Coexistence of Pemphigus Vulgaris with Hashimoto’s Thyroiditis: Case Report

Haşimoto Tiroiditi ile Birliktelik Gösteren Bir Pemfigus Vulgaris Olgusu

ABSTRACT A 41 year-old man applied with bullae and erosions, persisting for two months. The laboratory tests were within normal limits except increased antithyroid peroxidase and antithyroglobulin antibody levels. The ultrasonographic examination of thyroid showed an enlarged gland with a homogeneous parenchyma, and the case was appraised as Hashimoto’s thyroids with euthyroidism. HLA-A1, -A3, -B7, -B35, -Bw6, -Bw4, -Bw7, -DR4, -DR14, -DR52, -DR53 were detected in HLA genotyping. The histopathological and direct immunofluorescent examinations of skin lesions were consistent with pemphigus vulgaris. The therapy of pemphigus vulgaris with azathioprine and prednisolone was started, and the patient is still being followed up. We present this case as the coexistence of pemphigus vulgaris with Hashimoto’s thyroiditis has rarely been reported in the literature. And we believe that further studies of HLA can shed light on genetical base of this uncommon association.

Key Words: Pemphigus; thyroiditis, autoimmune; HLA antigens


Anahtar Kelimeler: Pemphigus; otoimmün tiroidit; HLA antijenleri

Pemphigus vulgaris is an autoimmune blistering disease of the skin of unknown etiology. Associations with various diseases, especially with other autoimmune diseases have been reported. However, there have been rare case reports of pemphigus vulgaris associated with autoimmune thyroid diseases.

CASE REPORT

A 41 year-old man presented with bullae and erosions that was persisting for two months. The patient had no history of intake of any drugs. The der-
matologic examination revealed erosions and bullae on his presternal area, interscapular area and upper extremities (Figure 1). The erythrocyte sedimentation rate, whole blood count, fasting blood sugar level, liver and kidney function tests, thyroid function tests, hepatitis markers, anti-human immunodeficiency antibodies, rheumatoid factor, anti-nuclear antibodies were within normal limits. Antithyroid peroxidase antibody (anti-TPO Ab) level was 119.4 IU/mL (normal, 0-34 IU/mL), antithyroglobulin (anti-Tg) antibody level was 1067 IU/mL (normal, 0-115 IU/mL). The ultrasonographic examination of thyroid showed an enlarged gland with a homogeneous parenchyma. The case was appraised as Hashimoto’s thyroiditis with euthyroidism.

The histopathological examination of the skin lesions revealed the diagnosis of pemphigus vulgaris. Direct immunofluorescent studies revealed intercellular deposits of immunoglobulin G and complement 3 (Figure 2A and 2B). Human leucocyte antigen (HLA) genotyping was performed by polymerase chain reaction, and HLA-A1, -A3, -B7, -B35, -Bw6, -Bw4, -Bw7, -DR4, -DR14, -DR52, -DR53 were found.

The therapy of pemphigus vulgaris with azathioprine and prednisone was initiated, and the patient is still being followed up.

**DISCUSSION**

It appears that unknown factors, genetic or environmental trigger the production of the high titers of the pathogenic autoantibody that result in the development of clinical autoimmune diseases.\(^1\)\(^2\) Autoimmune polyglandular syndromes (APS) have played an important role in understanding autoimmune disorders. APS is a rare constellation of autoimmune disorders characterised by more than one endocrine gland failure occurring in individuals and their families. In addition to endocrine glands, other non endocrine organs may be targeted by the immune system.\(^4\) At least two or possibly more phenomenon may be involved in the pathogenesis.\(^5\) The first is creation of pathogenetic T or B cells reacting with components of more than one tissue. The second is an inherited abnormal
function, predisposing to the loss of tolerance to a series of self antigens. Given such a predisposition, normal alleles of HLA genes within the major histocompatibility complex may then lead to targeting of specific organs. Different diseases are often associated with the same or similar HLA genotypes and thus would increase the co-occurrence of the disorders.\(^6\)

HLA A10, -A11, -B22, -DR4, -DRw14, and -DR6 were reported to be more frequent in pemphigus in some studies.\(^1,2,7-9\) HLA-B35, B44, CW4, DR4, DR14, DQ4 and DQ8 antigens were found to be frequent in Turkish pemphigus patients, and our patient had HLA-DR4, DR14 antigens consistent with this study.\(^10\)

There are also studies and case reports about association of autoimmune thyroid diseases and pemphigus.\(^11-13\) An increased prevalence of autoimmune thyroid diseases has been reported in the family members of patients with pemphigus. It is concluded that pemphigus vulgaris is highly associated with primary thyroid disorders, mainly with positive titers of anti-TPO-Ab, although most patients do not present overt clinical thyroid disease.\(^13\)

We present this case because the coexistence of pemphigus vulgaris with Hashimoto’s thyroiditis has rarely been reported in the literature. This association might be related to shared antigen that can result in targeting of multiple tissues, and inherited abnormalities of immune function. We believe that the further studies on HLA can lead a light on genetical base of this uncommon association.

**REFERENCES**