

## Case Report

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Volume 1 : Issue 2

Article Ref. #: 1000DRMTOJ1110

### Article History

Received: May 6<sup>th</sup>, 2016

Accepted: June 2<sup>nd</sup>, 2016

Published: June 3<sup>rd</sup>, 2016

### Citation

Gimenez-Garcia R, Sánchez-Bordona Marqués J, Zamora TM. Segmental lichen aureus: a case report. *Dermatol Open J.* 2016; 1(2): 35-37. doi: [10.17140/DRMTOJ-1-110](https://doi.org/10.17140/DRMTOJ-1-110)

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## Segmental Lichen Aureus: A Case Report

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**KEYWORDS:** Lichen aureus; Segmental lichen; Pigmented purpuric dermatosis.

### INTRODUCTION

Lichen Aureus (LA) is a rare asymptomatic dermatosis of unknown etiology which is classified under the group of Pigmented Purpuric Dermatitis (PPD). It is characterized by solitary or scant grouped macules or lichenoid papules, more common on the lower part of the legs, and typically very persistent. Histologically, the epidermis is normal, with a lymphohistiocytic band like infiltrate with extravasated blood red cells and hemosiderin deposits observed in the dermis.<sup>1-4</sup> A segmental or zosteriform pattern has been rarely described.<sup>5,6</sup> The aim of our study was to evaluate the clinicopathologic features of LA with segmental presentation.

### CASE REPORT

A 39-year-old barman presented to our clinic with a history of asymptomatic pigmented lesions on his right leg for approximately 10 months. The patient had no family or personal history of dermatosis. He had antecedents of varicose syndrome and had given up smoking one year ago. There was no history of trauma or drug intake prior to onset of the eruption.

Physical examination showed purpuric macules with zosteriform distribution on the backside of the right thigh and the right popliteal cavity (Figure 1). The laboratory data were all normal. The biopsy revealed capillaritis and endothelial hypertrophy in the dermis along with a per vascular lymphoid infiltrate, and a marked deposition of hemosiderin as result of the extravasations of red blood cells. The epidermis was normal. These findings were consistent with a purpuric lichenoid reaction that is suggestive of lichen aureus. The patient was treated with an association of Ruscusaculeatus, Hesperidine and Vitamin C (Fabroven®) for 3 months, without improvement but he stopped smoking and a year later no lesions were present.



**Figure 1:** Physical examination showed purpuric macules with zosteriform distribution on the backside of the right thigh and the right popliteal cavity.

**DISCUSSION**

The eruption has a predilection for the younger adults and is more common in males. A few cases of LA with zosteriform presentation have been reported in children. LA is usually unilateral and asymptomatic. Typical clinical presentation consists of a circumscribed area of pigmented macules or groups of coalescent papules whose colour varies from dark brown to bronze or gold. Lower parts of the legs are the most frequently affected sites, but it can also involve the forearms and trunk.<sup>1-6</sup>

The etiology is unknown. Factors such as focal infections, traumas, capillary fragility, venous insufficiency, drugs (medroxyprogesterone, Interferon-Alpha with Ribavirin) or even energy drinks have been postulated as possible causes of LA. There is one case in the literature of a patient with LA and a previous diagnosis of familial mediterranean fever.<sup>7-11</sup>

Differential diagnosis of LA included lichen planus, drug eruptions, bruises and other diseases of the family of the PDD. Purpuric lesions resembling LA histopathologically have been described in mycosis fungoides.

Histologically, LA differs from other PPD in the density of the lichenoid tissue reaction and the marked accumulation of hemosiderin-containing macrophages. The epidermis is normal in LA, while epidermal spongiosis and parakeratosis are seen in some of the PPD.<sup>4</sup> Dermoscopy can be useful.<sup>12</sup> Lesions are slow to evolve and usually persist unchanged for many years. Complete resolution rarely occurs. Gelmetti et al<sup>1</sup> suggest that childhood lichen aureus has a greater tendency for spontaneous regression (with an average duration of 3.4 years).

Treatment is usually difficult. Review of the literature suggests that spontaneous resolution rarely occurs and usually only after several years. Vitamin C, nonsteroidal anti-inflammatory agents, topical or systemic corticosteroids, topical pimecrolimus, and pentoxifylline together with prostacyclin have been used in its treatment. PUVA therapy has been shown to be effective in LA.<sup>13-17</sup>

**CONCLUSIONS**

- Lichen aureus is a rare dermatosis of unknown etiology which is classified under the group of Pigmented Purpuric Dermatitis (PPD).
- Lichen aureus is more common than it is believed and it has a predilection for male young adults. A few cases of LA with zosteriform presentation have been reported in children.
- Factors such as focal infections, traumas, capillary fragility, venous insufficiency, drugs or even energy drinks have been postulated as possible causes of LA.
- Segmental pattern of the lesions should be differentiated from other dermatosis with linear or zosteriform distribution such as lichen planus, drug eruptions and other diseases of the family of the PPD.

- Purpuric lesions resembling LA histopathologically have been described in mycosis fungoides.
- Treatment is difficult and complete resolution rarely occurs.

**CONFLICTS OF INTEREST:** None to declare.

**CONSENT**

The patient has provided written permission for publication of the case details.

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