A Case of Extensive Pityriasis Alba

Deborah Lee, M.D., Ju-Hyun Kang, M.D., Sang-Hyun Kim, M.D.,
Jong-Keun Seo, M.D., Ho-Suk Sung, M.D., Seon-Wook Hwang, M.D.

Department of Dermatology, Busan Paik Hospital,
College of Medicine, Inje University, Busan, Korea

Pityriasis alba (PA) is a common benign disease, characterized by hypopigmented macules or patches on the face, usually seen in children. However, two uncommon variants exist, a pigmenting type and an extensive type. Extensive PA is rare. The lesions tend to be less scaly, more persistent, more generalized, more symmetrical, and more frequently seen over the trunk and less so over the face. We report a child who had extensive PA lesions.
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Key Words: Extensive, Hypopigmented, Pityriasis alba

INTRODUCTION

Pityriasis alba (PA) is a common disease, usually seen in children. The lesions are frequently limited to the face, but the neck, arms, and shoulders can also be involved[1]. Initially the typical lesion consists of an irregular, round or oval, pink patch, sometimes with an elevated, and slightly erythematous border, varying in size from a few millimeters to a few centimeters. After a few weeks, the erythema usually fades, leaving a whitish macule covered by fine scales[2]. Atypical forms of PA are the extensive and pigmenting types. Extensive PA is characterized by typical PA lesions distributed in a generalized fashion. We present a case of extensive PA, which has not yet been reported in Korean literature.

CASE REPORT

A 4-year-old boy presented with multiple hypopigmented patches over his whole body (Fig. 1). 18 months ago, they started as small hypopigmented macules over the chest and gradually increased in number and size and spread to the entire body. The lesions were asymptomatic and were accentuated with sun exposure. There was no fluorescence under Wood's light. On physical examination, the lesions were symmetrically distributed over the whole body and consisted of large hypopigmented patches with indistinct borders. Laboratory examinations, in-

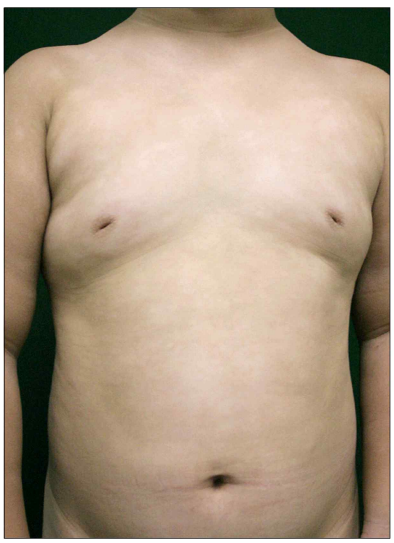

Fig. 1. Multiple hypopigmented, non-scaling, and non-coalescing patches with indistinct borders involving the whole body.

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Reprint request to: Deborah Lee, M.D., Department of Dermatology, Busan Paik Hospital, College of Medicine, Inje University, 633-165, Gaegeum-dong, Busanjin-gu, Busan 614-735, Korea. Tel: 82-51-890-6135, Fax: 82-51-897-6391, E-mail: btyouth@naver.com

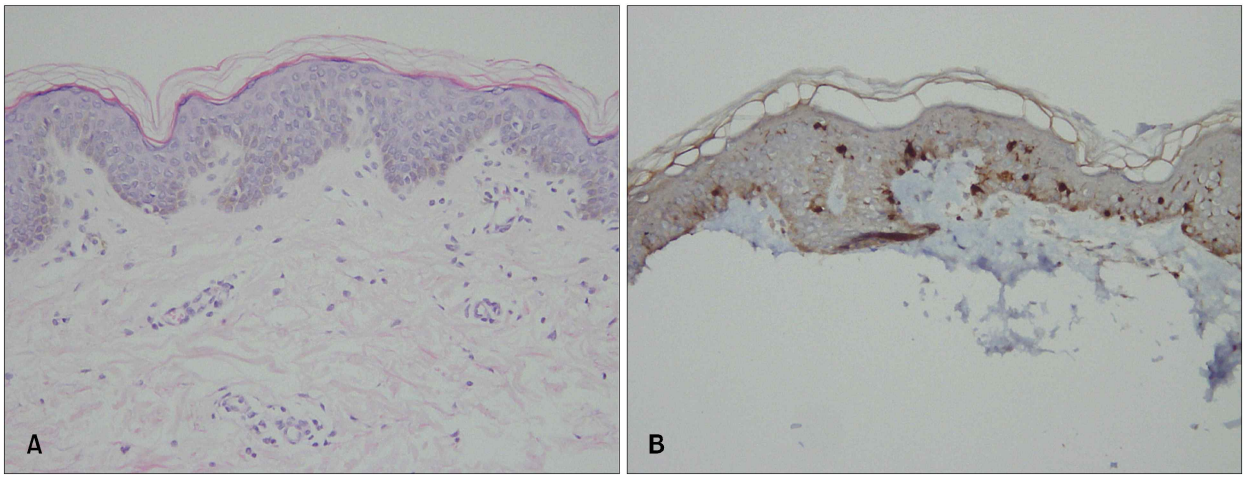

Fig. 2. (A) Histologic examination of the hypopigmented patch revealed hyperkeratosis, focal spongiosis in the epidermis and perivascular inflammatory infiltration (H&E, ×200). (B) Irregularly distributed melanocytes were positive for S-100 protein in the basal layer (S-100 protein, ×200).

cluding chest PA, CBC, LFT, and UA were within normal limits. Potassium hydroxide (KOH) mount from a hypopigmented lesion was negative. The boy had a history of xesosis for 2 years but no family history of extensive pityriasis alba or atopic dermatitis.

Histopathological examination of the hypopigmented patch revealed hyperkeratosis, acanthosis in the epidermis, and perivascular inflammatory cells infiltration in the upper dermis (Fig. 2A). On immunoperoxidase staining, the irregularly distributed melanocytes in the basal layer were positive for S-100 protein (Fig. 2B). Although the patient was treated with topical steroid twice a day for 1 month, no regression of the lesions were observed.

DISCUSSION

PA is a common skin disorder usually seen in children. PA often starts as a pink patch with an elevated border varying 0.5 to 5 cm in diameter. After several weeks, the patch fades, leaving a paler spot covered by a powdery white scale. This spot will progress to a smooth hypopigmented macule that persists for about 1 year. The lesions are frequently present on the face, arms, and shoulders. Most patients are children between 6 and 16 years of age. Boys are thought to be affected more frequently. There are two uncommon variants, a pigmenting and an extensive PA. Pigmenting PA is a variant that may be associated with superficial dermatophyte infection. Extensive PA is an entity characterized by typical PA lesions distributed in a generalized fashion, and seen more commonly in adults. Extensive PA is not preceded by erythema. The lesions tend to be less scaly, more persistent, and completely asymptomatic[4]. In addition, they are more generalized, more symmetrical, and more frequently seen over the trunk and less so over the face[5]. In our patient, the lesions were not preceded by erythema and not scaly, completely asymptomatic, and generalized.

The pathogenesis of PA is still controversial. Weber et al studied the etiopathogenesis of PA[6]. They reported, the disease was more accentuated when the patient had poor hygiene and sun exposure habits. And another important element in the development of the disease was associated with the xerosis presenting in individuals with atopic diathesis[5]. PA is also linked to vitamin deficiencies, lower serum levels of copper, wind, and soap[6,7].

The histologic changes in biopsy specimens are usually nonspecific[1]. PA has areas of hyperkeratosis, parakeratosis, acanthosis, and small amounts of spongiosis. In the early stage, there is follicular plugging and atrophic sebaceous glands. Perivascular lymphocytic infiltrates and edema are evident in the dermis. The intermediate stage is characterized by the damage to the hair follicle and spongiotic

edema. Late stage PA shows a finding of typical chronic dermatitis and irregularly distributed melanization[4]. The histologic finding of our patient showed late stage PA.

In the differential diagnosis, it is necessary to consider post-inflammatory hypopigmentation, tinea versicolor, vitiligo, and nevus depigmentosus. Post-inflammatory hypopigmentation can be ruled out due to the absence of a preceding dermatitis. Tinea versicolor can be distinguished by KOH mount of the lesion. In vitiligo, the contrast between normal and affected skin is greater than that of PA. Nevus depigmentosus can be distinguished from PA because 92.5% are present before the age of 2 and have well-defined borders. In this case, the skin lesion presented at the age of 3 without preceding dermatitis. KOH mount from the lesion was negative. There was no fluorescence under Wood's light. The lesions were hypopigmented patches with indistinct borders.

Treatment for patients with PA is assuring patients that the disorder is self-limiting and not dangerous. Clinicians should recommend measures that limit an individual's exposure to possible etiologic factors, such as decreasing sun and wind exposure, regular use of sunscreen, and reducing the frequency and temperature of baths. Accepted treatments include emollients and lubricants. Extensive PA has been found to resolve with psoralen-UVA therapy[2]. In recent studies, pimecrolimus cream 1% and tacrolimus ointment 0.1% were proved as effective treatment[5] for typical PA[9,10].

To the best of our knowledge, our case is the first case of extensive PA in Korean literature. Therefore we report this rare and interesting case of extensive PA. More experience in this rare condition and trial of various treatment modalities are needed.

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