

Annular lichen planus of the eyelid: A rare entity

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Abstract

Lichen planus (LP) is a common inflammatory dermatosis. Annular LP affecting the only eyelid, however, has rarely been reported. Diagnosis of annular LP limited to the eyelid can be a real challenge. We report a case of annular LP limited to the eyelid with its clinical, dermoscopic and histopathological findings.

Keywords: Dermoscopy; eyelid; lichen planus

INTRODUCTION

Lichen planus (LP) is a common inflammatory dermatosis that may present with various morphological patterns. Although the exact etiology of LP is unknown, immunological mechanisms are thought to play a role in the pathogenesis.^{1,2} Flexor surfaces of extremities, trunk, oral mucosa and, genital mucosa are the commonly involved areas.^{2,3,4} Annular LP is considered to be one of the rare clinical forms of the entity which is usually localized on the penis and scrotum. Eyelid involvement is rare and only a few cases have been reported in the relevant literature.^{1,5} Furthermore, dermoscopic findings of eyelid localized annular LP have not, apparently, been reported previously. Here we report a case of annular LP solely localized on the eyelid with its dermoscopic aspect.

CASE REPORT

A 38-year-old male patient presented to our outpatient clinic with a complaint of redness on the left upper eyelid. The redness persisted for 3 months and a similar lesion appeared and disappeared 1 year ago on his penis. On dermatological examination, an annular, violaceous erythematous scaly plaque 1 cm in diameter on the left upper eyelid was observed (Figure 1). The orogenital mucosal surfaces and the nails showed no involvement. Dermoscopic examination revealed a central bright red structureless area surrounded by a keratin scale and reddish structureless area (Figure 2).



Figure 1. A lilac erythematous annular plaque on the left upper eyelid

Histopathological examination showed hyperkeratosis, occasionally hypergranulosis, acanthosis, subepidermal separation (Max-Joseph spaces) and, lymphocyte-predominant band-like superficial dermal inflammatory infiltration destructing the epidermal and follicular

Received: 20.11.2019 **Accepted:** 29.01.2020 **Available online:** 16.04.2020

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basal layer (Figure 3). Complete blood count, liver and kidney function tests, HbsAg and Anti HCV serology were within normal limits. A diagnosis of annular lichen planus based on the clinical, dermoscopic and histopathological correlation. Topical hydrocortisone acetate cream once a day was started and a significant improvement was achieved after two weeks.



Figure 2. Dermoscopy shows a central bright red structureless area surrounded by a keratin scale and reddish structureless area

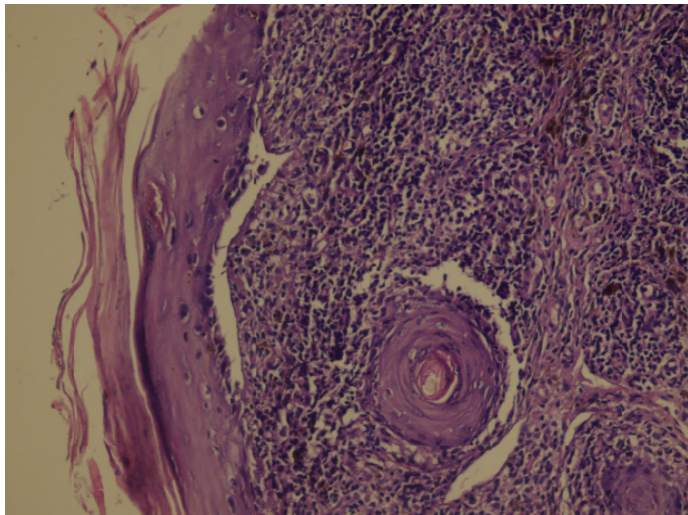


Figure 3. Histopathological examination revealed characteristic features of lichen planus including hyperkeratosis, occasionally hypergranulosis, acanthosis, subepidermal separation (Max-Joseph spaces) and, lymphocyte-predominant band-like superficial dermal inflammatory infiltration destructing the epidermal and follicular basal layer (H&E x400)

DISCUSSION

LP is a common papulosquamous dermatosis which may be limited to eyelids rarely. In the case of the isolated eyelid involvement, diagnosis may be very difficult.^{4,6} Annular LP is also a rare morphologic variant of LP. The exact pathogenesis of the annular morphology is not well understood, but it has been hypothesized that annular and central atrophic lesions may occur due to the elastolytic

activity of inflammatory cells.^{4,7,8} Eyelid involvement in LP is classified into three main types, including lilac-colored, slightly scaly lesions associated with similar lesions elsewhere, annular papular lesions or small medallion plaques with similar lesions elsewhere and, lesions limited to the eyelids.⁴ In the present case the lesions solely involved the eyelid and showed an annular configuration.

The use of dermoscopy has been extended to the diagnosis of inflammatory dermatoses such as plaque psoriasis, pityriasis rosea, and LP. Dermoscopic evaluation is also a helpful tool in the diagnosis and, evaluation of the response to treatment. Dermoscopic features of classical LP include Wickham striae, comedo and milium-like cysts, gray-blue spots and vascular structures. It has been suggested that Wickham striae regress with treatment and can be used as a marker of activation for LP lesions.^{5,7} In our case, dermoscopy showed a central bright red structureless area surrounded by a keratin scale and reddish structureless area.

Eyelid LP can imitate the common dermatoses involving the palpebral region. The main differential diagnosis is allergic contact dermatitis. Other differential diagnoses include discoid lupus erythematosus, psoriasis, dermatomyositis, lichen planus and, basal cell carcinoma.^{4,6} Although clinical manifestations vary between LP variants, they usually demonstrate a characteristic histopathological pattern confirming the diagnosis. Histopathological examination of the present case also showed the typical pattern of LP. Dermoscopy may also be a useful and practical method for the differential diagnosis.

Treatment of LP, in general, depends on the location and severity of the disease. Topical corticosteroids usually represent the first-line treatment.^{7,8,9} Our patient was also managed along with hydrocortisone acetate cream once a day for two weeks.

CONCLUSION

In conclusion, annular LP limited to eyelid is very rare and should be considered in the differential diagnosis of palpebral dermatoses.

Competing interests: The authors declare that they have no competing interest.

Financial Disclosure: There are no financial supports.

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