# Total Acquired Vulval Synechia: An Unusual Presentation

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# ABSTRACT

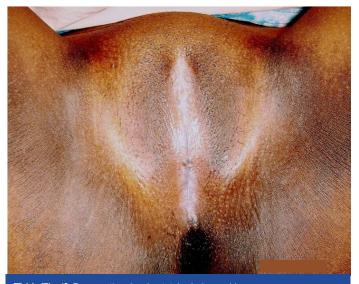
Surgery Section

An unusual case of Acquired Total vulval synechia due to vulvar Lichen planus is reported in an 18-year-old girl, which is an extremely rare condition. It has a potential for producing extensive scarring and narrowing of introitus resulting in dyspareunia and rarely carcinoma of vulva. Successful surgical management of total vulvar synechiae in patient suffering from Lichen Planus is being reported.

## CASE REPORT

A-18-year-old girl aged came to Obstetrics & Gynecology outpatient department and was referred for plastic surgery consultation. She came with a complaint of dysuria and complete closure of introitus for the last 2 months [Table/Fig-1]. The patient gave the history of burning sensation and distension in lower abdomen during micturition. The patient was earlier treated by dermatologist for purplish cutaneous lesions over both extremities and oral cavity. She was passing urine and menstrual blood through a small orifice in the middle of the synechia. She feels burning sensation and distension in the lower abdomen during micturition. She gives history of having treatment by dermatologist for purplish cutaneous lesions over the both extremeties and oral cavity. It was diagnosed as lichen planus after histopathology from the cutaneous and oral lesions and was treated with topical corticosteroids for the last two years with some relief from the cutaneous lesions [Table/Fig-2,3]. She attained menarche at the age of 14 y and having normal cycles since then. The menstrual blood also comes out through the small opening in the center of the fusion. Because of the history patient was referred to dermatology department. They found out the gingival lesions in addition to treated cutaneous lesions. Punch biopsy was done from the oral lesions and pathologists confirmed the histological features in conformity with Lichen planus.

After preliminary investigations she was operated under spinal anaesthesia. The synechiae were broken carefully and was observed that urethra and vagina are normal but the labia minora



[Table/Fig-1]: Preoperative showing total vulval synechia

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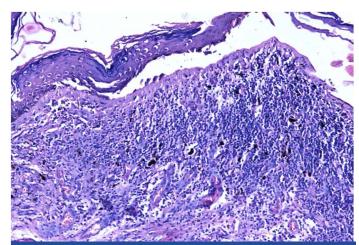
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[Table/Fig-2]: Cutaneous lesions over the extremities after treatment



[Table/Fig-3]: Oral and gingival lesions [Table/Fig-4]: Postoperative after release of synechia



[Table/Fig-5]: Histophotomicrograph of the labial tissue



[Table/Fig-6]: Followup after 6 months

were not properly developed .The cut mucosal edges were sutured and normal vulvo-vaginal anatomy was restored [Table/Fig-4]. The mucosal wounds healed well and was discharged on 5th postoperative day and advised topical application of hydrocortisone ointement locally. Histopathological study of the tissue removed during the release of labial adhesions revealed features of Lichen Planus [Table/Fig-5]. She is being followed regularly and doing well after 8 months postoperative [Table/Fig-6].

### DISCUSSION

Lichen planus (LP) affects approximately 1 % of all women and the most common site of involvement is the oral mucosa. Nearly 25 % of women with oral LP also have vulvo-vaginal involvement with possibility of development of squamous cell carcinoma of vulva subsequently [1-3].

LP is an inflammatory auto immune mucocutaneous disorder. There are three clinical variants of Vulvar LP. The most common form is erosive type and affects the vulva and vagina. Hypertrophic type is least common but present with hyperkeratotic plaques extending perianally and cause significant pruritus. The classical type of lichen planus exhibits small purple papules in the vulva as part of generalized cutaneous lesions [4].

Erosive type is characterised by glassy, brightly erythematous erosions associated with white striae {Wicckhan's striae} [4]. The disease may involve the labia minora and vestibule or may be associated with loss of labia minora, narrowing of introitus and obliteration of the vagina. In severe cases intravaginal synechiae may form causing partial or complete obliteration of vagina [5]. WG syndrome encompasses triad of erosive vulvitis, vaginitis and gingivitis. Histologically erosive LP is characterized by hyperkeratosis, irregular acanthosis with a saw tooth appearance of rete ridges, a prominent granular layer and basal cell liquefaction [6,7].

Firstline of treatment of Vulvar LP is daily application of topical ultrapotent corticosteroid ointment such as flucinomide (.05%) or clobetasol proprionate (.05%). For women whose disease is refractory for topical ointments, oral corticosteroids such as prednisolone will usually control the disease. Topical corticosteroids should be used until all the active lesions are resolved. Long term symptomatic and objective control of vulvovaginal lichen planus is prevention, but prevention requires an awareness of disease process as it relates to female genital tract [8,9]. Lichen sclerosis and erosive lichen planus are related to autoimmune mechanism in its aetiology and long term steroid therapy is mainstay in prevention of labial adhesions and vaginal and vulvar stenosis [10].

### CONCLUSION

This case focuses our attention that in all cases of lichen planus we should examine for the involvement of the vulva, particularly when oral and gingival lesions are present. If detected early and effective oral and topical steroid therapy is given the troublesome adhesions of the vulva can be prevented. Long term followup and treatment is mandatory in erosive type of vulvar lichen planus to prevent vulvar and vaginal stenosis. These patients are to be properly educated regarding the possible complications of vaginal stenosis and dyspareunia. A rare possibility of greater incidence of Squamous cell carcinoma of the vulva should be kept in mind and advice the patients accordingly.

# REFERENCES

- [1] Lewis FM, Harrington CI. Squamous cell carcinoma arising in vulval lichen planus. Br J Dermatol 1994:131:703-05.
- Eisen D. The clinical features, malignant potential and systemic associations [2] of oral Lichen planus: A study of 723 patients. J Am Acad Dermatology. 2002.46.207-14
- [3] Eishen D. The evaluation of cutaneous, genital, scalp, nail, oesophageal and ocular involvement in patients with oral lichen planus. Oral surgery, oral Med, oral pathology, oral radiology Endod. 1999;88:431-36.
- [4] Lewis FM, Shaw M, Harrington CI. vulval involvement in Lichen planus. Br J Dermatology. 1996;135:89-91.
- [5] Moyal-Boracco M, Edward L. Diagnosis and therapy of anogenital lichen planus. Dermatol Ther. 2004;17:38-46.
- [6] Anderson M, Kutzner S, Kaufman RH. Treatment of vulvovaginal lichen planus with vaginal hydrocortisone suppositories. Obst Gynecol. 2002;100:359-62.
- [7] FM Lewis, M Pelisse. Vulvar lichen planus: clinical aspects and guidline to management. CME Journal of Gynecologic oncology. 2005;10:188-92.
- [8] Ismail SB, Kumar SK, Zain RB. Oral lichen planus and lichenoid reactions: etiopathogenesis, diagnosis, management and malignant transformation. J Oral Sci. 2007;49(2):89-106.
- Helgessen AL, Gjersvik P, Kirschner R, Tambo T. Vaginal involvement in genital [9] erosive lichen planus. Acta Obstet Gynecol Scand. 2010;89(7):966-70.
- [10] Cooper SM, Ali I, Baldo M, Wojnarowska F. The association of lichen sclerosus and erosive lichen planus of the vulva with autoimmune disease: a case control study. Arch Dermatol. 2008;144(11)1432.

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