

PSORIASIS ASSOCIATED WITH VITILIGO. COEXISTING PSORIASIS AND VITILIGO

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ABSTRACT

Although the first case of psoriasis with vitiligo was reported in 1955, the pathogenesis of the association between these two dermatoses is still unknown (7). Herein, we report on a case of a 57-year-old man with coexisting vitiligo and psoriasis.

Keywords: vitiligo, psoriasis, coexistence

INTRODUCTION

Psoriasis and vitiligo are common skin diseases affecting respectively 1~3% and 0.5% of the general population. Some authors insist on the fact that the disease coexistence is a simple coincidence. Others support the thesis that there is a common pathogenic relationship.

CASE REPORT

A 57-year-old man presented with a 3-month history of erythematous patches with scales on his scalp, face, trunk, upper and lower extremities (Fig.1,2). Apart from these lesions the patient had hypopigmented macules on his face, toes, lower extremities and genitalia (Fig.1,3). These hypopigmented lesions had been diagnosed as vitiligo earlier.

The performed laboratory studies (CBC, routine blood/urine chemistry) were within the normal ranges except the trombocitopenia – 75G/l (130-360G/l).

The skin biopsy from psoriasis plaque showed parakeratosis, parakeratotic mounds, acanthosis, elongation of the rete ridges, a diminished granular cell layer and dilated capillaries at the dermal papillae. On the basis of the clinical and histological findings we assumed the diagnosis “psoriasis” and therapy with SUT, antihistamines and local corticosteroids was applied.

DISCUSSION

Psoriasis and vitiligo are relatively common dermatoses so their coexistence is not an unusual phenomenon. Several studies found out low prevalence of coexistence of these diseases (3,4). The psoriatic plaques and the vitiligo’s macules may partly/entirely overlap, but may also appear independently (9). High prevalence of autoimmune diseases (diabetes mellitus, pernicious anemia, thyroid disease, alopecia areata, chronic mucocutaneous candidiasis and multiple endocrine syndrome) is found in the psoriasis and vitiligo patients (3). Some authors consider the relationship between the coexistence of the two diseases fortuitous. Others point out similar mechanisms in the pathogenesis and the etiologic fac-

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Fig.1. Psoriatic and vitiligo lesions on patients lower extremity



Fig.2. Psoriatic lesions on patients upper extremities

tors in the development of the lesions. Cytokines, autoimmunity, the Koebner phenomenon or decreased melanocyte count have been studied as pathogenic factors for each disease. In one aspect, each disease has a common pathogenesis according to TNF- α and its elevated levels (1,2,10). Prignano et al. suggested



Fig.3. Vitiligo lesion on patient genitalia and toes

that each disease may be immune-mediated with a genetic link (5).

Literature data show that psoriasis and vitiligo are associated with HLA-B13 and HLA-B27 of MCHC. A lot of studies demonstrate the polygenic model in the development of vitiligo and psoriasis. A lot of loci associated with the predisposition of vitiligo and psoriasis are already well known. For example, locus AIS1 is linked with vitiligo predisposition, meanwhile locus PSORS7 is associated with psoriasis. Although these two loci are closely situated to each other, the possibility to be identical is reduced to the minimum.

It is interesting that imiquimod that activates the Toll-like receptors 7 and 8 and the production of cytokines from Th1 immune response induces vitiligo and psoriasis that demonstrates the common immunogenic mechanism in the two diseases (6,8). It is supposed that the lack of or small melanin amounts may provoke psoriasis development.

The rarity of the coexistence of these diseases could be explained in two ways:

1. the possibility of underestimation of the disease (physicians could misdiagnose the concurrence of the diseases or may not report it; also, the patients may not complain of their skin lesions as the lesions and symptoms might be mild)
2. there might be important genetic differences among the patients with these diseases that could lead to different clinical phenotype.

CONCLUSION

We report on a patient with two diseases (vitiligo – a Th1 related autoimmune apoptotic disease of the melanocytes, and psoriasis – a Th1 related proliferative disease of the keratinocytes) with approaching pathogenesis.

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