COEXISTENCE OF VITILIGO AND PSORIASIS: THREE CASE REPORTS
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ABSTRACT
Vitiligo is characterized depigmented patches result from an autoimmune loss of melanocytes. Psoriasis is skin disease that T-cell dependent inflammatory and autoimmune processes have an important role in its pathogenesis. But the etiology of coexistence remains uncertain. Herein we presented three cases of the rare coexistence of psoriasis and vitiligo.

Kew words: Vitiligo, psoriasis

INTRODUCTION
Vitiligo prevalance ranges from %0.5-1; it is a common skin condition. The etiopathogenesis of disease, three possible mechanisms that have been proposed as including vitiligo are autoimmunity, neurohumoral factors, and autocytotoxicity ¹. Psoriasis is one of the most common chronic inflammatory skin diseases and it affects 1-3% of the world's population ². Especially, T-cell dependent inflammatory and autoimmune processes have an important role in its pathogenesis along with the combination of genetic, environmental and immunologic factors ³. Etiology of coexistence of two diseases is not clearly understood. This is a case report of three patients who had vitiligo and psoriasis at the same time. First two cases were adult patients and psoriasis and vitiligo lesions were colocalized. The third case was a child whose lesions were distributed in a different localization.

CASE REPORT
CASE 1

A 31-year-old male patient presented to our clinic with white spots and lesions with red scales in patches on the body. The patient claimed that he had these white spots for 10 years on hands, knees and elbows. He was diagnosed with vitiligo at another healthcare center and occasionally treated with topical agents. He also developed lesions with reddish scales and itching started around the vitiligo lesions in the last 10 months. Dermatological examination revealed depigmented areas and erythematous squamous lesions at the same localization on elbow, hands and knees (Figure 1a). Skin biopsy revealed acanthosis, parakeratosis and Munro’s microabscesses (Figure 1b). Decrease of melanocytes in the basal layer of the epidermis was seen on melan A staining (Figure 1c). The histological findings confirmed the coexistence of vitiligo and psoriasis. There was no family history and previous medication use. Narrowband ultraviolet B treatment was started. Since there was partial improvement of psoriasis lesions and no change on the vitiligo lesions, the patient was dissatisfied and dropped the treatment.
Figure 1b

Figure 1c

Figure 1. CASE 1
CASE 2

A 51 year-old male patient presented with redness and spot on the body. His complaints started fifteen days ago. Depigmented plaques and erythematous and squamous lesions located at the same localization on the hands, knees and elbows were noted on dermatological examination (Figure 2). Punch biopsy revealed histological findings consistent with psoriasis. Past medical history was unremarkable. There was no family history. We suggested that retinoid-psoralen plus ultraviolet A therapy to our patient.

Figure 2. CASE 2

CASE 3

A 10 year-old female patient presented with white spot on the face and scaling lesions on the knees. The lesions started almost at the same time 4 years ago. Dermatological examination revealed depigmented areas on the face and squamous lesions on the knees (Figure 3). Psoriasis was diagnosed following a biopsy at a different center. Patient was intermittently treated with topical agents previously. Patient referred to our clinic since there was no change in the lesions. Past medical history was unremarkable. There was no family history. Topical corticosteroid was prescribed for vitiligo, and salicylic acid, corticosteroids and oral antihistaminic suspension, were given for psoriatic lesions. Based
on clinic and histopathologic findings; we present three cases of concomitant vitiligo and psoriasis.

Figure 3. CASE 3
DISCUSSION

Since vitiligo and psoriasis are fairly common dermatological disorders, it is not surprising that two diseases are concomitantly seen. There are such cases that were reported previously 4 - 5. However, there is limited number of case reports that reported vitiligo and psoriasis lesions at the same localizations 6 - 8. Sandhu et al. observed 4700 patients with psoriasis for 14 years. Of these patients 38 had also vitiligo and psoriatic plaques were surrounded with vitiliginous patches only in one patient 9. Psoriatic plaques were surrounded with vitiliginous patches in our first two cases.

Etiopathogenesis of two diseases is not clear yet. Although there are some authors who suggested that the concomitance of these two diseases is not significant 9, other researchers claimed that there should be some factor causing this. Various opinions are claimed to explain this coexistence. It is related to Koebner phenomena and autoimmunity in some reports 6 - 7. Tumor necrosis factor- α (TNF- α) is the key cytokine in psoriasis as demonstrated in some studies and its level is increased on the perilesional skin in vitiligo 10 - 11. Therefore, it is suggested that TNF- α can be the connection point in two diseases. From this point of view, effective treatments with anti- TNF agents were accomplished in some cases with vitiligo and psoriasis 13 - 14.

In our two cases, vitiligo and psoriasis lesions were in the same localization and they were on the areas open to trauma such as knees, elbows and dorsum of the hands. This also supports that Koebner phenomena has a role in this coexistence. Since immunopathogenesis of these two diseases is still mysterious, there is a great need for studies to clarify the pathogenesis of these diseases.

CONSENT

The patients gave consent to the publication of these cases.

COMPETING INTERESTS

The author declares that the author has no competing interest.

REFERENCES