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Case report

Lichen planus pigmentosus inversus: 3 cases

Asmae Lahlou[1,&], Sara Elloudi[1], Salim Gallouj[1], Fatima-Zohra Mernissi[1]

[1]University Hospital Hassan II, Dermatology Department, Fez, Morocco

[&]Corresponding author: Asmae Lahlou, University Hospital Hassan II, Dermatology Department, Fez, Morocco

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Abstract

Lichen planus pigmentosus-inversus is a rare variant of lichen planus pigmentosus. The eruption of lichen planus pigmentosus-inversus occurs mainly in the flexural regions and presents with brownish macules and patches. Here we describe three cases of woman who presented with hyperpigmented lesions at the different body folds. Physical examination revealed multiple brownish macules and patches on the intertriginous area without pruritis, and histologic findings showed a regressive pattern of lichen planus. These clinical and histological findings were consistent with a diagnosis of lichen planus pigmentosus-inversus.

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Introduction

Lichen planus pigmentosus inversus is a rare variant of lichen planus pigmentosus [1]. The eruption of lichen planus pigmentosus-inversus occurs mainly in the flexural regions and presents with brownish macules and patches with or without pruritus [2]. Approximately 20 cases are reported in the medical literature worldwide. The etiology is unknown, without any causal relation to medications or sun exposure [3]. We report 3 cases of three women who had asymptomatic lesions hyperpigmented at the folds.

Patient and observation

Observation 1: A 53-year old women, phototype IV, followed in gastrology for viral hepatitis C in which no treatment currently, presented with asymptomatic brown macules in the inguinal area, umbilical, and some elements in the axilla (Figure 1). There was an absence of lesions on scalp, mucosae and nails, Histologic examination revealed a dense mononuclear inflammatory infiltrate papillary dermis epidermal performing a sub band image at net lower limit nibbling epidermal ridges and by giving them an arcuate appearance and a pigment incontinence. These clinical and histological findings were consistent with a diagnosis of Lichen planus pigmentosus inversus.

Observation 2: A 22 -year old women, phototype IV, without significant pathological antecedents, presented with asymptomatic brown macules in the left inguinal area (Figure 2), which the pathological examination revealed lichen planus, and clinical symptomatology is compatible with lichen Lichen planus pigmentosus inversus.

Observation 3: a 28-year old women, phototype IV, without significant pathological antecedents presented of 7 years duration pigmented macules at all the folds, lesions slightly itchy (Figure 3).

Discussion

The term lichen planus pigmentosus inversus (LPPI) was proposed by Pock et al in 2001, after the report of 7 cases of lichen planus pigmentosus located predominantly on intertriginous areas [1]. Gaertner and Elstein, in 2012, considered the clinical and histological manifestations of LPPI as distinct from other similar entities [4]. LPPI is a chronic inflammatory affection, it's a variant of lichen plan pigmentosus, it is a rare disease occurring in the intertriginous areas of individuals with fair skin, while our observations have described the occurrence of these lesions on skin type IV The etiology is unknown, without any causal relation to medications or sun exposure [5]. The pathogenesis appears to be related to a T lymphocyte-mediated, cytotoxic activity against basal keratinocytes [1-3]. The most affected areas were the axillary, inguinal and inframammary regions, There was an absence of lesions on scalp, mucosae and nails in all cases reported, as the case of our patients [6]. The characteristic manifestations of LPPI are hyperchromic macules, usually small, lenticular, with discreet to absent pruritus, affecting intertriginous areas, mainly axillae and also cervical, inguinal and popliteal areas. Wickham striae have also been reported Histopathology, as in the case reported here, revealed marked pigmentary incontinence and discreet lichenoid infiltrate similarly to typical lichen planus, there is a compensatory proliferation of those keratinocytes, which do not develop in intertriginous areas [1, 7]. The differential diagnosis includes fixed drug eruption, acanthosis nigricans, candida intertrigo, erythrasma, post-inflammatory pigmentation, lichenoid toxic dermatitis or ashy dermatosis [8]. Our case presented with asymptomatic brown macules and patches in the flexural areas showing a strong incontinence of pigment and a mild lymphocytic infiltrate in the upper dermis.

Conclusion

We have described three rare cases of Lichen planus pigmentosus inversus one plane in a patient with hepatitis C serology positive based on clinical appearance of lesions and their location at the folds and a histological confirmation.

Competing interests

The authors declare no competing interests.

Authors' contributions

All authors have read and agreed to the final version of this manuscript.

Figures

Figure 1: Inversus lichen at the great folds of the abdomen
Figure 2: Lichen inversus in the inguinal folds
Figure 3: Inversus lichen at the sub mammary fold

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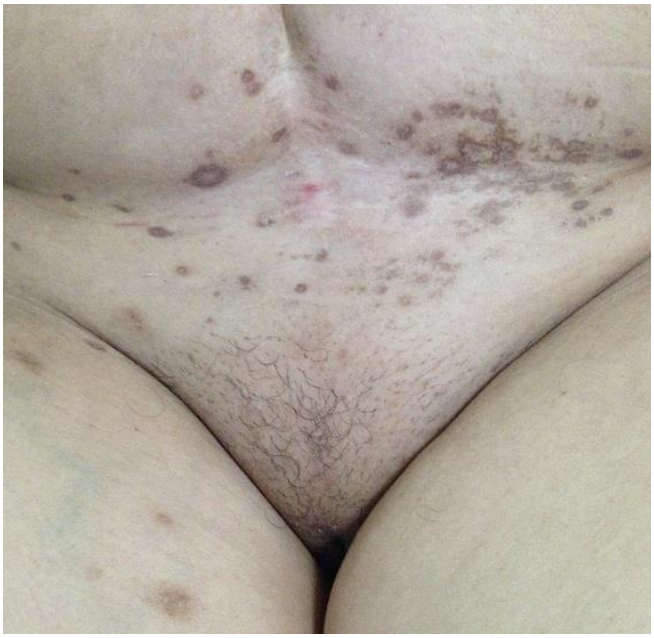

Figure 1: Inversus lichen at the great folds of the abdomen

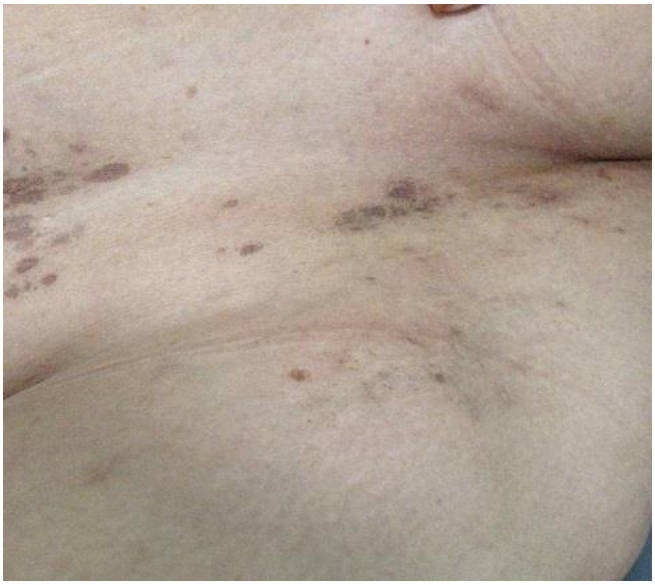

Figure 2: Lichen inversus in the inguinal folds

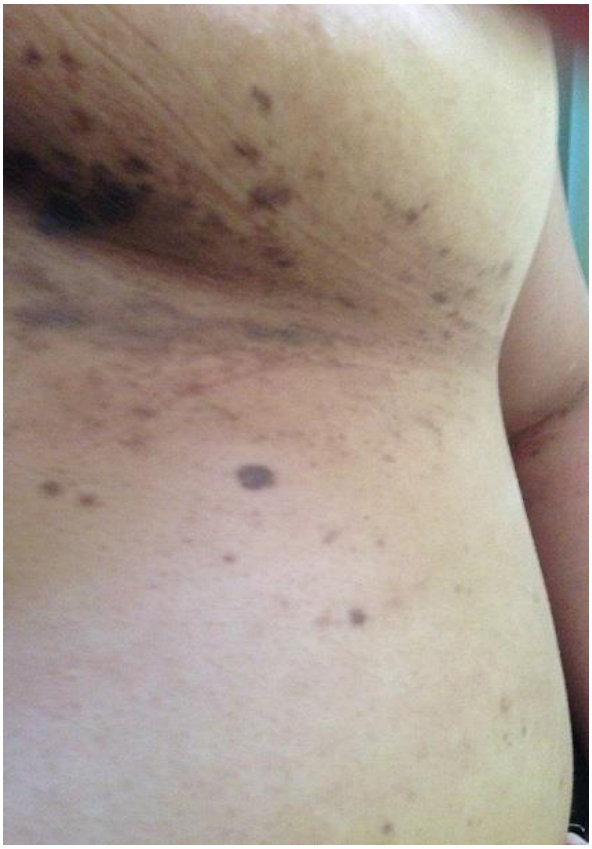

Figure 3: Inversus lichen at the sub mammary fold