



## Case Report

# Coexistence of Genital and Extragenital LSA with Dermoscopic Features

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## ABSTRACT

Lichen sclerosus et atrophicus (LSA) is a chronic inflammatory dermatosis, primarily involving the anogenital region, and sometimes extragenital sites (15–20%). Rarely, patients can present with only extragenital lesions (2.5%). A 50-year-old female presented with depigmented lesions on vulva, bilateral knees and legs for 1½ years. Dermoscopy showed patchy white structureless areas with follicular plugs and histopathological examination revealed focal vacuolar degeneration of the basal layer and hyalinisation in the papillary dermis, with mild perivascular lymphohistiocytic inflammation, helping confirm the diagnosis of genital and extragenital LSA. Thus, the authors elaborate the rarity of coexistence of genital and extragenital LSA in a single patient and the use of dermoscopy as a tool in its diagnosis.

**Keywords:** Lichen sclerosus et atrophicus, Genital, Dermoscopy

## INTRODUCTION

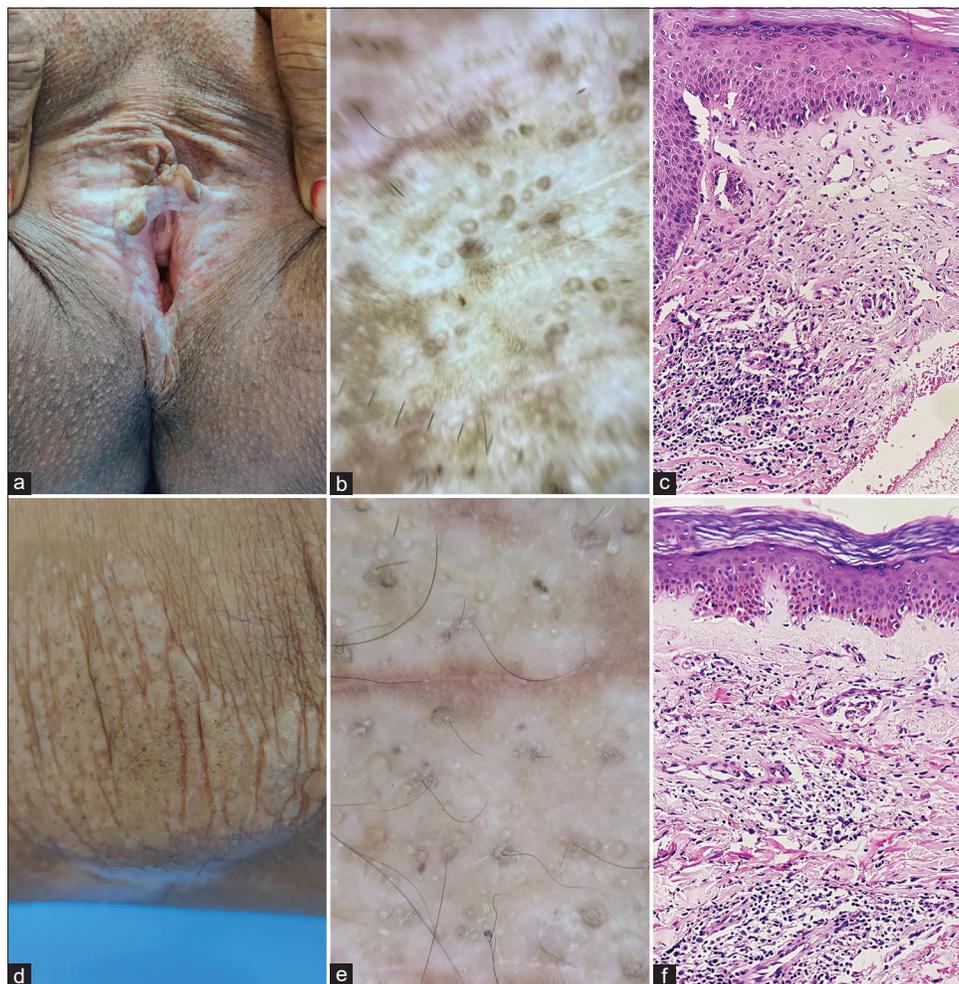
Lichen sclerosus et atrophicus (LSA) is a chronic inflammatory dermatosis.<sup>[1]</sup> LSA typically occurs in the anogenital region (83–98%) and sometimes extragenital sites (15–20%).<sup>[2]</sup> Although the anal and genital regions are predominantly affected, 2.5% of patients only present with extragenital lesions, particularly on the trunk, neck and upper limbs.<sup>[3]</sup> Here, we report a case of a 50-year-old female with coexistent genital and extragenital LSA and its dermoscopic features.

## CASE REPORT

A 50-year-old female presented to the outpatient department with complaints of vulvar itching and depigmentation on her vulva, bilateral knees and legs. She had developed the lesions on her leg 2 years ago, while the genital lesions appeared 6 months later. The patient is 11 years postmenopausal. On examination, a solitary bilaterally symmetrical white atrophic plaque extending from mons pubis to the posterior fourchette of vulva was present. Multiple whitish papules of variable sizes, coalescing to form plaques with overlying comedo-like openings, were present on the bilateral knees and legs. On dermoscopy using DermLite 3 in the non-polarised mode with ×10 magnification, patchy whitish areas with follicular plugs were seen in the genital lesions. Dermoscopy of the extragenital lesions also showed similar features. Biopsy was done from both the sites. Histopathology showed focal vacuolar degeneration of the basal layer and hyalinisation in the papillary dermis, with mild perivascular lymphohistiocytic inflammation [Figure 1]. Her human papilloma virus (HPV) polymerase chain reaction was negative for high-

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**Figure 1:** (a) White atrophic plaque involving the labia majora and vulva. (b) Dermoscopy of genital lesions shows patchy white structureless areas with follicular plugs. (Dermlite 3, non-polarised mode,  $\times 10$ ). (c) Photomicrograph of genital lesion shows focal vacuolar degeneration of basal layer and hyalinisation in the papillary dermis, with mild perivascular lymphohistiocytic inflammation and significant interstitial infiltrate in between the collagen of predominantly lymphocytes (H and E,  $\times 100$ ). (d) Multiple white papules coalescing to form plaques on the left knee and leg with overlying comedo-like openings. (e) Dermoscopy of extragenital lesions shows patchy white structureless with follicular plugs (Dermlite 3, non-polarised mode,  $\times 10$ ). (f) Photomicrograph of extragenital lesion shows focal vacuolar degeneration of basal layer and hyalinisation in the papillary dermis, with mild perivascular lymphohistiocytic inflammation. (H and E,  $\times 200$ ).

risk genotypes and PAP smear revealed no intraepithelial malignancy. Based on the clinical, dermoscopic and histopathological features, a diagnosis of genital with extragenital LSA was made.

She was started on clobetasol propionate 0.05% and tacrolimus 0.3% ointments to be applied once daily. At 2 months follow-up, she reports symptomatic improvement.

## DISCUSSION

LSA occurs in both the sexes with two peaks, first pre-pubertal and the other postmenopausal. The male-to-female

ratio varies from 1:3 to 1:10.<sup>[1]</sup> The prevalence is estimated at 0.1% for children and 3% for women over 80-year-old.<sup>[1]</sup> In the anogenital area, initially, only a slight redness may be seen. Atrophic skin, lacerations, depigmentation and scarring of the clitoris and the labia minora typically occur later in the course of disease. In men, sclerosis and narrowing of the foreskin can result in erectile dysfunction. Extragenital lichen sclerosus is less common, seen in 15–20% and usually found on the trunk, neck and upper limbs.<sup>[4]</sup> Extragenital lichen sclerosus is usually asymptomatic, presents with whitish papules, plaques and is not associated with an increased risk of malignant transformation.

The main differential of genital LSA is vitiligo. Unlike vitiligo, LSA lesions are atrophic, might extend perianally and are mostly symptomatic. Vulvar intraepithelial neoplasia (VIN) needs to be ruled out in all cases of LSA. VIN can progress to vulvar squamous cell carcinoma (SCC) and should be considered as a differential in case any ulceration or erosion develops. Extragenital LSEA needs to be differentiated from morphea. A multicentric prospective study from France reported that 38% of patients of morphea had genital LSA. However, there are also few case reports of vulval lichen planus-LSA overlap.<sup>[1]</sup>

Dermoscopy of genital LSA shows patchy structureless whitish-yellow areas with associated linear telangiectasias or dotted vessels. In our case, only whitish-yellow structureless areas were seen. In extragenital LSA, whitish-yellow structureless areas with follicular plugs are seen, as was visible in our case. Dermoscopy can help us to differentiate it from VIN which shows pink to red structureless areas and curvy, short serpentine and some dotted vessels. Histopathology of our case showed focal vacuolar degeneration of basal layer and hyalinisation in the papillary dermis, with mild perivascular lymphohistiocytic inflammation, consistent with the findings expected in LSA.

## CONCLUSION

Thus dermoscopy is a useful tool to diagnose LSA, both genital and extragenital and to distinguish it from our differentials. HPV genotyping in LSA helps us in the early detection of SCC.<sup>[5]</sup> These patients can then be managed medically with topical super-potent steroids.

Coexistence of genital and extragenital LSA with the use of dermoscopy as a diagnostic tool is put forth in this case report.

## Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

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Nil.

## Conflicts of interest

There are no conflicts of interest.

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