

Two Cases of Lichen Planus Pigmentosus-inversus Arising from Long-standing Lichen Planus-inversus

Byung-Soo Kim, M.D., Kyung Duck Park, M.D., Seong Geun Chi, M.D.,
Hyun Chang Ko, M.D.¹, Weon Ju Lee, M.D., Seok-Jong Lee, M.D., Do Won Kim, M.D.

Department of Dermatology, School of Medicine, Kyungpook National University, Daegu,
¹Department of Dermatology, School of Medicine, Pusan National University, Busan, Korea

Lichen planus pigmentosus-inversus (LPP-inversus) is an extremely rare variant of lichen planus (LP), and only a few cases have been reported. Its course is characterized by exacerbations and remissions, and it is known to be more chronic than classical LP is. We report two cases of LPP-inversus and offer the suggestion that LPP-inversus may originate from LP of flexural areas. (*Ann Dermatol* (Seoul) 20(4) 254~256, 2008)

Key Words: Lichen planus-inversus, Lichen planus pigmentosus-inversus

INTRODUCTION

Lichen planus pigmentosus-inversus (LPP-inversus) is an extremely rare variant of lichen planus (LP), and only a few cases have been reported^{1,2}. We have already seen one patient with LPP-inversus, and that case has been published³. Recently, we saw two more cases of LPP-inversus. We report the details of those cases and offer suggestions concerning their possible origin.

CASE REPORT

The first patient was a 49-year-old woman who presented complaining of violaceous reticulated patches and scattered rice grain-sized macules localized to the left inguinal area for several months (Fig. 1A). She had no subjective symptoms, such as pruritus or pain. She had not come into contact with any chemicals, animals, or plants, nor had she

been using any medications that could prompt an allergic response. Her medical and family history were non-contributory. A skin biopsy from a violaceous patch revealed irregular acanthosis, vacuolar alteration of the basal layer, and marked band-like dermal lymphocytic infiltration with pigment incontinence (Fig. 1B). These histological features suggested the presence of classic LP. Thereafter, the lesions slowly flattened and changed color to brown. Although we could not examine the flattened lesions histologically, we hypothesized that lesions of classic LP located only in intertriginous areas may have changed into LPP sometime later.

The second patient was a 25-year-old woman who complained of multiple brownish macules scattered on both axillae for one year (Fig. 2A). Recently, a solitary pigmented atrophic patch was also found on the left inner thigh (Fig. 2B). She was not symptomatic. The size of the lesions increased gradually. There were also some tiny papules around the lesions in the axilla. According to the patient, some of the papules had flattened into macular components. A skin biopsy was performed on the axillary and inner thigh lesions. The papular lesions in the axilla showed histological features consistent with classic LP (Fig. 2C). Thinning of the epidermis and pigmentary incontinence were prominent features of the thigh lesions. These features found in the thigh lesions were consistent with LPP.

Received April 28, 2008

Accepted for publication June 13, 2008

Reprint request to: Byung-Soo Kim, M.D., Department of Dermatology, Kyungpook National University Hospital, 200, Dongduk-ro, Jung-gu, Daegu 700-721, Korea. Tel: 82-53-420-5838, Fax: 82-53-426-0770, E-mail: dockbs@knu.ac.kr

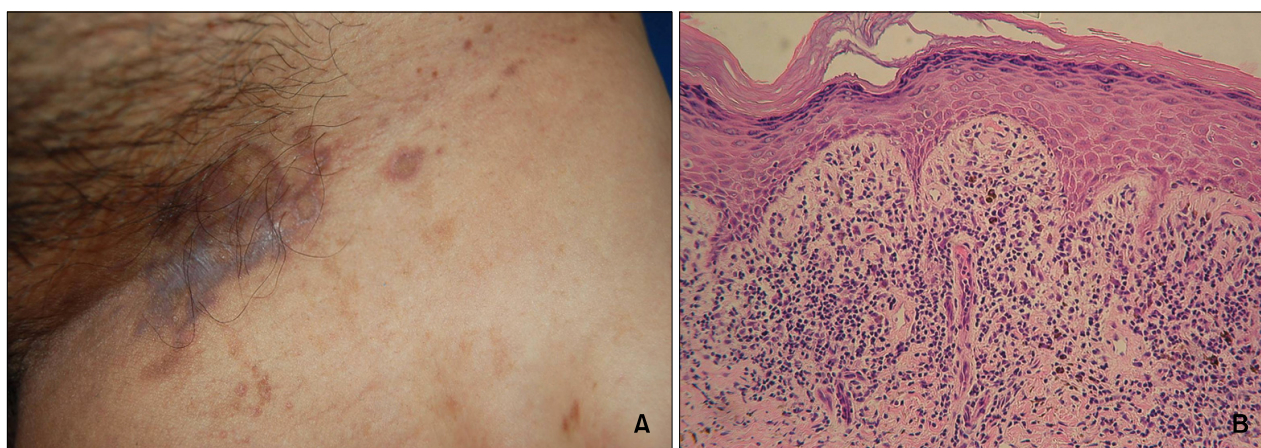


Fig. 1. (A) Violaceous annular patches and scattered rice grain-sized macules are seen in the left inguinal region. (B) Mild hydropic degeneration of the basal keratinocytes and marked, band-like dermal lymphocytic infiltration with pigment incontinence are seen on histopathological examination (H&E, $\times 200$).

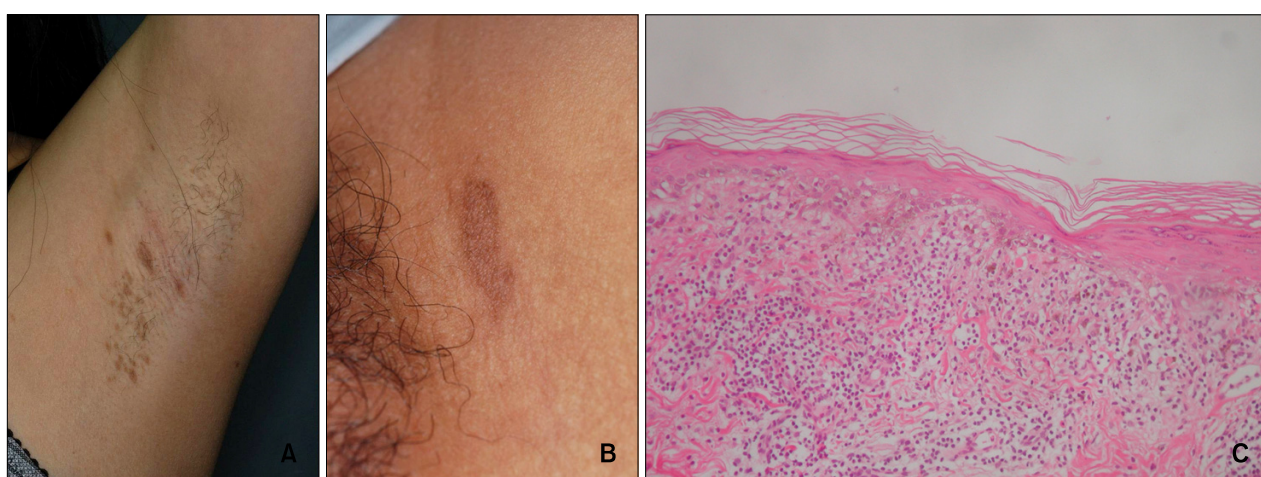


Fig. 2. Several brownish-to-purplish papules and macules are located in the axillae (A) and in the right inner thigh (B). Histopathological examination of the papular lesions in the axilla shows dense, band-like, predominantly lymphocytic infiltrates in the papillary dermis and vacuolar alteration of the basal layer with some necrotic keratinocytes (C) (H&E, $\times 200$).

DISCUSSION

LPP, a disease of unknown etiology, manifests as hyperpigmented, dark brown, occasionally pruritic macules and/or papules. The course of the disease is characterized by exacerbations and remissions. It is known to be more chronic than classical LP is⁴.

With regard to the coexistence of classic LP in a number of LPP patients and the histopathological resemblance between these two disorders, many authors have suggested that LPP is a variant of LP⁵.

However, classical LP shows a predilection for the wrist, thigh, ankle, and the dorsum of the hand, and to the best of our knowledge, there have been no reports of classical LP being confined to intertriginous areas. The two current cases and the case detailed in our previous report³ confirm classic LP lesions confined to skin folds, which developed LPP features over time through epidermal flattening.

Although verification of similar cases is needed in order to confirm our hypotheses, we suggest that LPP-inversus may originate from LP of flexural

areas. Furthermore, classic LP can be located in the flexural area only, so we suggest that a new term, 'LP-inversus', be used to designate such an entity.

REFERENCES

1. Pock L, Jelinkova L, Drlik L, Abrhamova S, Vojtechovska S, Sezemska D, et al. Lichen planus pigmentosus-inversus. *J Eur Acad Dermatol Venereol* 2001;15:452-454.
 2. Munoz-Perez MA, Camacho F. Pigmented and reticulated plaques of folds. A case of lichen planus pigmentosus-inversus? *Eur J Dermatol* 2002;12: 282.
 3. Kim BS, Aum JA, Kim HS, Kim SJ, Kim MB, Oh CK, et al. Coexistence of classic lichen planus and lichen planus pigmentosus-inversus: resistant to both tacrolimus and clobetasol propionate ointments. *J Eur Acad Dermatol Venereol* 2008;22: 106-107.
 4. Cho S, Whang KK. Lichen planus pigmentosus presenting in zosteriform pattern. *J Dermatol* 1997; 24:193-197.
 5. Kanwar AJ, Dogra S, Handa S, Parsad D, Radotra BD. A study of 124 Indian patients with lichen planus pigmentosus. *Clin Exp Dermatol* 2003;28: 481-485.
-