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CASE REPORT

Plantar lichen planus masquerading eumycetoma of dark grains

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Author contributions: Das A was the correspondent author and took the photographs; Das D also seen the case and discussed with other 2 contributors and did histopathology; Gharami RC previous two authors consulted the author for histopathology and the confusion between eumycetoma and plantar lichen planus and for further management and consultation for Verhoeff-Van Gieson.
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Core tip: The case was initially thought to be eumycetoma of dark grains as there was history of discharge of grains but after repeated antifungal therapy it did not resolve and in histopathology it was found as lichen planus. In this case the clinical features collaborating with perforating lichen planus but histopathology has failed to elucidate the perforating channel which is often missed and difficult to delineate. So, it is better to do a histopathology before giving the treatment as there is overlapping clinical features of various diseases.

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Abstract

Lichen planus is a common inflammatory disease but its perforating variety is not so common and it has been described in small number of text and articles. Here we reported a case of plantar lichen planus where there was a history of discharge of dark grains from the sole of foot and diagnosing the disease as eumycetoma of dark grains repeated antifungal therapy could not resolve the lesions and histopathologically it showed the classical pictures of lichen planus. Collaborating the clinical and histological features we have diagnosed the case as perforating lichen planus but Verhoeff-Van Gieson stain could not elucidate the perforating channel which ot difficult to delineate and often missed. So, we have put the diagnosis of plantar lichen planus and treated with intramuscular triamcinolone and the lesions resolved.

Key words: Plantar lichen planus; Masquerading eumycetoma; Perforating lichen planus

INTRODUCTION

Lichen planus (LP) is a common chronic inflammatory papulosquamous disorder of skin,hair, and nail generally characterized by shiny, violaceous, flat-topped polygonal papules. They may be closely aggregated or widely dispersed.

There are many variants of lichen planus including annular, linear or blaschkoid pattern, hypertrophic, atrophic, erosive, vesicular, follicular LP, micropapular or eruptive, lichen planus pigmentosus, *etc.* Involvement of palms and soles is not very common[1]. Morphology of palmoplantar lichen planus is not like that of other areas. Lesions may be profoundly hyperkeratotic plaque, honeycomb pattern, perforating type, ulcerative type, *etc.*[2].

Here we reported a case of plantar lichen planus presented with discrete keratotic papules with central crater and history of discharging of some material resembling mycetoma.

CASE REPORT

A 48-year-old farmer presented with solid elevated lesions

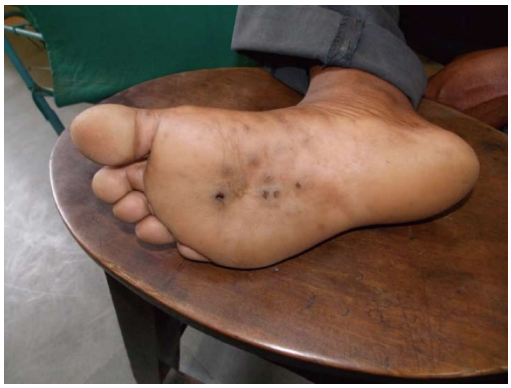

Figure 1 Few indurated papules at sole with central desquamation and ulceration resembling sinuses.

over medial border of left foot and a history of blackish discharge from the lesions for last 2 years. On examination 4-5 hyperkeratotic papules with central craters with a mild indurated background were found (Figure 1). Mucosae, nails and other areas of the body were normal. The case was provisionally diagnosed as mycetoma. Biopsy was done for histopathological examination and fungal culture. Fungal culture yield negative result. X-ray of the foot revealed no abnormality. Biopsy showed a finding consisting of lichen planus (Figure 2) without any epidermal channel. Verhoeff-Van Gieson stain excluded discharge of any altered tissue. Routine examination of blood, urine and stool, chest X-ray found no abnormality. Two doses of injection triamcinolone (40 mg/cc) intramuscularly were given at 2 wk interval, followed by 3 wk interval for another 2 such. Lesions resolved completely without any relapse during 6 mo period of follow up.

DISCUSSION

Perforating lichen planus is an uncommon variant of LP. It presents as hyperkeratotic papules or plaques topped by crust or a keratotic plug. Occasionally keratotic plugs might be dislodged, leaving behind pitted keratotic papules or plaques. Hanau and Sengel[3] reported a case of perforating LP in 1984 in a 52-year-old woman where histology showed classic features of LP and there was a channel containing epithelial cells, hyaline bodies and fibrillar material. Hanau and Sengel[3] speculated that hyaline bodies present abundantly at the base of perforation could irritate the dermo-epidermal junction and consequently initiate the process of perforation of epidermis.

Gutte and Khopkar[4] again reported a case of perforating LP with acrosyringeal accentuation of infiltrate.

In our case there were keratotic papules with central craters. Craters were formed due to dislodgement of superficial hyperkeratotic layers and probably partially detached material was described by the patient as discharge. Serial sections of the specimen also failed to reveal any epidermal channel. So, our case is not exactly a case of perforating lichen planus as mentioned by others[3,4]. Or this might be a case of perforating lichen planus where histopathology was by chance failed to reveal the epidermal channel as it not an easy job to find out. Clinically the case is correlating what was described by previous authors[3,4].

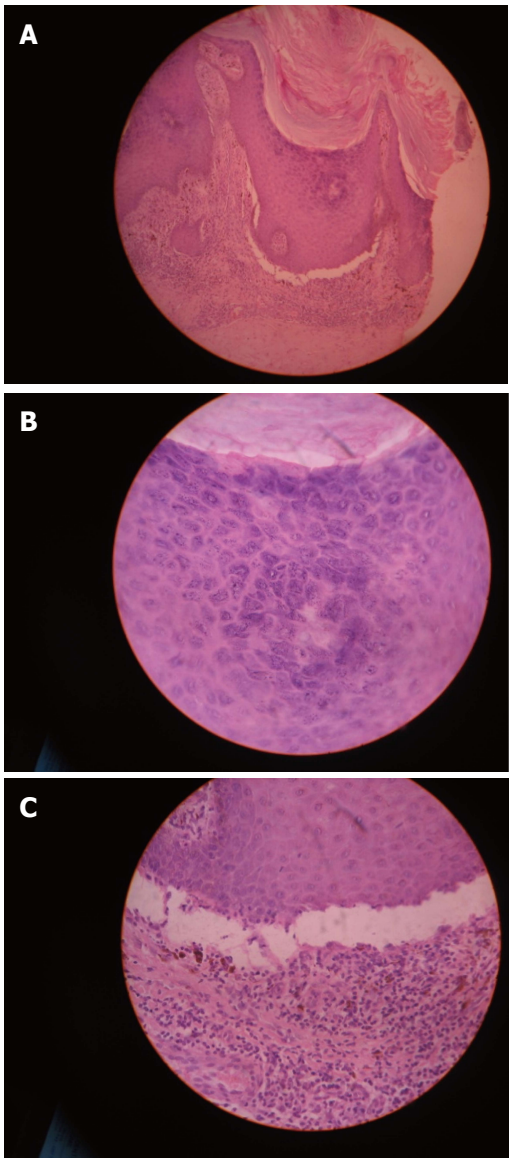

Figure 2 Biopsy showed a finding consisting of lichen planus without any epidermal channel. A: Hyperkeratosis, hypergranulosis, acanthosis, max joseph's canal, basal layer degeneration with melanin incontinence and band-like infiltrate in dermis; B: Wedge shaped hypergranulosis; C: Max Joseph's canal with band-like infiltrate.

COMMENTS

Case characteristics

Dark grains coming out from the plaque over the sole.

Clinical diagnosis

Mycetoma.

Differential diagnosis

Eumycetoma, perforating disorders.

Laboratory diagnosis

Fungal culture yields negative result.

Pathological diagnosis

Histopatholgy suggestive of lichen pplanus but it is very difficult to elucidate the perforating channel of the lesion and we didn't get the same in histopathology.

Treatment

Systemic glucocorticoid (injection triamcinolone acetonide 40 mg/cc deep intramuscular every monthly).

Term explanation

Perforating lichen planus-lichen planus presents as hyperkeratotic papules or plaques topped by crust or a keratotic plug. Occasionally keratotic plugs might be dislodged, leaving behind pitted keratotic papules or plaques. There lies a channel containing epithelial cells, hyaline bodies and fibrillar material. Hyaline bodies present abundantly at the base of perforation could irritate the dermo-epidermal junction and consequently initiate the process of perforation of epidermis.

Experiences and lessons

Many dermatological lesions clinically misdiagnosed as other entity unless the histopatholgy helps to find the original lesion.

Peer review

This paper is a usefull clinical case and wrote well.

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