Sultan Qaboos University Med J, February 2019, Vol. 19, Iss. 1, pp. e79–80, Epub. 30 May 19
Submitted 6 Nov 18
Revision Req. 9 Dec 18; Revision Recd. 11 Dec 18
Accepted 3 Jan 19
https://doi.org/10.18295/squmj.2019.19.01.016

INTERESTING MEDICAL IMAGE

Palmoplantar *Lichen Planus*

A diagnosis to keep in mind

*Ricardo Ruiz-Villaverde,[1] Beatriz Rueda-Villafranca,[2] Marina Ruiz Galvez-Moreno[1]

الحزاز المسطح في راحة اليد وباطن القدم

تشخيص يجب أخذه بعين الإعتبار

ريكاردو رويز-فيلافيردي، بياتريز رويدا فيلافرانكا، مارينا رويز غالفيز مورينو

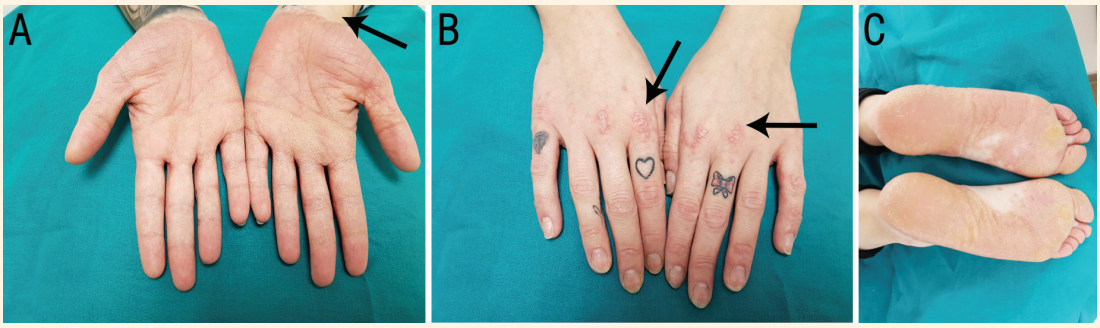

Figure 1: Photographs of the hands and feet of a 29-year-old female patient showing well-defined diffuse erythema (arrows) on both (**A**) palms and (**B**) *dorsum* sparing the fingertips and (**C**) well-defined erythematous patches sparing the plantar arch on both soles.

A 29-year-old Caucasian female patient was referred to the Dermatology Outpatient Clinic of Hospital Universitario San Cecilio, Granada, Spain in 2018 with a pruriginous palmoplantar eruption over the previous five months that had not improved with the application of high-potency topical corticosteroids. She had no personal or family history of skin diseases. Recently, she denied the use of any medications.

Dermatological examination revealed the presence of a well-defined diffuse erythema on the palm of the hands that spared the fingertips and bilateral violaceous polygonal papules on the *dorsum* aspect of the hands [Figures 1A & B]. On the soles of her feet, well-defined erythematous patches sparing the plantar arch were observed [Figure 1C]. No involvement of other skin areas or mucosa was noted. Laboratory tests including complete blood count, general biochemistry, venereal research laboratory tests, hepatitis B and C and HIV serology showed normal results. In addition, an allergic contact dermatitis patch test was negative.

Histolopathologic examination of a lesion on the *dorsum* of the right hand revealed orthokeratotic hyperkeratosis, irregular acanthosis, vacuolar degeneration of the basal layer and band-like lymphocytic infiltration on the papillary dermis [Figure 2].

Therefore, the patient was diagnosed with palmoplantar *lichen planus* (PPLP). Treatment with isotretinoin was proposed at a dose of 0.5 mg/kg/day with a substantial improvement three months later. At present, the patient remains asymptomatic with periodic consultations. Psoralen and ultraviolet A (PUVA) therapy for localised disease was refused by the patient for her inability to attend due to work-related reasons.

Comment

PPLP is an uncommon entity of low prevalence on the clinical spectrum of *lichen planus* with an incidence rate of 12.9–26%.[1] This disease has a male predilection and the average age of onset of 38 years with a range of 9–72 years.[2]

The absence of the typical polygonal violaceous papules, which were found on the dorsal aspect of both hands of the current patient, is not unusual; on the palms, the fingertips are usually spared.[3,4] In general, of localised *lichen planus* cases become generalised with

Departments of [1]Dermatology and [2]Pathology, Hospital Universitario San Cecilio, Granada, Spain
**Corresponding Author's e-mail: ismenios@hotmail.com*

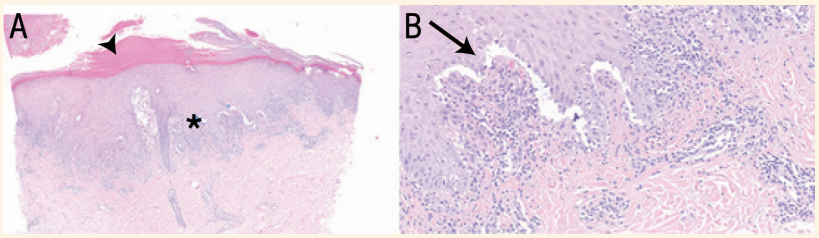

Figure 2: Haematoxylin and eosin stain at **(A)** x2 magnification showing orthokeratotic hyperkeratosis (arrowhead), irregular acanthosis and vacuolar degeneration of the basal layer (*) and at **(B)** x20 magnification showing the degeneration of the basal layer (arrow) and band-like lymphocytic infiltration on the papillary dermis.

the average time of evolution estimated to be between 1–4 months.[5]

Five clinical types of PPLP have been described, namely eczematous, lichenoid, punctate keratotic, ulcerative and psoriasiform, which is the most frequent.[1] There are isolated cases that have described the presence of vesicles, *petechiae* or umbilicated papules.[4] Histolopathological studies are crucial to diagnose PPLP. The pathological characteristics of PPLP are shared with those of classic *lichen planus*. The thickness of the *stratum lucidum* of palms and soles has its clinical meaning in the absence of the characteristic Wickham's *striae*.[5] Differential diagnosis should include psoriasis, hyperkeratotic eczema, diffuse keratoderma, keratosis *punctata*, *lichen* nitidus, granuloma annulare and secondary syphilis among others.[4]

A variable response to treatments, including retinoids, PUVA therapy, corticosteroids, methotrexate, cyclosporine and enoxaparin sodium, has been reported.[4–6] It is necessary to establish a therapeutic protocol that assesses the risks and benefits of each patient.

References

1. Sinha S, Sarkar R, Garg VK. Palmoplantar lesions of lichen planus. Indian J Dermatol 2018; 63:57–61. https://doi.org/10.4103/ijd.IJD_161_17.
2. Gutte R, Khopkar U. Predominant palmoplantar lichen planus: A diagnostic challenge. Indian J Dermatol 2014; 59:343–7. https://doi.org/10.4103/0019-5154.135477.
3. Burillo-Martínez S, Tous-Romero F, Rodríguez-Peralto JL, Postigo-Llorente C. Palmoplantar lichen planus: The spectrum of clinical manifestations in a single patient. Actas Dermosifiliogr 2017; 108:790–2. https://doi.org/10.1016/j.ad.2017.01.019.
4. Solak B, Kara RO, Kosem M. Palmoplantar lichen planus successfully treated with acitretin. BMJ Case Rep 2015; 2015:bcr-2015211115. https://doi.org/10.1136/bcr-2015-211115.
5. Kim MJ, Choi M, Na SY, Lee JH, Cho S. Two cases of palmoplantar lichen planus with various clinical features. J Dermatol 2010; 37:985–9. https://doi.org/10.1111/j.1346-8138.2010.00936.x.
6. Rieder E, Hale CS, Meehan SA, Leger M. Palmoplantar lichen planus. Dermatol Online J 2014; 20:13030/qt1vn9s55z.