Familial Colocalization of Lichen Planus and Vitiligo on Sun Exposed Areas

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Lichen planus and vitiligo are common skin disorders. Colocalization which is rarely reported may consider the koebner phenomenon related to the photo damage causing initiation of lichen planus over vitiliginous skin. We report a 37-year-old mother and her 23-year-old daughter, both farmers and known cases of vitiligo with subsequent gradual onset of pruritic skin lesions of lichen planus starting first over previous vitiliginous skin on sun exposed areas. Coexistence and colocalization of lichen planus and vitiligo in two members of a family is very rare and has not been reported previously according to our knowledge. Predominant colocalization was on vitiliginous areas which may explain actinic damage as a triggering factor for inducing lichen planus in long-standing vitiligo and supports its pathogenic relationship. (Ann Dermatol 25(2) 223 ∼ 225, 2013)

-Keywords-
Lichen planus, Vitiligo

INTRODUCTION

A common etiologic background may be inferred from the coexistence of two or more autoimmune associated diseases. Vitiligo is an unknown disease in which genetic and neurohumoral factors are thought to be causative agents besides autoimmunity. Etiology of Lichen planus is also unknown and immune factors are thought to play a key role in the pathogenesis. Vitiligo and lichen planus both occur concomitantly with other autoimmune diseases. Regarding a relative prevalence of 0.5 ∼ 1% of lichen planus and vitiligo, coincidence of these diseases in one patient can be predictable, but development of these two unrelated diseases in the same anatomic areas is unusual, rare and has been described by only few reports¹² in the last ten years. The occurrence of both conditions in one patient seems to not be just an accidental phenomenon as a probability of autoimmune background or common pathogenesis exists. Here, we report a very rare colocalization of lichen planus and vitiligo in two members of a family. To our knowledge, no other such cases have been reported.

CASE REPORT

Case 1: mother

The mother is a 37 year old lady, farmer with a known case of vitiligo from 7 years prior. She presented with a one year history of pruritic skin eruptions over here hands and feet. Physical examination revealed multiple well defined depigmented patches over feet, hands, trunk, elbows and knees with multiple pinkish to erythematous plaques predominantly localized over hands and feet confined to sun exposed and hypopigmented vitiliginous areas (Fig. 1). Her elder sister also had pathologically proven lichen planus lesions over her face and hands without vitiliginous patches.

Case 2: daughter

The daughter is a 23 year old single woman, farmer with a known case of vitiligo for 10 years, presented with a history of pruritic skin eruptions that begun over her hands...
and feet, and extended to her forearm and face since 6 months earlier. Physical examination showed multiple hypopigmented vitiliginous patches over the hands, feet, posterior of thighs, knees, and arms with multiple pinkish to erythematous plaques over hands and feet. The patches were present over sun-exposed areas confined to depigmented vitiliginous areas with gradual violaceous discoloration when extending to normally pigmented skin. There were also few violaceous to brownish macules and plaques over the forearm, face and lips (Fig. 2).

In both patients oral mucosa and nails were normal and preceding vitiliginous areas including knees, trunk, legs and forearms were free of the new lichen skin lesions. Paraclinical and laboratory examinations including biochemistry tests (blood sugar, blood urea nitrogen, creatinine, electrolytes, liver enzymes, alkaline phosphatase, and bilirubin), the thyroid function test and serology tests of C3, C4, immunoglobulin (IgG, IgM, IgA, IgE, hepatitis C virus antibody, hepatitis B-surface antibody, antithyroid peroxidase antibody were all within normal limits except for the high level of IgE in daughter which was 435.90 KIU/L (normal range was up to 150).

The skin biopsy of lesions on hands confirmed lichen planus in both patients, showing hyperkeratosis, acanthosis, hypergranulosis, and basal cell liquefaction with cistatte bodies associated with band like infiltration of chronic inflammatory cells in the dermis. On the basis of the clinical and histological diagnosis of lichen planus, systemic and topical steroids were initiated. Marked improvement was achieved after one month.