PHOTOLETTER TO THE EDITOR

A papular eruption on the face. A distinct subtype of lichen planopilaris?

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Corresponding author:Linda H. Zhou, MD, Department of Dermatology and Skin Cancer, Roger Williams Medical Center, 50 Maude Street, Providence, RI 02908, USA. E-mail: lindahuazhou@yahoo.com**Abstract**

Lichen planopilaris is a scarring alopecia resulting from a lymphocytic inflammatory process of unknown etiology. We report a case of a 46-year-old man, who presented with an asymptomatic papular eruption over the face. Histologic examination was consistent with lichen planopilaris. This case is unusual because the disease affects the facial vellus hair only, without scalp involvement or other features of lichen planopilaris and its variants. (*J Dermatol Case Rep.* 2013; 7(1): 23-24)

Key words:

cicatricial alopecia, eyebrows, face, lichen planopilaris, lichen planus

A 46-year-old man presented with a one-month history of an asymptomatic papular eruption over the face. The patient stated that the lesions arose suddenly over several days and did not resemble his typical acne. He reports a 30-year history of absent hair growth over the eyebrows bilaterally. He had no other relevant medical history and denied the use of any medication. Physical examination revealed numerous pink, smooth, 1-2 mm papules, several with hairs penetrating the center giving them an umbilicated appearance. Lesions were symmetrically distributed over the temples, infraorbital and buccal aspects of the cheeks, as well as the pre-auricular regions of the face (Fig. 1). There was no involvement of the scalp, nails or mucosa, and only 2 papules involving the most lateral aspect of the right eyebrow.

A punch biopsy was performed on a papule from the right pre-auricular area for histologic analysis (Fig. 2). Histologic examination revealed a lymphocytic peri-follicular lichenoid interface dermatitis. The inflammation and necrotic

Figure 1

Physical examination revealed numerous skin-colored, smooth, 1-2 mm papules.

keratinocytes primarily involved the follicular infundibulum with minimal epidermal interface change. Alcian blue stain showed no increase in dermal mucin and Periodic Acid Schiff stain was negative for basement membrane thickening. Peri-adnexal inflammation was not observed.

Lichen planopilaris (LPP) is a scarring alopecia resulting from a lymphocytic inflammatory process of unknown etiology culminating in destruction of the hair follicle.¹ Early LPP is characterized by hyperkeratotic plugs at follicular ostia and peri-follicular violaceous erythema at the periphery of the expanding alopecia.² Progression leads to diminished inflammatory changes both clinically and histologically.^{1,2} Although rare, LPP is the most frequent cause of adult cicatricial alopecia and exhibits a female predominance.^{1,2} Histopathology demonstrates a lichenoid inflammatory infiltrate with vacuolar degeneration of the basal layer and destruction of basal keratinocytes. Necrotic keratinocytes can be found both in the dermis and epidermis. The lymphocytic infiltrate is concentrated between the follicular infundibulum and isthmus sparing the lower portions of the hair follicle.^{1,2} Variants of LPP include frontal fibrosing alopecia (FFA) and the Lasseur Graham-Little Piccardi Syndrome. The latter consists of scarring alopecia of the scalp, non-scarring alopecia of the axillary and pubic hair bearing areas, and an eruption of keratotic papules. Frontal fibrosing alopecia presents with a progressive bandlike alopecia of the frontal and parietal scalp, however, eyebrows, eyelashes, and other vellus or terminal hairs of the face and extremities can be involved.¹ Like LPP, frontal fibrosing alopecia has a greater incidence in women; however, FFA has a strong correlation with a perimenopausal state.¹⁻³ Our case is unusual because this presentation affects the facial vellus hair only, without scalp involvement or other features of LPP and its variants. To our knowledge only 2 reports of facial hyperkeratotic follicular papules have been documented, all in perimenopausal women with FFA.^{4,5} One case series reports the occurrence of facial papules in 3 postmenopausal women with FFA, however, a histopathologic correlation with LPP was not established.⁵ Linear LPP of the face has infrequently been reported, but these presentations were confined to a single area.⁶

Treatment of LPP remains elusive, and there exists no standard protocol to arrest its progression. Facial involvement presents an additional challenge by limiting the use of existing standards of care such as mid-potency topical corticosteroids, Minoxidil 2 or 5% solution, and intralesional triamcinolone. Data on treatment modalities such as cyclosporine, thalidomide, isotretinoin, and finasteride show modest benefit and are limited by studies examining only classic LPP and FFA of the scalp.¹⁻⁴

Figure 2

Histologic examination revealed a lymphocytic peri-follicular lichenoid interface dermatitis.

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