CASE REPORT

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Lichen Planus Pigmentosus on the palms: Case Report

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ABSTRACT

Lichen planus pigmentosus (LPP) is uncommon variant of Lichen planus (LP). Lichen planus is a common inflammatory condition of unknown etiology. Here we report a60-year-old female presented with 7 months history of persistent very itchy skin lesions on her hands. Otherwise, she is healthy. Skin examination revealed non-scaly brownish patches on her palms. Hair, nail and mucous membranes examinations were all normal. Skin biopsy showed hyperkeratosis, hypergranulosis, acanthosis, saw toothing of rete ridges, vacuolar degeneration of the basal layer and band-like lymphohistiocytic cellular infiltrates in the papillary dermis. The patient was diagnosed as LPP. She was started on potent topical steroid treatment with excellent response.

Keywords: Lichen planus pigmentosus, lichen planus, lichenoid dermatosis

1. INTRODUCTION

Lichen planus pigmentosus (LPP) is avariant of Lichen planus (LP). Lichen planus is a common inflammatory condition of unknown etiology. However, topical mustard oil application has been implicated as a possible trigger. LPP is commonly seen in Indians, Middle Easterns and Latin Americans. It is common in middle age female (Amanda Oakley, 2015). LPP is characterized by asymptomatic symmetrical brown to grey-brown macules and patches. Occasionally, a reticulated pattern is observed. The linear distribution following the Blaschko lines were described (Katta R, 2000). The most common areas of involvement include face, neck and intertriginous areas (Bourra & Leila, 2013). Prognosis wise, LPP is a chronic disease with remissions and exacerbations. Few cases show spontaneous resolution (Al-Mutairi & El-Khalawany, 2010). Therapeutic agents that have been proven to be effective in treatment of LPP include topical and systemic steroids, topical calcineurin inhibitors, systemic retinoids, narrow band UVB, PUVA, antimalarials and oral immunosuppressive agents (Shima, 1956).

2. CASE REPORT

Sixty-year old female presented with 7 months history of persistent very itchy skin lesions on her hands. Otherwise, she is healthy. Review of systems, past medical history and family history were all unremarkable. Skin examination revealed non-scaly brownish patches on her palms (Figure 1).

Figure 1 The palms of the patient showingnon-scaly brownish patches.

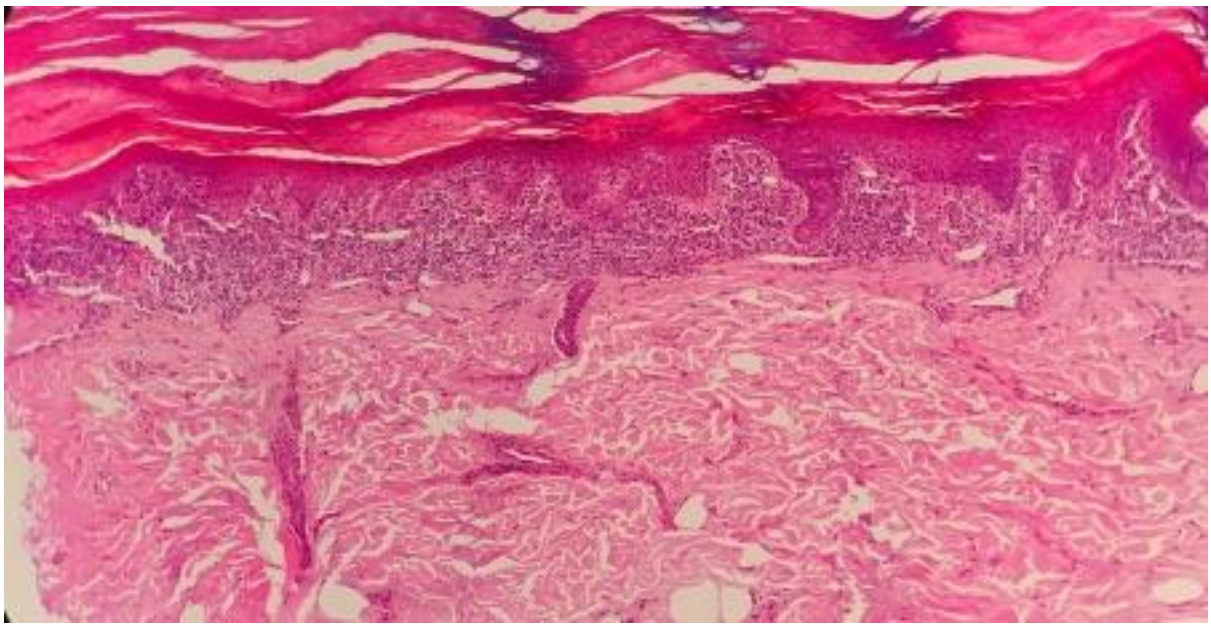

Figure 2 Skin biopsy shows hyperkeratosis, hypergranulosis, acanthosis, saw toothed of rete ridges, pan like infiltrate in the papillary dermis and vacuolar degeneration of the basal layer.

Hair, nail and mucous membranes examinations were all normal. Skin biopsy showed hyperkeratosis, hypergranulosis, acanthosis, saw toothing of rete ridges, vacuolar degeneration of the basal layer and band-likely lymphohistiocytic cellular infiltrate in the papillary dermis (Figure 2). The patient was diagnosed as LPP. She was started on potent topical steroid treatment with excellent response.

3. DISCUSSION

The typical presentation of LPP is brown or gray–brown patches in sun-exposed areas. Our patient showed typical color of LPP. However, the location was unusual (the palms). The classical histopathology of LPP includes epidermal atrophy, lymphocyte poor lichenoid tissue reaction (LTR) and pigment incontinence. The histopathology in our patient was not typical for LPP; instead it showed typical features of the classic LP. The main differential diagnosis includes drug-induced pigmentation and PIH. However, our patient has no drug history and the histopathology in our patient was classic for LP. The main treatment of LP includes topical, intralesional and systemic corticosteroids, systemic retinoids, narrowband UVB, PUVA, topical calcineurin inhibitors, antimalarials and oral immunosuppressive agents. Our patient responded well to super potent topical steroid.

4. CONCLUSION

LPP is uncommon variant of LP. It typically present in sun exposed areas and interteragenus areas. However, other locations can be rarely involved. LPP should be considered in the differential diagnosis of any pigmentary skin lesions.

Acknowledgments

This case was diagnosed and treated by the corresponding author at King Abdulaziz Hospital, Makkah, Saudi Arabia. We extend special thanks to the patient for her cooperation and lap support.

Informed consent

Informed consent has been obtained from the patient.

Authors' Contributions

1. Dr. Khalid A. Al hawsawi, Dermatology consultant, MD (Principle Investigator and corresponding author) - *Abstract, introduction, case report, discussion and conclusion.*
2. Mryam N. Haddad, MD (Co-Author) - *Introduction and discussion, Abstract and conclusion*

3. Raghad T. Aldibane, MD (Co-Author) - *Introduction and discussion*
4. Mashael A. Alsulami, MD (Co-Author) - *Introduction and conclusion*

Financial Resources
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Conflicts of Interest
The authors have no conflicts of interest that are directly relevant to the content of this clinico-pathological case.

Data and materials availability
All data associated with this study are present in the paper.

Peer-review
External peer-review was done through double-blind method.

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