, and various physiological functions.

At the heart of Hashimoto's thyroiditis is an autoimmune reaction where the body's immune system attacks its own thyroid tissue. This process is mediated by both cellular immunity (T-cells) and humoral immunity (autoantibodies). The most common antibodies found in patients with Hashimoto's are anti-thyroid peroxidase (TPO) and anti-thyroglobulin (Tg) antibodies. The autoimmune response leads to progressive thyroid gland destruction, fibrosis, and a reduction in thyroid hormone production, which results in hypothyroidism.

A 62-year-old obese female presented in the emergency department. She had difficulty breathing since 15 days associated with neck swelling, which was spontaneous in onset and gradually increasing in size. Primary thyroid lymphoma is rare, accounting for <5% of thyroid malignancies and <3% of extranodal lymphomas. On Examination (Center, white box with blue border) Well-defined swelling approx. $10 \times 8 \text{ cm}^2$ on anterior neck. Swelling moves with deglutition, is soft, non-tender, non-transilluminant, mobile, not moving with tongue protrusion. Overlying skin normal, no sinus, fistula, or necrosis.

Investigations :

- **Emergency Nasopharyngolaryngoscopy:** Falling epiglottis over airway, excessive pooling of saliva, posterior pharyngeal wall visualization poor.
- **Thyroid Profile:** T3 = 3.06 ng/dl, T4 = 1.33 ng/dl, TSH = 1.30.
- **USG Neck:** Suggestive of Hashimoto's thyroiditis.
- **FNAC:** Features of lymphocytic thyroiditis.
- **CT Scan Neck:** Heterogeneous enhancing lesion $98 \times 80 \times 62 \text{ mm}$, involving both lobes of thyroid, compressing trachea with narrow lumen, no retrosternal extension. Postoperative neoplastic lesion likely.

Management :

- Thyroid debulking surgery with esophageal repair with tracheostomy under general anesthesia.
- **Histopathological Examination:** High-grade Non-Hodgkin's lymphoma in a background of pre-existing Hashimoto's thyroiditis.

CONCLUSION:

In conclusion, Hashimoto's thyroiditis is a common autoimmune disorder that leads to progressive destruction of the thyroid gland, resulting in hypothyroidism. Given its insidious onset and often subtle symptoms, early diagnosis is

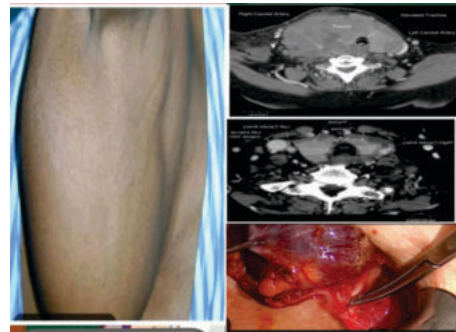
crucial to prevent complications associated with untreated hypothyroidism, such as cardiovascular disease, infertility, and myxedema coma. This condition typically presents with symptoms like fatigue, weight gain, cold intolerance, and depression, but it can often go undiagnosed, especially in the early stages.

The hallmark of Hashimoto's thyroiditis is the presence of anti-thyroid antibodies (anti-TPO and anti-thyroglobulin), along with laboratory findings of elevated TSH and low thyroid hormone levels. While the disease is most common in women and typically diagnosed in middle age, it can occur in any demographic. Regular monitoring of thyroid function is essential, particularly in patients who have a family history of autoimmune thyroid disease.

Treatment, which primarily involves thyroid hormone replacement therapy (levothyroxine), is highly effective in normalizing thyroid function and alleviating symptoms. Adjustments in dosage may be required over time, especially in the context of age, pregnancy, or other comorbidities. Long-term follow-up is necessary to ensure optimal management and to monitor for potential complications such as goiter or the development of other autoimmune conditions.

The prognosis for patients with Hashimoto's thyroiditis is generally favorable with proper treatment. Most patients achieve full symptom resolution and a normal quality of life once euthyroid status is maintained. However, lifelong management and regular clinical assessment are vital to ensuring sustained thyroid function and addressing any emerging concerns.

Ultimately, Hashimoto's thyroiditis is a manageable condition, and with early recognition and appropriate treatment, individuals with this disease can live healthy and productive lives. Early intervention remains key in minimizing the risk of complications associated with untreated hypothyroidism.



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