'website : www.ijacare.in e-ISSN No.: 2457-0443
INTERNATIONAL JOURNAL OF AYUSH CASE REPORTS (IJA-CARE)

Lichen Simplex Chronicus (LSC) of Vulva- A Case Report and Literature Review

Tuba Razi[1*], Shamsa Ahmad, [1] Fahmeeda Zeenat [2]

[1]PG Scholar, [2]Assistant Professor, Ajmal khan Tibbiya College, A.M.U, Aligarh, UP, India

ABSTRACT:

The typical form of chronic neurodermatitis known as lichen simplex chronicus manifests as hic k, scaly, dry patches of skin.The most common cause of the hypertrophic epidermis is habitually rubbing or scratching a particular area of the skin.The primary symptom of the disorder may in dicate a possible psychological component, or it may be related to other skin conditions like psor iasis or eczema.These types of plaques arise from pruritic dermatoses, which are usually brought on by psychological stressors. Over the past century the disease entity has often been referred to by multiple other names, including lichen chronicum circumscriptus, circumscribed neurodermatitis, and neurodermatitis. Biopsy confirmed LSC of the vulvar region has been rarely reported. We report a case of LSC of the vulvar region in an Asian Indian woman performed a literature review. A 50-year-old Indian woman (housewife) presented in OPD with complaints of intense itching and thickened skin in the vulvar region There was a history of depression. She had attained menopause 3years ago. The skin at vulva was thickened, hard and leathery. There were signs of scratching. The skin was hyperpigmented. The patient was treated with Surfaz-SN cream containing Beclomethasone(steroid)+ Neomycin(antibiotic)+ Clotrimazole(antifungal) for local application along with herbal blood purifier syrup (*mussaffi khoon*). Within two days of treatment patient found improvement in itching.

KEYWORDS: Lichen simplex chronicus of vulva, Itching, Leathery skin, Unani medicine.

Received: 09.05.2024 Revised: 19.05.2024 Accepted: 30.05.2024 Published: 26.06.2024

Quick Response Code

***Corresponding Author:**
Dr. Tuba Razi
PG Scholar,
Ajmal khan Tibbiya College, A.M.U, Aligarh, UP, India
Email: tubarazi30095@gmail.com

INTRODUCTION:

Lichen simplex chronicus is a common chronic neurodermatitis that typically manifests as scaly, leathery, and dry patches of skin.[2] Usually, chronic scratching or rubbing of a specific area of the skin results in the hypertrophic epidermis. The major symptom of the disorder may be a primary symptom reflecting a possible psychological component or secondary to other skin conditions like psoriasis or eczema, these types of plaques arise from pruritic

dermatoses, which are usually brought on by psychological stressors.[1][2][3] Although lichen simplex chronicus is most often a non-life-threatening skin disorder, the frequent itching can lead to infection, changes to how keratinocytes divide and grow, and subsequent, although rarely observed, malignant transformation of the epithelial tissues affected.

It typically affects the neck, scalp, upper eyelids, ears, palms, soles, ankles, wrists, genital areas and bottom.[4] It often develops gradually and the scratching becomes a habit.[4] treatment of lichen simplex chronicus may include topical anti-inflammatory therapies such as corticosteroids topical emollients; antibiotics if infection is highly likely antihistamines can be used to prevent exacerbation by allergic mediators. Phototherapy with UVA as well as photochemotherapy, may be used for severe cases, except in case of genital involvement. Psychological treatment, such as anti-anxiety medications, also can assist due to the etiological nature of the disorder.

LITERATURE REVIEW:

Incidence:

Anogenital LSC (AGLSC) develops predominantly in mid- to late adult life (30-50 years of age). [5] Despite being a common condition seen by the dermatologists, the incidence and prevalence figures have not been well established, and the factors operating in the causation as well as the perpetuation of the disease are poorly understood.

AGLSC is common in mid- to late adult life (30-50 years of age). [2],[6] The mean age of patients with vulvar LSC in studies conducted by Singh *et al* [7] and O'Keefe *et al*. [8] were 49.9 and 42 years (range 22-76 years), respectively. [9] These findings are in concordance with our study where we found that the mean age of AGLSC cases was 45.9 years with a vast majority of cases (89/105 patients, 84.7%) being more than 30 years of age.

Histopathology:

Pathology of lichen simplex chronicus shows a hyperkeratotic plaque with foci of parakeratosis, prominent granular cell layer, elongated and irregularly thickened epidermal rete, acanthosis, pseudoepitheliomatous hyperplasia, papillary dermal fibrosis, mild spongiosis, and perivascular as well as interstitial inflammation with histiocytes, lymphocytes, and occasional eosinophils in the superficial dermis. Electron microscopy shows collagen fibres attached to and above the lamina basalis.

Evaluation:

Diagnosis of lichen simplex chronicus includes a physical exam, a complete medical history, dermoscopy, and self-reported symptoms. Patch testing can eliminate possible allergic reactions due to contact dermatitis as a cause of the lesions. If the lichen simplex chronicus is in the genital area, then a potassium hydroxide examination and fungal cultures are helpful to exclude tinea cruris or candidiasis. Skin biopsies can be performed to exclude disorders such as psoriasis or mycosis fungoides. Blood tests may be performed as well; for example, elevated serum immunoglobulin E levels support the diagnosis of an underlying atopic diathesis.[10][11]

CASE DESCRIPTION:

A 50-year-old Indian woman (housewife) presented in OPD with complaints of intense itching and thickened skin in the vulvar region. There was no history of hypertension. Diabetes mellitus, thyroidism

and any other disease. There was a history of depression for which she took medication 4-5 years back. Recently she was in stress due to some family problems. In her menstrual history she had attained menopause 3years ago. On examination her vitals were within normal limits. The skin at vulva was thickened, hard and leathery. There were signs of scratching. The skin was hyperpigmented, as shown in pic.1 and pic.2 she also complained of burning micturition and frequency of micturition. On investigation her blood sugar level came to be within normal limits. Investigation for urine -routine and microscopic showed few pus cells indicating mild infection.

The patient was treated with Surfaz-SN cream containing Beclomethasone(steroid)+ Neomycin(antibiotic)+ Clotrimazole(antifungal) for local application along with herbal blood purifier syrup (mussaffi khoon). Her urinary infection was treated with nitrofurantoin 100 mg twice a day along with Uri- kind sachet containing cranberry extract, once a day.

Within two days of treatment patient found improvement in itching. After a week there was significant improvement in her symptoms. Itching got reduced to a significant level, the skin texture also improved, as shown in pic .3 and 4. Burning micturating and frequency of urination completely resolved after 10 days of treatment. On follow up after one month the patient did not have any complaint of recurrent itching.

Aetiology:

Numerous research studies have connected emotional variables to lichen simplex chronicus. These emotional factors frequently cause recurrent and cyclical itching as a coping mechanism for emotional disturbances or as a result of an acute impulse to scratch an area that is shown to occur after an emotional disturbance. The most common areas are on self-accessible areas of the body such as the scalp, head, neck, hands, arms, and genitals [4]. Often, there is a cyclical pattern to the mental strain that results in the discomfort and the urge to scratch. The plaques that form as a result can lead to an increase in stress and persistent itching, changes in the skin's pigmentation, and even the spread of the affected area to broader areas.

This is primarily a pruritic condition, although it can also be secondary to other dermatoses such as xerosis, psoriasis, atopy, or others.

Differential Diagnosis

The following conditions should be excluded: psoriasis, atopic dermatitis, lichen planus, contact dermatitis, mycosis fungoides, fungal infections, and squamous cell carcinoma.

THERAPEUTIC INTERVENTION:

Treatment of lichen simplex chronicus may include the following: occlusion of the area; topical anti-inflammatory therapies such as corticosteroids (high-potency versions may be used for 3 weeks at a time for thicker plaques/lesions); topical emollients; antibiotics if infection is highly likely or present, especially if immunosuppressant drug therapy is being utilized; and antihistamines can be used to prevent exacerbation by allergic mediators. [12][13][14] Psychological treatment, such as psychotherapy as well as respective drug therapies, such as anti-anxiety medications, also can assist due to the etiological nature of the disorder.

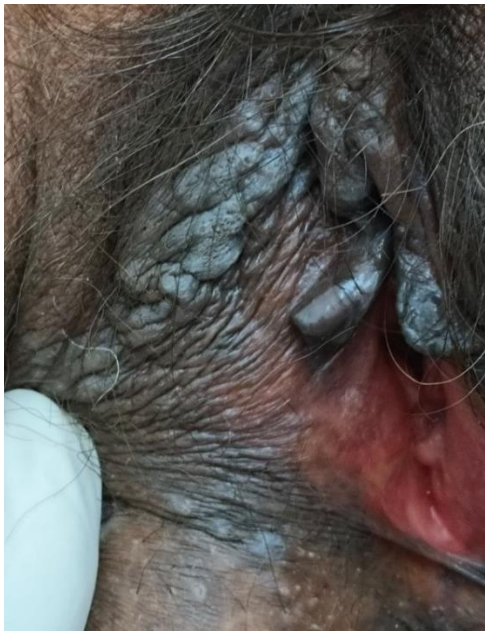

Figure-1: BT thickened leathery skin

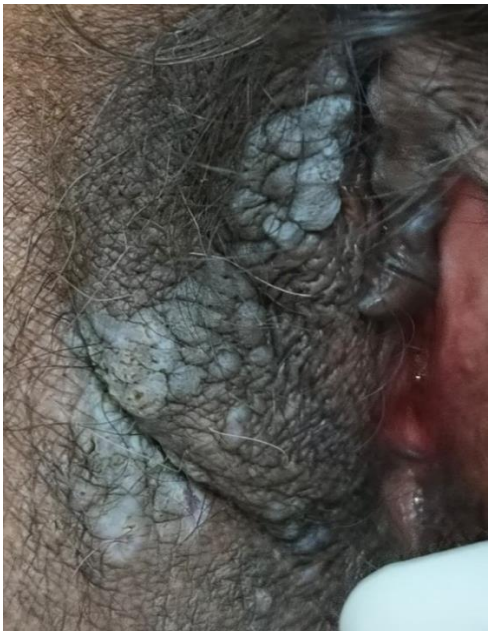

Figure-2: BT leathery skin patches

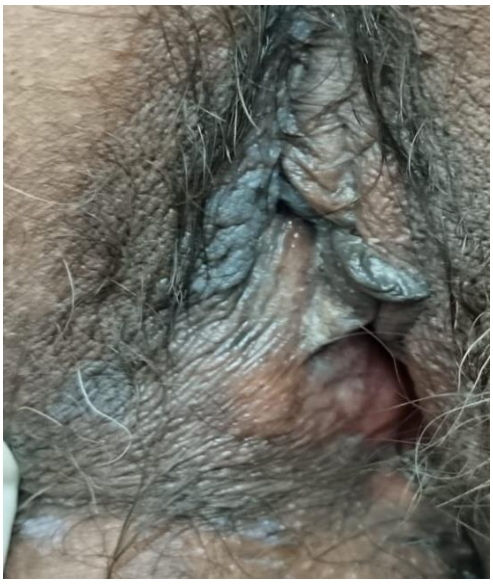

Figure-3: AT mildly softer skin

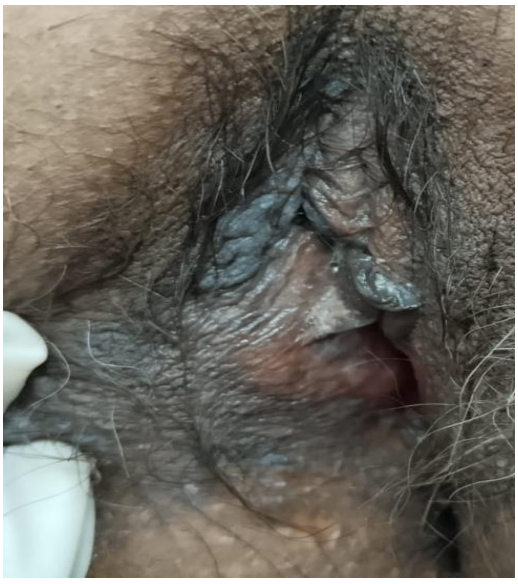

Figure-4: AT no thickened skin patches

DISCUSSION:

LSC is a common pruritic skin disorder characterized by lichenified plaques resulting from irresistible and persistent scratching or rubbing. It can be either primary arising *de novo* on tissue with a normal appearance or secondary due to various dermatological disorders. AGLSC is quite a common condition seen by the dermatologists; yet there is only limited literature available on this subject. What remains more challenging is characterizing the obscure nature of the etiologic factors in a majority of cases and appropriately addressing the psychological morbidity that may accompany any disorder involving the anogenital region. Corticosteroids are found to be effective in its management.

CONCLUTION:

Lichen simplex chronicus is a common skin condition but still very less information is available about vulval lichen simplex chronicus. Further awareness should be

spread about this skin disease so that patients don't feel shy to get consulted by doctors. This will help to report more such cases.

Limitations of this study:

Validity and reliability of this result may vary because this is a single case study so further studies with large sample size are required to validate its efficacy.

Consent of patient:

Consent was taken from the patient before starting the treatment protocol as well as prior to publication of the case details and data.

Conflict of interest: Author declares that there is no conflict of interest.

Guarantor*:* Corresponding author is guarantor of this article and its contents.

Source of support: None

How to cite this article:

Tuba R. Shamsa A, Zeenat F, Abiha A, Naaz S.A. Lichen Simplex Chronicus (LSC) of Vulva: A Case Report and Literature Review. Int. J. AYUSH CaRe. 2024;8(2): 242-246.

REFERENCES:

1. Aboobacker S, Harris BW, Limaiem F. Lichenification. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 May 1.
2. Borghi A, Virgili A, Corazza M. Dermoscopy of Inflammatory Genital Diseases: Practical Insights. Dermatol Clin. 2018;36(4):451-461.
3. Boozalis E, Grossberg AL, Püttgen KB, Cohen BA, Kwatra SG. Itching at night: A review on reducing nocturnal pruritus in children. Pediatr Dermatol. 2018;35(5):560-565.
4. James WD, Elston DM, Treat JR, Rosenbach MA, Neuhaus I. Pruritus and neurocutaneous dermatoses. In: James WD, Elston DM, Treat JR, Rosenbach MA, Neuhaus I, editors. Andrews' Diseases of the Skin: Clinical Dermatology. 13th ed. Elsevier; 2020. p. 53-54.
5. Lynch PJ. Lichen simplex chronicus (atopic/neurodermatitis) of the anogenital region. Dermatol Ther. 2004;17:8-19
6. Burgin S, Fitzpatrick's Dermatology in General Medicine, Nummular eczema and lichen simplex chronicus/prurigo nodularis. Wolff K, Goldsmith LA, Katz SI, Gilchrest BA, Paller AS, Leffell DJ, New York. 7th edition 2008, pp158-62
7. Singh N, Thappa DM, Jaisankar TJ, Habeebullah S. Pattern of non-venereal dermatoses of female external genitalia in South India. Dermatol Online J. 2008;14(1):1.
8. O'Keefe RJ, Scurry JP, Dennerstein G, Sfameni S, Brenan J. Audit of 114 non-neoplastic vulvar biopsies. Br J Obstet Gynaecol.1995;102(10):780-6.
9. Rajalakshmi R, Thappa DM, Jaisankar TJ, Nath AK. Lichen simplex chronicus of anogenital region: A clinico-etiological study. Indian J Dermatol Venereol Leprol. 2011;77(1):28-36.
10. Sand FL, Thomsen SF. Skin diseases of the vulva: eczematous diseases and contact urticaria. J ObstetGynaecol. 2018;38(3):295-300.
11. Chibnall R. Vulvar Pruritus and Lichen Simplex Chronicus. Obstet Gynecol Clin North Am. 2017;44(3):379-388..
12. Fruchter R, Melnick L, Pomeranz MK. Lichenoid vulvar disease: A review. Int J Womens Dermatol. 2017;3(1):58-64
13. Day T, Bohl TG, Scurry J. Perianal lichen dermatoses: A review of 60 cases. Australas J Dermatol. 2016;57(3):210-5.
14. Boyd K, Shea SM, Patterson JW. The role of capsaicin in dermatology. Prog Drug Res. 2014;68:293-306.