Localized and linear lichen planopilaris over the face and scalp with associated alopecia – clinical and dermoscopy pattern

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Abstract

A case of localized lichen planopilaris over the face, extending to the scalp is presented. This case highlights the different variations, which can occur in the presentation of localized lichen planus. The case was unique because of the extension of the lesions into the scalp. We also wanted to demonstrate the peculiar dermoscopic patterns of active lichen planopilaris when occurring over the face.

Case synopsis

A 27-year-old man presented with a history of hyperpigmented papules and plaques associated with mild pruritus over the left side of the forehead extending into the scalp. The condition had been present for about a year and had slowly enlarged over a period of about 6 months and then remained stable since then. The patient had been using topical steroids (mometasone) intermittently. The pruritus was controlled with the topical corticosteroids, but there was no significant improvement in the lesion as such. There was no history of any systemic drug intake and there was also no history of any trauma to the affected site.

On examination, localized, violaceous papules and plaques were seen over the left side of the forehead extending into the scalp and also producing minimal patchy alopecia over the scalp (Figure 1). Dermoscopy (10X, polarized light) showed a violaceous pattern over the normal pseudo-network of the region associated whitish striations (corresponding to Wickham’s striae) and prominent pigment clumps (corresponding to the dermal melanophages) (Figure 2). The patient had no other significant skin or systemic illness. There were no mucosal
A clinical diagnosis of localized lichen planus and a differential diagnosis of lichen planopilaris were considered. Routine investigations including complete blood count, liver function tests, and serology for hepatitis viruses were all negative.

A skin biopsy showed prominent basal cell degeneration (with associated pigment deposition in the dermis) and a prominent perifollicular band like lymphocytic infiltrate in the dermis (Figure 3, Figure 4). The histopathology was consistent with lichen planopilaris, even though there was significant interfollicular involvement demonstrated in the histopathology.

The patient was counseled regarding the self-limited nature of the disease and was advised to continue with topical steroids.
**Discussion**

There have been many reports of localized lichen planus occurring in linear and zosteriform patterns. There are fewer reports of lichen planus occurring along Blaschko’s lines [1, 2]. Lichen planus occurring in linear and zosteriform patterns are generally explained on the basis of a Koebner like phenomenon, especially as many of them are associated with a history of trauma or previous dermatosis over the affected sites, like herpes zoster [3]. Lichen planus following a Blaschkoid pattern is considered to be essentially a variant of Blaschkitis (inflammatory dermatitis along Blaschko’s lines), but the exact etiopathogenesis is not clear. The condition is usually self-limited and topical steroids are useful in the initial phase [2, 3].

Lichen planopilaris and lichen planus pigmentosus have also been described in linear and zosteriform patterns [1, 4, 5, 6]. In our case there was some patchy alopecia and this combined with the prominent peri-follicular infiltrate seen on histopathology made us consider lichen-planopilaris as the first diagnostic possibility. However the presence of significant itching was something slightly more in favor of lichen planus rather than lichen planopilaris.

The exact pathogenesis of lichen planopilaris is not clear. One of the proposed factors include a down-regulation of the nuclear hormone receptor peroxisome proliferator–activated receptor gamma in the hair follicle [4].

Different treatment options have been described for lichen planopilaris including topical/intralesional steroids and topical calcineurin inhibitors like tacrolimus. [5] Other modalities mentioned include -cyclosporine, mycophenolate mofetil, oral tetracyclines, oral retinoids, thalidomide, and hydroxychloroquine [4].

Lichen planopilaris can present in many cases with localized alopecia and one of the conditions in the differential diagnosis is frontal fibrosing alopecia. Both these conditions can have similar histopathological features, the main difference being that the in frontal fibrosing alopecia shows less follicular inflammation [7].

The typical dermoscopic findings in cases of active lichen planus include polymorphic whitish structures (corresponding to Wickham’s striae) associated with prominent linear vessels [8]. In our cases the whitish striations were seen over the pseudo-network, which is normally seen over the face, but significant vessels were not seen. The presence of pigment clumps (corresponding to the pigment incontinence and melanophages) was seen in our case, which is usually associated with pigmented lichen planus [8].

This case highlights the different variations, which can occur in the presentation of localized lichen planopilaris. The case was unique because of the extension of the lesions into the scalp. In general it is considered very rare for the linear form of lichen planopilaris to involve the scalp [4].We also wanted to demonstrate the peculiar dermoscopic patterns of active lichen planopilaris when occurring over the face.

**References:**