

Original Research Paper

Endocrinology

A CASE OF HASHIMOTO THYROIDITIS WITH RHEUMATOID ARTHRITIS

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ABSTRACT It has been widely observed that disorders with an autoimmune pathogenesis occur with increased frequency in patients with a history of another autoimmune disease. In our case, we would like to establish the possible pathogenic linkage between two distinct auto immune diseases in a single individual diagnosed with rheumatoid arthritis and autoimmune thyroid disease.

KEYWORDS:

INTRODUCTION

An Auto immune disease can be either organ-specific or non-organ specific (systemic) in its clinical presentation. Hashimoto thyroiditis, now considered the most common autoimmune disease, a pronounced lymphoid goiter affecting predominantly women. Our case highlights a case of Hashimoto thyroiditis presenting with classical features of rheumatoid arthritis showing the need to be cautious to rule out other autoimmune diseases in an individual suffering from a known auto immune disease.

CLINICAL HISTORY

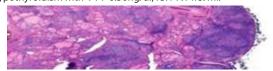
A 45-year-old female patient came with complaints of pain and swelling in her neck, joints of hands and feet for the past 6 months. H/O morning stiffness +, She had history of weight loss with increased appetite for the past 1 year. H/O irregular menstrual cycles – once in 2 months and lasting for 2 days. N/K/C/O Type-2 diabetes mellitus, systemic hypertension, Bronchial asthma and seizure disorder. On examination, patient was comfortable in supine position. Pallor was present. Vitals: Pulse- 90/minute, regular, normal volume. B.P- 120/80 mm of Hg. Temperature- 98 F. Cardiovascular, Respiratory, abdominal examination and Central nervous system were normal. L/E-tenderness and swelling present over her left elbow, metacarpophalangeal and knee joints. Examination of the neck revealed a diffuse swelling in front of a neck which moves on deglutition.

INVESTIGATIONS

The Haemoglobin-9.0g%. ESR-49 mm/h, C-reactive protein -2.09 mg/dl. Rheumatoid factor - 65.6.IU/ml and CCP 30.8. Antinuclear antibodies and extractable nuclear antigens were negative. Signs of RA, such as periarticular osteopenia, erosion, cyst formation and a narrowing of the joint space were observed bilaterally in the third and fourth MCP joints during the radiological evaluation.

The thyroid function test showed the following result- FT3-10.0ug/dl, TSH-0.010ulU/ml, Thyroid Peroxidase Antibody-75 IU/ml, Thyroglobulin Antibody-1.9 IU/ml. Ultra sound of the neck revealed heterogeneous echotexture of both the lobes suggesting a chronic thyroiditis. FNAC report – smear showing thyroid follicular epithelial cells in cohesive clusters and acinar pattern in the background of plenty of lymphocytes, few Hurthle cells, little colloid and areas of haemorrhage.

In the follow up after 3 months the patient was found to have hypothyroidism with-FT4-0.50ng/dl,TSH-7.14lU/ml.



DISCUSSION

The relationship between RA and the thyroid gland has been studied extensively, with several studies demonstrating the autoimmune nature of thyroid dysfunctions in Rheumatoid arthritis $^{\scriptscriptstyle{[1]}}$. In a previous study, thyroid dysfunction was found to be three times more prevalent in women with RA than in women with non-inflammatory rheumatic diseases.

In addition to the classic form, several other clinico-pathologic entities are now included under the term Hashimoto Thyroiditis: fibrous variant, IgG4- related variant, juvenile form, Hashitoxicosis, and painless thyroiditis. All forms are characterized pathologically by the infiltration of hematopoietic mononuclear cells, mainly lymphocytes, in the interstitium among the thyroid follicles, although specific features can be recognized in each variant. Most HT forms ultimately evolve into hypothyroidism, although at presentation patients can be euthyroid or even hyperthyroid. The diagnosis of HT relies on the demonstration of circulating antibodies to thyroid antigens (mainly thyroperoxidase and thyroglobulin) and reduced echogenicity on thyroid sonogram in a patient with proper clinical features.

Studies indicate that the possibility of three or more ADs occurring in the same patient is unlikely to be due to a chance event and thus suggests a pathogenic relationship between the diseases [3].

Our patient was found to have hypothyroidism in the follow-up and was started on Thyroxine and corticosteroids for the rheumatoid arthritis.

CONCLUSION

In conclusion, the presence of one auto immune disease in a patient should make us think about the possibility of additional auto immune diseases in the same individual. The increasing number of reports of the co-occurrence indicates the need for continued surveillance for the development of new auto immune diseases in predisposed patients.