# Lichen planus hypertrophicus of the vulva – An isolated presentation

Sir,

Lichen planus (LP) is a chronic inflammatory mucocutaneous dermatosis that affects the skin, mucus membranes, and appendages. The classical form of LP is characterized by flat-topped, purple, pruritic, polygonal papules and plaques and histopathologically by vacuolar degeneration of the basal epidermal keratinocytes and a band-like inflammatory infiltrate. [1] Various clinical forms of LP according to morphology and distribution of lesions have been described. Although vulvar lesions in LP have been described commonly as part of generalized disease, isolated presentation is rare. Three variants of LP have been described on the

vulva. These include erosive, classic, and hypertrophic varieties. The erosive form is the most common form of vulvar LP, while hypertrophic variant is the least described in the literature.<sup>[2]</sup>

A 45-year-old married female presented with complaints of growth over the vulva for 3 years. These lesions were extremely pruritic. Cutaneous examination showed well-defined, multiple, discrete to coalescing, nontender, hyperpigmented to violaceous, hyperkeratotic papuloplaques with central atrophy and depigmentation over the vulva [Figure 1a and b]. No similar lesions were present elsewhere on the body. Examination of other mucosae was normal. There was no discharge or bleeding from the lesions. There was no history of vaginal discharge, genital ulcer, pain, burning sensation during urination or defecation, and no inguinal lymphadenopathy. There was no history of diabetes, hypertension, chronic renal disease, or other associated comorbidities. Based on clinical presentation, possibilities of hypertrophic vulvar LP, genital warts, and lichen simplex chronicus and lichen sclerosus et atrophicus were considered. Her routine blood investigations showed normal parameters. Venereal



Figure 1: (a and b) Multiple, discrete to coalescing, hyperpigmented to violaceous, hyperkeratotic papuloplaques with central atrophy and depigmentation over the vulva

disease research laboratory, hepatitis B antigen, hepatitis C antibody, and HIV enzyme-linked immunoassay (ELISA) were nonreactive. Skin biopsy of the lesion showed hyperkeratosis, hypergranulosis, papillomatosis, and elongation of rete ridges with saw tooth appearance, basal cell vacuolar degeneration, presence of necrotic keratinocytes, and pigment incontinence. The papillary dermis showed lichenoid pattern of moderate-to-dense lymphomononuclear cell infiltrates [Figure 2a and b]. These findings were consistent with hypertrophic LP. She was treated with intralesional triamcinolone acetonide (40 mg/ml) in vulvar lesions once in 3 weeks, along with oral levocetirizine 5 mg twice daily. After three doses of intralesional triamcinolone acetonide injections, lesions were healed significantly (more than 50% improvement in most lesions). Itching at the local site subsided completely. After 2 months, she was lost to follow-up.

Vulvar dermatosis is a distressing condition both for patients and for clinicians. Lesions over the vulva might have a variable presentation due to peculiar anatomical and physiological properties of vulva and may mimic several other vulval dermatoses. This can result in a significant delay in diagnosis, more so when it presents as an isolated presentation without involvement of other sites. Our patient was diagnosed after 3 years of onset of illness.<sup>[3]</sup>

Typical lesions of hypertrophic LP present as hypertrophic papules and plaques are usually seen over lower extremities, though they can also present over other parts of the body. These lesions are intensely pruritic, and chronic rubbing and itching result in new lesions with similar morphology. Hypertrophic LP over the vulva area is extremely rare, with only a few cases of solitary hypertrophic LP of the vulva reported in the literature.<sup>[3,4]</sup>

Although the diagnosis of hypertrophic LP over the usual sites is usually made clinically, atypical site lesions warrant histopathology as in the index case. It may need to be differentiated from common warts or squamous cell carcinoma. Vulvar LP is an important cause of pruritus vulvae, an embarrassing condition to face, and has a huge impact on quality of life. Further, growths over the vulva

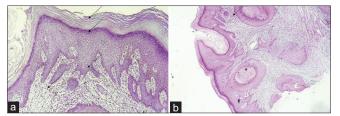


Figure 2: (a and b) Histopathology showing hyperkeratosis, hypergranulosis, papillomatosis, and elongation of rete ridges with saw tooth appearance, basal cell vacuolar degeneration, presence of necrotic keratinocytes, and pigment incontinence. The papillary dermis showing lichenoid pattern of moderate-to-dense lymphomononuclear cell infiltrate (×10)

cause anxiety to patients as that might be cancerous or sexually transmitted diseases. Due to its resemblance to genital warts, sometimes, it may be misdiagnosed and pose a diagnostic challenge.<sup>[1,5]</sup> In the present scenario of Google culture, where patients self-diagnose their diseases and initiate treatment based on unreliable information found on the internet could lead to futile anxiety and stress, ending up with complications. Therefore, it is relevant to highlight more cases of hypertrophic LP of the vulva so that the physicians are aware of this situation and avoidable delay in diagnosis and management could be decreased.

### **Declaration of patient consent**

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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### **Conflicts of interest**

There are no conflicts of interest.

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