

Case report



Penile lichen planus recognized by dermoscopy: a case report

Radia Chakiri

Corresponding author: Radia Chakiri, Department of Dermatology, Faculty of Medicine and Pharmacy, University Ibn Zohr, Agadir, Morocco. r.chakiri.87@gmail.com

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Penile lichen planus recognized by dermoscopy: a case report

Radia Chakiri^{1,&}

¹Department of Dermatology, Faculty of Medicine and Pharmacy, University Ibn Zohr, Agadir, Morocco

[&]**Corresponding author**

Radia Chakiri, Department of Dermatology, Faculty of Medicine and Pharmacy, University Ibn Zohr, Agadir, Morocco

Abstract

Lichen planus is a chronic inflammatory pruritic disease affecting skin, mucous membranes, hair follicles and nails. Dermoscopy have potentially improved the diagnosis of skin diseases by defining specific patterns. We report a case of 34 year-old man with penile lichen planus diagnosed by dermoscopy.

Introduction

Lichen planus is a common inflammatory disease affecting the skin, the mucous membranes, the genitalia, the nails and the scalp [1]. Lichen planus affects 0.5% to 1% of the general population with adults in the third-sixth decade of life forming the most commonly affected age group [2]. The etiology of lichen planus is unknown since the ethiopathogenesis seems complex, and involvement of genetic, environmental and lifestyle factors have also been suggested. However, immunopathological pathogenesis with T lymphocytes directed against basal keratinocytes is reported [3]. Dermoscopy allows the visualization of structures located in the epidermis, dermo-epidermal junction and papillary dermis that cannot be seen with naked eye [4]. In this report we represent a case of penile lichen planus recognized by dermoscopy.

Patient and observation

A 34 year-old man visited our department for evaluation of four month, mildly pruritic lesions on the penis. Clinical examination revealed violaceous, flat-topped papules on the penile shaft Figure 1. There was no evidence of skin or mucosal involvement and no nail changes on physical examination. The lesions were studied with dermoscope (Dermlite DL4) revealing yellow dots and reticular whitish structures that correspond to Wickham striae and dots vessels (Figure 2). The diagnosis of lichen planus (LP) was considered after clinical and dermoscopic correlation. The patient was started on mild topical steroid to the affected areas for 6 weeks with symptoms improvement.

Discussion

Lichen planus is a chronic muco-cutaneous inflammatory disease of unknown origin. Various potential triggers, for example, viral or bacterial antigens, metal ions, drugs or physical factors, could initiate this autoimmune process [5]. Many variants of cutaneous lichen planus have been

described. The annular variant is the most common form of the LP on the glans penis. However lichen planus on the penis can present as the characteristic violaceous, flat topped papules as in our case, or as an erosive, bullous, or atrophic variant [6]. Dermoscopy is a fascinating bridge between clinical and histological examination that has become a key tool for the evaluation of pigmented and nonpigmented skin tumors because of its ability to reveal findings not visible to naked eye [7,8]. Besides this classic application, it is gaining appreciation in areas other than dermatology, especially inflammatory dermatology (inflammoscopy) [7,8]. In lichen planus, dermoscopy findings consist of polymorphic pearly whitish structures, known as Wickham striae (WS). Several patterns of WS have been described including circular, reticular, radial linear, globular, perpendicular and veil-like structureless forms [9]. Other findings include the following: dotted, globular, and/or linear vessels, mainly detectable at the periphery of the lesion and less commonly showing a perifollicular or diffuse arrangement; white/yellow dots; and pigmented structures (dots, globules, and/or reticular or cloud-like areas) [10].

Conclusion

In our knowledge we report the first case in the literature which highlights the importance of dermoscopy for the diagnosis of penile LP by showing yellow dots and reticular whitish structures and vessels dots.

Competing interests

The authors declare no competing interest.

Authors' contributions

The author read and agreed to the final manuscript.

Figures

Figure 1: violaceous, flat-topped papules on the penile shaft

Figure 2: dermoscopic features of penile lichen planus: reticular whitish structures (green triangles), dots vessels (red circle) and yellow dots (black arrows)

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Figure 1: violaceous, flat-topped papules on the penile shaft

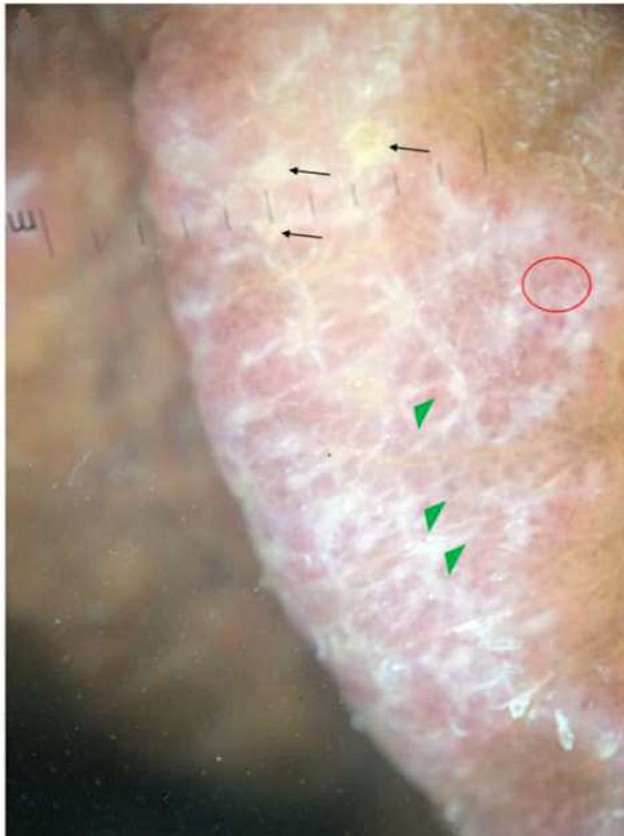


Figure 2: dermoscopic features of penile lichen planus: reticular whitish structures (green triangles), dots vessels (red circle) and yellow dots (black arrows)