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# Hypertrophic Lichen Planus of Vulva

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Abstract: Vulvovaginal LP is a type of chronic inflammatory dermatoses of vulva largely affecting women of perimenopausal age. A 75 year old female patient presented with painful lesions in genital area since 1 year. On examination, a solitary well defined tender white hyperkeratotic plaque with verrucous surface measuring about 1.5\*1cm was seen near posterior fourchette. Histomorphological features were suggestive of hypertrophic lichen planus. Hypertrophic LP is usually characterized as thick violaceous plaques on extensor surfaces of lower extremities<sup>2</sup>. Hypertrophic lichen planus (verrucous lichen planus) of vulvae is a rare entity<sup>3, 4</sup> which sometimes gives an appearance similar to squamous cell carcinoma<sup>1</sup>. Patient was treated symptomatically with oral antihistamines (Tab Bilastine 40mg OD and Tab Levocetirizine 10mg OD) and topical steroids (Halobetasolcream) for 1 month and was advised wide excision. Since the patient refused surgery, she was advised regular follow up to look for any signs of neoplastic change. Diagnosis of hypertrophic LP of vulva can be challenging as it clinically simulates genital warts and SCC.

Keywords: Vulvar dermatoses, Lichen planus, Squamous cell carcinoma

#### 1. Introduction

Vulvovaginal LP is a type of chronic inflammatory dermatoses of vulva largely affecting women of perimenopausal age. Most patients present during 5<sup>th</sup> or 6<sup>th</sup> decade of life. It has 3 subtypes - classic or papulosquamous LP, hypertrophic LP and erosive LP<sup>1</sup>. Classic LP is pruritic papules and plaques of variable color that occur anywhere and spontaneously resolve. Erosive LP, which usually occurs on nonkeratinized squamous epithelium of the vestibule and adjacent hairless skin of labia minora but may also extend into the vagina. It manifests as well - demarcated glazed erythema, often with a hyperkeratotic border. Hypertrophic LP is usually characterized as thick violaceous plaques on extensor surfaces of lower extremities<sup>2</sup>. Hypertrophic lichen planus (verrucous lichen planus) of vulvae is a rare entity<sup>3, 4</sup> which sometimes gives an appearance similar to squamous cell carcinoma<sup>1</sup>. Hypertrophic LP of vulva may be associated with HCV, autoimmune disorders, alopecia areata, and coeliac disease<sup>5</sup>.

Here we report a case of hypertrophic lichen planus of vulva.

### 2. Case Report

A 75 year old female patient presented with painful lesions in genital area since 1 year. On examination, a solitary well defined tender white hyperkeratotic plaque with verrucous surface measuring about 1.5\*1cm was seen near posterior fourchette (figure 1). Differential diagnosis of verruca vulgaris, hypertrophic lichen planus and squamous cell carcinoma were considered. On skin biopsy, hyperplastic stratified squamous epithelium with irregular acanthosis, spongiosis, exocytosis of lymphocytes covered with thin layer of parakeratosis and hyperkeratotic layer was noted. Basal cell vacuolar degeneration was noted with pigment incontinence. Upper dermis showed mild to moderate number of mononuclear cell infiltration. Histomorphological features were suggestive of hypertrophic lichen planus (figure 2). PAP smear was normal. Patient was treated symptomatically with oral antihistamines (Tab Bilastine 40mg OD and Tab Levocetirizine 10mg OD) and topical steroids (Halobetasolcream) for 1 month and was advised wide excision. Since the patient refused surgery, she was advised regular follow up to look for any signs of neoplastic change.

#### 3. Discussion

Lichen planus can present with extensive involvement of the skin, mucosa, nails, and scalp, but it can also occur only in the vulva. The exact incidence of vulvar LP is currently unclear. Studies based on biopsy of the vulva have reported a vulvar LP incidence of  $3.7\%^{6}$ , but up to 57% of patients with oral LP also have vulvar LP<sup>7</sup>. Clinical manifestations of vulvar LP include irritating vaginal discharge, vulvar tenderness, severe itching, burning sensation, and pain on intercourse, although a small number of patients are asymptomatic or have only mild symptoms<sup>8</sup>. Hypertrophic LP of vulva presents with hyperkeratotic white plaques which mimics vertuca vulgaris, lichen simplex chronicus and SCC<sup>9</sup>. Hence biopsy has to be done to rule out above conditions. Topical corticosteroids are widely used as initial line of therapy. Hypertrophic variant may require intralesional corticosteroids<sup>10</sup>. It is also necessary to monitor regularly to look for any signs of malignancy<sup>1</sup>.

#### 4. Conclusion

Hypertrophic lichen planus is commonly seen on lower limbs. Hypertrophic LP of vulva is a rare entity. Diagnosis of hypertrophic LP of vulva can be challenging as it clinically simulates genital warts and SCC.

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#### References

- [1] Rashmi Mahajan, Varun Jain, Yogesh S Marfatia Hypertrophic lichen planus of vulva – a missed diagnosis Indian Journal of Sexually Transmitted Diseases and AIDS 2020 Jan - Jun; 41 (1): 116 - 118.
- [2] Day T, Weigner J, Scurry J. Classic and Hypertrophic Vulvar Lichen Planus. J Low Genit Tract Dis.2018 Oct; 22 (4): 387 - 395
- [3] Anupa Mary Job, SowmyaKaimal Lichen planus hypertrophicus of vulva – a rare entity International Journal of STD and AIDS Vol 28, Issue 10

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- Hypertrophic lichen planus of the vulvaMounaKorbi, [4] Syrine Ben Ammou, Nour el ImeneOuni, AhlemBellalah, Hichem Bel Hadj Ali, J. Zili: December 2022
- [5] Job AM, Kaimal S. Lichen planus hypertrophicus of the vulva - A rare entity. Int J STD AIDS.2017; 28: 1048-1050.
- [6] L, Preti M, Bogliatto F, Zanotto Valentino MC, Ghiringhello B, Massobrio M. Vulval lichen planus in the practice of a vulval clinic. Br J Dermatol 2000; 143: 1349-1350.
- [7] Belfiore P, Di Fede O, Cabibi D, Campisi G, Amaru GS, De Cantis S, et al. Prevalence of vulval lichen planus in a cohort of women with oral lichen planus: an interdisciplinary study. Br J Dermatol 2006; 155: 994-998
- Fahy CMR, Torgerson RR, Davis MDP. Lichen planus [8] affecting the female genitalia: a retrospective review of patients at Mayo Clinic. J Am AcadDermatol 2017; 77: 1053-1059
- Tziotzios C, Brier T, Lee JY, Saito R, Hsu CK, [9] Bhargava K, et al. Lichen planus and lichenoid dermatoses: Conventional and emerging therapeutic strategies. J Am AcadDermatol.2018; 79: 807-18
- [10] Fahy CM, Torgerson RR, Davis MD. Lichen planus affecting the female genitalia: A retrospective review of patients at Mayo Clinic. J Am AcadDermatol.2017; 77: 1053–9.

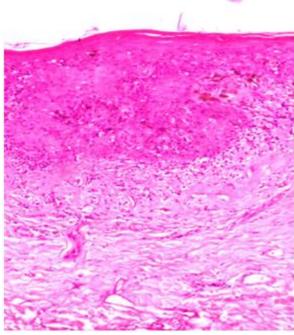


Figure 2: HPE 100X – Hyperplastic stratified squamous epithelium showing hyperkeratosis, parakeratosis, irregular acanthosis, basal cell vacuolar degeneration with pigment incontinence.





Figure 1: Solitary well defined white hyperkeratotic plaque with vertucous surface measuring about 1.5\*1cm was seen near posterior fourchette.



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