Lichen Aureus with Dermoscopic Findings: A case report *Liken Aureus Dermoskopik Bulguları: Olgu Sunumu*

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ABSTRACT

Lichen aureus is a rare variant of pigmented purpuric dermatosis, which often affects young adults and is localized mainly on the lower extremities. We present here a 31-year-old female who had a solitary golden-brown-color patch on her right leg for 1 year. Punch biopsy of the lesion revealed lymphohistiocytic band-like infiltrate of the papillary dermis with erythrocyte extravasation and hemosiderin deposits. The diagnosis of Lichen aureus was made based on clinicopathologic findings. The dermoscopic findings that support this diagnosis were brownish yellow diffuse coloration of the background, round to oval red dots, globules and patches and twisted red loops. Herein, we present the dermoscopic findings of a 31-year-old female patient with a diagnosis of lichen aureus established with clinical and histopathological features.

Keywords: pigmented purpuric dermatosis, lichen aureus, dermoscopy

ÖZ

Liken aureus, genellikle genç yetişkinleri etkileyen ve çoğunlukla alt ekstremitelere lokalize nadir bir pigmente purpurik dermatoz varyantıdır. Bu vaka sunumunda, sağ bacağına 1 yıldır, soliter açık kahverengi yama şeklinde bir lezyon bulunan 31 yaşında bir kadın hasta sunuyoruz. Lezyonun 'punch' biyopsisinde, papiller dermiste lenfositik bant benzeri infiltrasyon, eritrosit ekstrasvasyonu ve hemosiderin birikimi görüldü. Klinikopatolojik bulgulara dayanarak, liken aureus tanısı kondu. Bu teşhisi destekleyen dermoskopik bulgular, arka planda kahverengimsi sarı yaygın renk değişikliği, yuvarlak-oval kırmızı 'dot'lar, globüller yamalar ve kıvrımlı kırmızı halkalardı. Burada, klinik ve histopatolojik özelliklerle liken aureus tanısı alan 31 yaşındaki kadın hastanın dermoskopik bulgularını sunuyoruz.

Anahtar Sözcükler: pigmente purpurik dermatoz, liken aureus, dermoskopi

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Introduction

Lichen aureus (LA) or lichen purpuricus is a rare subtype of pigmented purpuric dermatoses especially seen in young adults, clinically characterized by localized, persistent, golden-brown colored eruption (1). We present here our case to highlight dermoscopy as a useful diagnostic tool to support the clinical diagnosis of LA.

Case

A 31-year-old female admitted to our clinic with a solitary golden-brown-colored non-blanchable patch about 2 cm in diameter, on her right leg for one year (Figure 1). There was no history of prior trauma at this site. The patient denied any other medical

problems or family history of similar disorders. A punch biopsy was performed, revealing a mild lymphohistiocytic band-like infiltrate of the papillary dermis with erythrocyte extravasation and hemosiderin deposits. Nuclear atypia or vasculitis were absent (Figure 2, 3). Dermoscopic examination showed brownish yellow diffuse coloration of the background, round to oval red dots, globules and patches and twisted red loops (Figure 4). Complete laboratory investigations including hemogram and coagulation profile were within normal limits. The diagnosis of LA was made on the basis of clinicopathological features and dermoscopic findings and topical pimecrolimus treatment was initiated. Mild improvement was observed after 2-months of treatment.

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Figure 1. The golden-brown-colored non-blanchable patch about 2 cm in diameter on the leg.

Discussion

Lichen aureus (LA), first described by Martin in 1958 and termed as “lichen purpuricus”, is characterized by isolated golden to rust-brown patches or plaques (2). LA has a predilection for young adults, and less frequently for children (3). The etiology remains unclear but several factors have been proposed such as venous insufficiency, capillary fragility, contact allergy, focal infections, adverse effects of drugs (acetaminophen, acetylsalicylic acid, adalin, carbromal, chlorthalidone, glipizide, glyburide, hydralazine, meprobamate, persantin, reserpine, thiamine, interferon alpha, and medroxyprogesterone acetate injection), hyperlipidemia and alcohol ingestion (4,5). Our patient has

Figure 2. ×20, HE, a mild lymphohistiocytic band-like infiltrate of the papillary dermis with erythrocyte extravasation and hemosiderin deposits. Nuclear atypia or vasculitis were absent.

Figure 3. ×20, HE, a mild lymphohistiocytic band-like infiltrate of the papillary dermis with erythrocyte extravasation and hemosiderin deposits. Nuclear atypia or vasculitis were absent.

Figure 4. Brownish yellow diffuse coloration of the background, round to oval red dots, globules and patches and twisted red loops.

declared none of these precipitating factors, however we could not perform a patch test.

Clinically, LA presents as macules, papules or plaques of varying sizes, rust or golden-color, and sometimes may show purpuric dots. The lesions are generally asymptomatic, unilateral and solitary (1). Linear, segmental, zosteriform patterns have also been reported in case of multiple lesions (2). The most common location is the lower limbs, although the trunk, upper extremities and face are occasionally involved (1).

Other pigmented purpuric dermatoses are Schamberg disease, Majocchi disease, Gougerot-Blum syndrome and eczematoid-like purpura of Doucas and Kapetankis. They represent different clinical patterns with more or less similar histopathologic features (6). In LA, histopathology shows typically band-like infiltrate of lymphocytes and histiocytes. Extravasated erythrocytes and hemosiderin-laden macrophages are also noted with little or no epidermal alteration. Grenz zone (present in half of the cases) tends to be denser than in other pigmented purpuric eruptions. There are also fewer extravasated red blood cells than in other pigmented purpuric eruptions (1).

Zaballos et al. reported in three patients that LA showed four characteristic dermoscopic features: (i) brownish or coppery-red diffuse coloration of the background; (ii) round to oval red dots, globules and patches; (iii) some gray dots; and (iv) a network of brownish to gray interconnected lines (7). Diffuse brownish copper-red background is thought to correlate with dermal infiltrate of lymphocytes and histiocytes. Gray dots are thought

to be produced histologically by hemosiderin-laden macrophages. Red globules may be present along with round to oval dots by extravasation of red blood cells from dilated capillaries in the papillary dermis. The network of brownish to gray interconnected lines are explained by the presence of hyperpigmentation of the basal cell layer and pigmentary incontinence of the upper dermis (7,8). It was suggested that all four dermoscopic features are not necessarily observed in all cases, and their existence varies, probably depending on the course of the disease (9). Çakmak et al. observed the following dermoscopic findings in a patient with LA: brownish diffuse coloration of background, round to oval red dots, globules and patches, some grey and brown dots, twisted red loops (8). Portela et al. reported coppery-red pigmentation on background, permeated by a dark brown network, and linear vessels in the central portion of the lesion, accompanied by punctate vessels and a peculiar circular conformation, especially in the periphery of the lesion (1).

Traumatic bruises, thrombocytopenic purpura, purpuric contact dermatitis, stasis pigmentation, leukocytoclastic vasculitis, angioma serpiginosum, drug hypersensitivity and purpuric mycosis fungoides were important differentials (6,8,10). LA is a chronic, persistent pigmented intractable purpuric dermatitis, and treatment of LA is challenging. Withdrawal of suspected provocative factors can help to improvement of patient. Potent topical steroids are generally ineffective. Topical pimecrolimus and tacrolimus, PUVA, narrowband UVB, oral administration of vasodilators (e.g. pentoxifylline or prostacyclin) have shown variable success (2,6,11).

This case presentation highlighted the usefulness of the dermoscopy as a useful diagnostic tool to support the clinical diagnosis of LA.

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