An Egyptian case of isolated palmar lichen planus mimicking tinea nigra

Enas A.S. Attia[a,b], Delram M. Mahmoud[c]

[a]Department of Dermatology, Venereology and Andrology, Faculty of Medicine, Ain Shams University, Cairo, Egypt, [b]Department of Dermatology, Queen Hospital, [c]Department of Histopathology, Alborge Lab, Doha, Qatar

Correspondence to Enas A.S. Attia, MD, Department of Dermatology, Venereology and Andrology, Faculty of Medicine, Ain Shams University, Cairo, PO Box: 11566, Egypt
Tel/fax: +20 224 346 709;
e-mail: annosah1974@yahoo.com

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Exclusive palmoplantar lichen planus causes diagnostic challenge because of its rarity and the nonclassical morphology of the lesions. Herein, we report a case of exclusive palmar lichen planus resembling tinea nigra in an Egyptian male.

Keywords:
histopathology, lichen planus, palm, tinea nigra

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Introduction

Exclusive palmoplantar lichen planus (PPLP) causes diagnostic challenge because of its rarity and the nonclassical morphology of the lesions. Previously reported lesions include yellowish hyperkeratotic papules, erythematous scaly plaques, diffuse keratoderma, annular lesions, ulcerated lesions, vesicle-like papules, diffuse palmar hyperpigmentation, umbilicated papules, hyperkeratotic pitted plaques with epidermal perforation, and pitted keratotic plaques (acrosyringeal LP) [1]. Common differential diagnoses include psoriasis, eczema, keratoderma, lichen nitidus, and warts [2]. In exclusive PPLP, diagnosis is usually missed clinically, and histopathology is crucial [1].

Case Report

Herein, we report a case of exclusive palmar LP in a 49-year-old Egyptian male patient. The patient presented with social embarrassment owing to asymptomatic slowly progressive brown discoloration of the central area of both palms of gradual onset, which started few months ago on the right palm followed by the left palm. There was no history of other lesions elsewhere on the body. History revealed that the patient was diagnosed as having eczema and treated with topical clobetasol for few weeks, with no response. The patient denied possible repetitive friction from *athletic* gear.

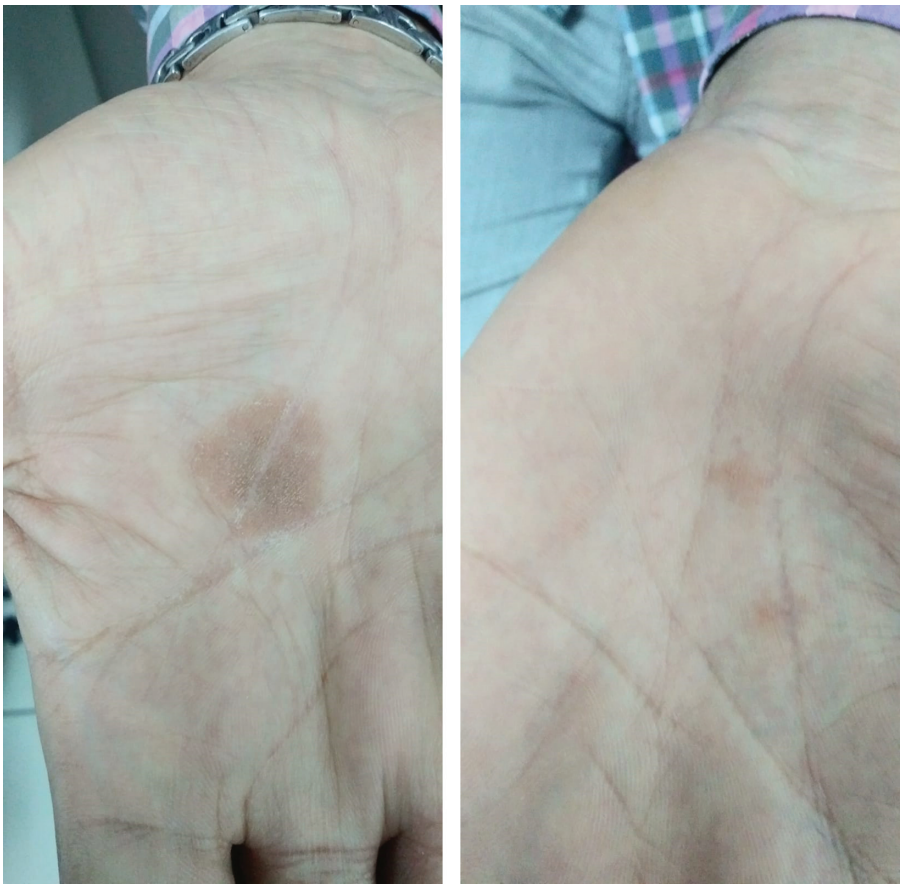
Examination revealed well-defined brown slightly keratotic plaques with preserved skin markings on the central area of both palms, more on the right side (Fig. 1). No other lesions were detected in the body, nails, hair, or mucous membranes.

Provisional clinical diagnosis was tinea nigra. However, direct KOH examination was negative. Therefore, biopsy was taken for histopathological examination, which revealed the typical features of LP with epidermal hyperkeratosis, acanthosis, and wedge-shaped hypergranulosis, and dermal band-like lymphocytic infiltrate with interface of saw-tooth rete ridges. Higher magnification revealed focal spongiosis, absent melanophages, but prominent civatte bodies (arrows) (Fig. 2). No pigmented hyphae and spores were seen in hematoxylin and eosin sections as well as PAS-stained sections.

Discussion

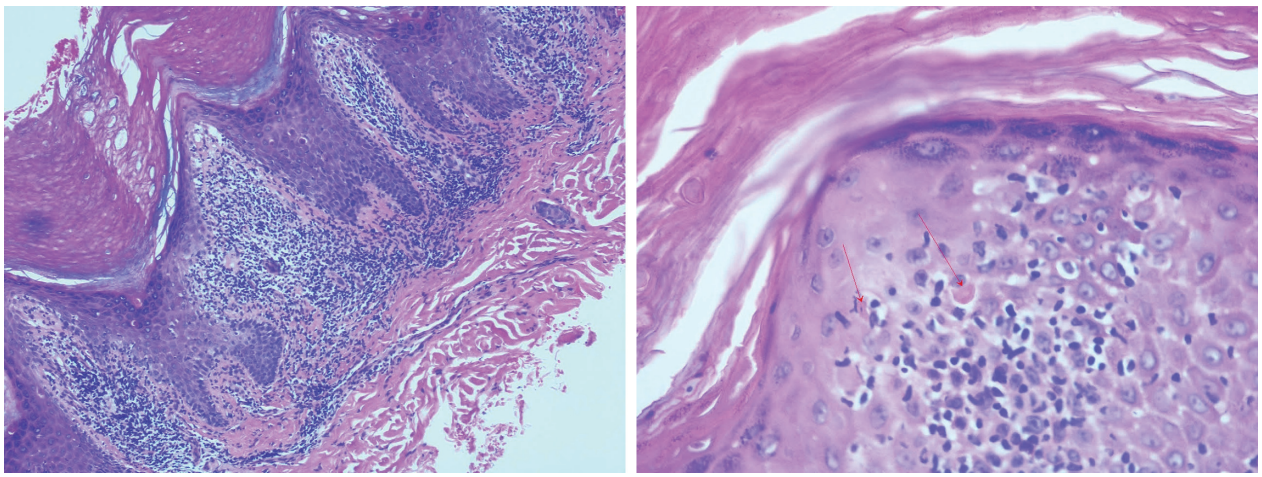
Exclusive PPLP is reported to be rare. In a clinico-etiological study of 375 patients with LP, involvement of the palms was seen in only 3.5% and of soles in 4.3% of the cases [2]. Exclusive palmar or plantar LP was reported only in 11% of patients presented with PPLP, with the central palmar region the least affected palmar site [1]. Itching was absent in 10–11% of patients with PPLP [1,2].

Figure 1



Well-defined brown slightly keratotic plaques with preserved skin markings on the central area of both palms, more prominent on the right side.

Figure 2



Epidermal hyperkeratosis, acanthosis, and wedge-shaped hypergranulosis, and dermal band-like lymphocytic infiltrate with interface of saw-tooth rete-ridges (hematoxylin and eosin, ×100). Higher magnification revealed focal spongiosis, absent melanophages, but prominent civatte bodies (arrows) (hematoxylin and eosin, ×400).

Histopathological features of PPLP were reported to include some unusual features such as parakeratosis in 44% of cases, spongiosis in 39%, lack of melanophages in 78%, lack of wedge-shaped hypergranulosis in 44%, deeper infiltrate in 26%, and eosinophils in 17% of patients [1]. Similarly, we reported focal spongiosis and absent melanophages.

Topical treatments for localized PPLP include topical steroid, keratolytics, and topical tazarotene [2,3]. As the

current case was resistant to topical clobetasol, and as topical tacrolimus showed some efficacy in the treatment of cutaneous LP [4], he was prescribed a combination of topical clobetasol and salicylic acid and tacrolimus 0.1% ointment, with mild improvement after 2 weeks, on follow-up.

In conclusion, PPLP lesions are not as rare as thought but always do not have classical features and show variable clinical presentations that can mimic other conditions. Histopathology is crucial for correct diagnosis in such cases.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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