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**Case Report**

# A case of vaginal pruritis, dysuria and dyspareunia in a young lady

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**Abstract** Vaginal pruritus, painful micturition and dyspareunia secondary to a large number of local or systemic disorders are common short term complaints in young to middle aged women. In minority of cases, when underlying cause is not appropriately diagnosed and managed, these symptoms become frustrating for patient as well as for physician. We present a young lady who suffered with above debilitating symptoms that significantly impacted her psycho-sexual life for two years until she was diagnosed as a case of erosive vulval lichen planus.

***Key words***
Erosive lichen planus, Hepatitis C virus, vaginal soreness, vulvo-vaginal distortion, painful coitis, vulval lichen planus, vaginal itching, painful micturation.

## Introduction

Vulvo-vaginal symptoms are frequently encountered in young to middle aged sexually active females but usually the ailments are transient and can easily be managed by primary care physicians, gynecologists, venereologists and dermatologists. Sometimes these symptoms persist for long and do not respond to routine therapies. Such cases alert the physician to probe for some uncommon etiologies like sexually transmitted infections, genital lichen planus and lichen simplex atrophicans.[1,2] Lichen planus (LP) is an inflammatory mucocutaneous condition that can affect the skin, hair follicles, nails, oral cavity and anogenital mucosa.[3] Genital LP can be classified into three sub-types including classic LP, hypertrophic LP and erosive LP.[2,3] Erosive vulvovaginal LP is an uncommon variant that involves the vulva and vagina. This disease seems to largely affect Caucasian women of perimenopausal age. Most patients present in the sixth decade of life.[1-3] Recent studies have confirmed significant association between LP and liver diseases, in particularly hepatitis c viral infection.[4] The erosive sub-type is important as it is the most common type affecting the genital mucosa and can result in severe scarring if not recognized early and treated appropriately.[2] It is characterized by glassy, brightly erythematous erosions associated with white striae (Wickham's striae).[3,5] The disease may lead to loss of labia minora, narrowing of introitus. In severe cases intravaginal synechiae may form that can result into partial or complete obliteration of vagina. Erosive genital LP is often chronic and disabling, causing psychological, emotional and physical distress to the affected patients leading to significant morbidity.[5] Treatment can be challenging but usually involves topical or intralesional corticosteroids as first line, followed by systemic immunosuppressants and even surgical management for resistant cases.[6,7] Steroid vaginal suppositories may be useful in controlling vulvovaginal LP.[8] Nearly 25% of women with oral LP also have vulvo-vaginal

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involvement with possibility of development of squamous cell carcinoma of vulva subsequently.[9] We report this case to highlight the importance of early diagnosis and appropriate management of relatively uncommon disorder presenting with common vaginal symptoms.

## Case Report

A 38-year-old married premenopausal woman para 6 was referred with two years history of vulval itching, burning, soreness, discharge from vagina and menorrhagia. On further questioning her main concern was rapidly progressing dyspareunia and dysuria. She was depressed and suffering from psyco sexual distress. There was no history of scalp or nail involvement. She was not addicted to tobacco or bettlenut and had no relevant family history. With her repeated visits to primary care physicians and dermatologists, she was managed as a case of vaginal candidiasis and intertrigo and was treated with different regimens of oral and topical antifungals, antihistamines and topical steroids. Her disease kept on progressing and symptoms never improved satisfactorily with any medication. Initial examination revealed erythematous and tender erosions over the atrophic labia minora bilaterally and clitoral hooding **(Figure 1)**. Oral examination revealed violaceous plaques with lacy white streak on sides of buccal mucosa. The investigations revealed an increase in white blood cells. Hepatitis C serology and PCR were positive. LFTs, fasting blood sugar, thyroid profile, sexually transmitted diseases and autoimmune screens were negative. X-ray chest was unremarkable, ultrasound abdomen and pelvis revealed fatty liver and intramural fibroid. Skin biopsy of right vulval region showed orthokeratosis, preserved granular layer, spongiosis, basal layer vacuolar degeneration with pigmentary incontinence. Dense lymphocytic infiltrate at dermoepidermal junction and papillary dermis was seen. PAS stain for fungal hyphae was negative **(Figure 2)**. Topical clobetasol propionate 0.05% ointment was prescribed for genital use along with oral corticosteroid (40 mg prednisolone daily). Topical triamcinolone was prescribed for the oral lesions. Dose of oral prednisone was gradually tapered and symptoms are now controlled.

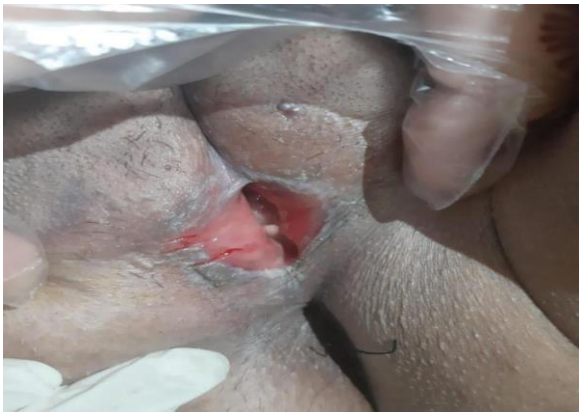

**Figure 1** Architectural destruction with loss of the labia minora and clitoris and narrowing of the introitus. The epithelium is denuded leading to contact bleeding, and vaginal adhesions.

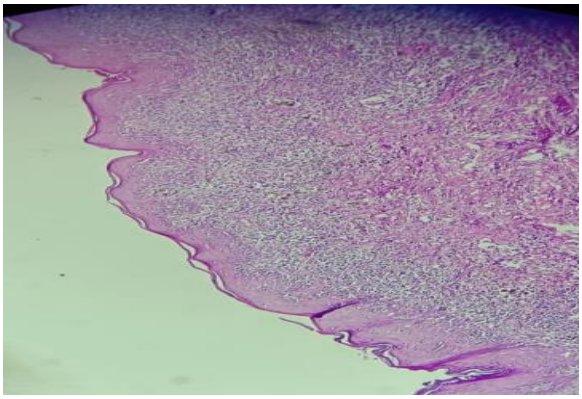

**Figure 2** Epidermis shows orthokeratosis, preserved granular layer and spongiosis. There is basal layer vacuolar degeneration with pigmentary incontinence and dense lymphocytic infiltrate is seen at dermoepidermal junction and papillary dermis.

## Discussion

Genital symptoms in sexually active females like dysuria, dyspareunia and vaginal burning

and discharge are generally considered as an outcome of some sexually transmitted infection (STI). However, there are some non venereal inflammatory dermatoses that may have similar presentation as that of STIs.[2] Vulvovaginal LP is one of these non-sexually transmitted dermatoses. A characteristic feature of the vulvovaginal variant of LP is a chronic course with unexplained exacerbations, improvements, and remissions. Women affected by vulvovaginal LP may present to number of health care providers complaining of genital irritation, itching, burning, soreness, and dyspareunia. These symptoms may be accompanied by erosion, abnormal often purulent discharge which may progress to vaginal adhesion, stenosis, dyspareunia and loss of genital anatomical architecture.[1-3] Often these symptoms are incorrectly attributed to persistent candidiasis, bacterial vaginosis, trichomonal infections, pelvic inflammatory disease or recurrent herpes genitalis and such patients keep on visiting various disciplines of medicine and surgery before they are finally diagnosed. This delay in diagnosis and lack of appropriate management puts lot of social, physical, emotional and economic burden and has a negative impact on the quality of life, especially sexual life of the patients. Our reported patient is a good example of this as she remained in continuous distress for two years. She visited a number of physicians and received varied modalities of treatments but her physical and emotional sufferings continued and sexual and family life deteriorated to the extent of an impending divorce. The aim of presenting this case was to highlight the need for early diagnosis and effective treatment to avoid troublesome anatomical distortion of the female genitalia that can have devastating consequences for a young to middle aged sexually active female. Timely diagnosis and aggressive management in such cases does not only have significant positive impact on quality of life by improving physical and sexual health but also reduces the long term risk of developing SSC.[5,9]

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