INTRODUCTION

Lichen planopilaris (LPP) was termed by Pringle to denote a condition characterized by perifollicular scaling followed by destruction of follicle resulting in alopecia and is usually associated with typical lichen planus lesions elsewhere in the body in half of the cases. LPP is a condition with several clinical presentations with a common histopathological pattern. The various clinical presentations of LPP include classical LPP, Graham-Little syndrome, frontal fibrosing alopecia, and fibrosing alopecia in a patterned distribution. Histopathology of LPP is characterized by lichenoid interface dermatitis involving the infundibulum and isthmus of the hair follicle. Perifollicular fibrosis concentrically around the follicles is seen. Sebaceous glands of the involved follicles are either absent or diminished. Perivascular lymphocytic infiltrate has been described in the most cases.

CASE REPORT

A 23-year-old female presented with a history of scalp scaling and itching for 2 years accompanied by loss of hair which was gradual since the time of onset of scalp lesions with increase for 1 month. She also gave a history of scaly plaques over both the feet associated with fissuring for 8 years. Scaling was accompanied by vesicles and oozing at the time of onset but subsequently had only scaling. There was no seasonal variation. Physical examination of scalp showed diffuse white scales over the scalp [Figure 1] and thick diffuse scaling of both soles. Oral cavity and nails were clinically normal.

Dermatoscopic examination of scalp was done using a hybrid pocket dermatoscope which gives a ×10 magnification (Dermlite DL3, 3Gen Inc, USA) in both polarized and nonpolarized modes using paraffin oil as interface fluid. Dermatoscopic images were taken with a Sony Cybershot DSC-W800 20.1 MP digital camera (Sony corp., Tokyo, Japan) after attaching it to the dermatoscope using an universal adapter. Contact dermatoscopy in

ABSTRACT

Lichen planopilaris is a form of lymphocyte-mediated primary cicatricial alopecia characterized by perifollicular scaling progressing to patches of alopecia depending on the clinical variant. The course is relentlessly progressive and chronic. Hence, early diagnosis and institution of therapy are imperative to halt the disease progress. Although definitive diagnosis is made by scalp biopsy, the detection is usually delayed. Dermatoscopy helps in early recognition of this condition which at that stage is clinically invisible. We report a 23-year-old female who presented with hair loss and scalp scaling without clinically obvious patches of alopecia.

Key words: Dermatoscopy, invisible, lichen planopilaris

Address for correspondence:
Dr. Nirmal B,
Department of Dermatology,
OPD No. 220, Room No. 5,
Christian Medical College,
Vellore, Tamil Nadu, India.
E-mail: nimu2swash@yahoo.co.in
polarized mode without interface fluid showed peripilar tubular casts with miniaturized vellus hairs [Figure 2].

Dermatoscopy with interface fluid in nonpolarized mode showed peripilar casts clearly [Figure 3] whereas...
polarized mode showed granular grey dots, white dots, and crystalline structures predominantly around the hair follicles [Figure 4].

Histopathological examination of the scalp showed basket weave hyperkeratosis, follicular plugging, basal cell vacuolization in the epidermis and band-like lymphohistiocytic infiltrate in the superficial dermis extending around the infundibulum till the proximal part of the isthmus of the hair follicle with pigment incontinence [Figures 5 and 6]. Biopsy features were consistent with LPP and direct immunofluorescence was negative. Histopathology of the sole showed compact hyperkeratosis, acanthosis and vertical streaking of collagen in the papillary dermis without interface changes.

DISCUSSION

Gougerot described a condition called “Invisible lichen planus” where lesions were not visible to naked eye but symptomatic. They became evident under Wood’s lamp examination and were confirmed with histopathology.[5] We describe a similar entity to what was described by Gougerot where clinically a diagnosis of LPP could not have been made in a scaly scalp, and changes were evident only after dermatoscopy.

Scalp biopsy is an important tool to make a diagnosis of LPP and to differentiate from other nonscarring causes of alopecia. Proper clinical history, correct biopsy site, adequate specimen and proper pathologic processing are crucial for the interpretation of scalp biopsy. Dermatoscopy also helps in selection of appropriate site for biopsy as not all follicles are affected in the areas of hair loss.[6]

Dermatoscopic features of LPP include: perifollicular keratin plugs, white dots in the follicular region, crystalline structures (white patches) in the interfollicular region, speckling with blue-gray dots in the interfollicular region, perifollicular blue-gray targets and decrease in number of follicular ostia. Histopathologically tubular cast corresponds to follicular plugging, blue-gray dots to melanophages due to pigment incontinence and both white dots & crystalline structures to dermal fibrosis.[7]

The case is reported as a diagnosis of LPP at an early stage in the absence of patches of alopecia would not have been possible clinically without a dermatoscope and we term this condition as “invisible LPP.”

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

REFERENCES

1. Matta M, Kihbi AG, Khattar J, Salman SM, Zaynoun ST. Lichen planopilaris: A clinicopathologic study. J Am Acad Dermatol 1990;22:594-8.
2. Kang H, Alzolibani AA, Otberg N, Shapiro J. Lichen planopilaris. Dermatol Ther 2008;21:249-56.
3. Chiu HY, Lin SJ. Fibrosing alopecia in a pattern distribution. J Eur Acad Dermatol Venereol 2010;24:1113-4.
4. Nayar M, Schornberg K, Dawber RP, Millard PR. A clinicopathological study of scarring alopecia. Br J Dermatol 1993;128:533-6.
5. Grupper MC, Buisson J, Durepaire R, Edelson Y. Gougerot’s invisible lichen planus. Bull Soc Fr Dermatol Syphiligr 1971;78:598-9.
6. Miteva M, Tosti A. Dermoscopy guided scalp biopsy in cicatricial alopecia. J Eur Acad Dermatol Venereol 2013;27:1299-303.
7. Duque-Estrada B, Tamler G, Sodré CT, Barcaui CB, Pereira FB. Dermoscopy patterns of cicatricial alopecia resulting from discoid lupus erythematosus and lichen planopilaris. An Bras Dermatol 2010;85:179-83.