



## SPECTRUM OF BENIGN VULVAR DISORDERS IN GYNECOLOGY OUTDOOR OF A TERTIARY CARE CENTRE

<b>Dr. Swati Mehta</b>	Assistant Professor, Department of Obstetrics and Gynecology, Dr. S. N. Medical College Jodhpur, Rajasthan.
<b>Dr. Sawai Khatri</b>	Senior Resident, Department of Obstetrics and Gynecology, Dr. S. N. Medical College Jodhpur, Rajasthan.
<b>Dr. Balgopal Bhati</b>	Senior Resident, Department of Obstetrics and Gynecology, Dr. S. N. Medical College Jodhpur, Rajasthan.
<b>Dr. Lokesh Mehta</b>	Medical Officer, District Hospital Paota, Dr. S. N. Medical College Jodhpur, Rajasthan.

### ABSTRACT

**Objectives:** The vulva can be involved in variety of conditions that can occur in all ages. The study was done to overview the spectrum of different types of benign vulvar disorders among patients presenting to a tertiary care institute.

**Methods:** This was an observational study, done over patients having different types of vulvar disorders, who attended Gynecology out-patient clinic in the department of Obstetrics and Gynecology, over a period of 24 months.

**Results:** In our study 108 patients were found to be having confirmed diagnosis of vulvar disorders in 2 years duration of study. Most of the women belonged to 45-60 years age group. Pruritus vulva was the commonest presenting symptom (61.11%). White discoloration or white patch on the vulva was present in 56 (51.85%) cases. Lichen sclerosis was the commonest disorder (29.62%) and the second most common disorder was Bartholins cyst (14.81%).

**Conclusions:** Although the benign disorders of vulva are not so common, their symptoms are quite worrisome and annoying for the patient. Good personal hygiene and general care of vulva are major adjunct to medical treatment. It is prudent to take biopsy and closely follow suspicious lesions.

**KEYWORDS :** Vulva, vulvar disorder, Lichen Sclerosis, Pruritus vulva.

**Introduction:** Vulva is one of the least talked about subject in the field of gynecology. In the past few years there has been an increased interest in vulvar diseases. A wide spectrum of benign, premalignant and malignant lesions may involve the vulva. The complexity in dealing with these is the necessity to involve various specialities like dermatology, pathology, urology along with gynecology to differentiate between normal variants, benign findings and potentially serious disease.<sup>1</sup> The most useful means of generating a differential diagnosis of vulvar lesions is by morphologic findings rather than by symptomatology which is often nonspecific.<sup>2,3</sup> Benign vulvar disorders are a significant issue for patients. These disorders include vulvar atrophy, benign tumors, hamartomas and cysts, infectious disorders, and nonneoplastic epithelial disorders.<sup>4</sup> The most common symptom of both benign and malignant vulvar lesions is vulvar itching.<sup>5</sup>

The general approach to evaluate vulvar lesions includes the history, physical examination and diagnostic studies. The biopsy should be strongly considered in cases where a diagnosis cannot be made confidently on visual inspection and by non invasive methods or if the lesion does not resolve after standard therapy. It is extremely beneficial to establish the diagnosis by biopsy early, as the clinical features may change over time.<sup>6</sup>

From a pathological point of view, vulva, as a part of genitalia, can be affected by specific disorders such as multifocal HPV lesions of any degree or vulvar expression of a vaginal infection. Vulva can also exhibit specific dermatological diseases for which signs can be observed elsewhere on the body, such as in lichen sclerosus or psoriasis. However, vulva can also exhibit signs of a large variety of diseases, such as digestive, hematological, immunological, and endocrine disorders. This leads us to consider any vulvar disorder as a potential expression of a very large panel of diseases.<sup>7</sup> The aim of the study is to overview the different types of benign vulvar disorders among all gynecological out patients in our Obstetrics and Gynecology department including their presenting symptoms, response to the treatments and follow up.

**Methods:** It was a observational study done over a period of 24 month (August 2014 to July 2016) among patients having suspected benign vulvar disorder, attending the out-patient clinic at the department of Obstetrics and Gynecology, Umaid Hospital, Dr. SNMC Jodhpur. Patients were evaluated by means of history taking, general, systemic and local examination and various relevant investigations including biopsy were done to reach a final diagnosis. References were done with dermatologists, physicians, pathologists and microbiologists wherever necessary. Only those patients with a final diagnosis of benign vulvar disorder were included in this study. Those with malignant lesions were excluded from the study. Patients in whom no definitive diagnosis could be made were also excluded. Data regarding, age distribution, presenting symptoms, final diagnosis, treatment given and type of surgeries performed were collected and analysed.

**Results:** In our study total 108 patients were diagnosed with benign vulvar disorders. As shown in Table 1, majority of patients, 51 (47.22%) were between 45-60 years of age group, another 23 (21.29%) were between the age of 30-45 years. 18 (16.66%) women belonged to young age group of less than 30 years. 16 (14.81%) cases were of more than 60 years of age, out of them one women was more than 70 years of age.

**Table 1: Distribution of cases according to age [n=108]**

Age Group (years)	Number of cases	Percentage (%)
< 30	18	16.66
30 - 45	23	21.29
45-60	51	47.22
>60	16	14.81

Table no. 2 shows that pruritus vulva was the commonest symptom, present in 66 (61.11%) cases. The second most common symptom was white patch/plaque on the vulva. Pruritus vulva was mainly present in women with lichen sclerosus, lichen simplex chronicus, atrophic vulvitis and psoriasis vulva. 29 patients had pain or soreness of vulva and amongst them 20 were suffering from

lichen simplex chronicus and 7 were suffering from infected bartholin cyst . Fifteen patients complained of dyspareunia , most commonly present in women with Lichen sclerosus. Complains of swelling or nodular masses were present in 27 patients. 76 patients presented with some discolouration of vulval skin, white patch was the most common type of discolouration(51.85%),two patients were having dark coloured patches of Acanthosis Nigricans . There were 7 cases of vulval ulcers six of them were infective ulcers and one case was of hidradenitis suppurativa.

**Table 2: Symptomatology of vulvar disorders**

Symptoms	No. of cases(%) n=108
Pruritus vulva	66 (61.11)
Vulval pain/soreness	29 (26.85)
Dyspareunia	15 (13.88)
Swelling/Mass/nodule	27 (25.00)
White discoloration	56 (51.85)
Red patch /nodule	18 (16.66)
Dark coloured lesion	2 (1.85)
Ulcer	7 (6.48)

Table 3 shows that the most common dermatologic condition was Lichen Sclerosus , present in 32(29.62%) women out of total 108 patients.They presented with whitish discoloration, pruritus vulvae, soreness of vulva, dyspareunia and all of them were treated medically. The second most common disorder was Lichen simplex chronicus present in 20(18.51%) patients. All the cases presented with pruritis vulva along with soreness, watery discharge. The third most common presentation was Bartholin cyst, 16 such cases (14.81%) presented with a cystic swelling in the vulva and were treated surgically. Six patients were having dermatitis out of which 5 were having Primary Irritant Dermatitis and one patient was having Allergic Dermatitis. All 3 (2.77%) cases of psoriasis, presented with red scaly itchy lesions, were treated medically. Two patients were having Genital warts. Amongst the others, one patient was having episiotomy scar endometriosis presented with dark colored lesion with cyclical pain and one other patient was having Lipoma, both were managed surgically.

**Table 3: Spectrum of vulval lesions (n=108)**

Disorders	No. of Cases	Percentage(%)
DERMATOLOGIC	32	29.62
Lichen Sclerosus	20	18.51
Lichen simplex chronicus	3	2.77
Lichen planus	3	2.77
Psoriasis vulva	6	5.55
Dermatitis	1	0.92
Hidradenitis suppurativa Vitiligo	4	3.70
Acanthosis nigricans	2	1.85
INFECTIVE		
Folliculosis	6	5.55
Infective ulcers	6	5.55
Bartholin cyst/abscess	16	14.81
Genital warts	2	1.85
OTHER		
Atrophic Vulvitis	5	4.62
Endometriosis	1	0.92
Lipoma	1	0.92

**Discussion:**

The vulvovaginal region arises from the close juxtaposition of epithelium derived from all three embryologic layers (endoderm, mesoderm, and ectoderm), a condition found in no other part of the body. Each of the three embryologic derivatives differs in epithelial and glandular structure, hormonal responsiveness, neural distribution, immune response, and relationship to disorders of other body systems. Embryologic and immunologic aspects of the vulva contribute to the diagnostic and therapeutic challenges of managing vulvar problems.<sup>3</sup> A multidisciplinary approach involving gynecologist, dermatologist, clinician and a

dermatopathologist is required for the management of vulvar disorders.

A community-based survey has estimated that 20% of women have vulvar symptoms lasting more than 3 months during their lifetime.<sup>8</sup> In our study most common symptom was pruritus vulvae (cases;%). The commonest site of vulvar lesions was labia majora ( 52 cases,48.14 %) followed by labia minora ( 48 cases,40.74 %). Less common sites were clitoris, fourchette, mons pubis and perinium. In one case the site of biopsy was episiotomy.

Vulvar skin disorders commonly present with nonspecific symptoms such as pruritus, pain and changes in skin color and texture. These include vulvar dermatoses, infection, contact dermatitis, hormone deficiency and systematic skin disorders. Self-medication or previous inadequate or inappropriate treatments may contribute to symptoms. Detailed elaborate history regarding previous inappropriate medication and exposure to potent allergens, is important to search for the underlyingly cause.

In our study lichen sclerosis was the commonest dermatologic disorder (29.62%) as reported in other studies.<sup>6,9,10</sup> Most of them presented with severe pruritus which was worse at night. Skin has wrinkly cigarette paper like characteristic appearance. Dyspareunia can be due to pain resulting from fissures or due to narrowing of intoitus in longstanding disease. Squamous cell carcinoma develops in 3-6% of women affected by vulvar lichen sclerosis, which is therefore now regarded as a preneoplastic condition.<sup>11</sup> Although vulvar lichen sclerosis can be a clinical diagnosis, skin changes may be difficult to differentiate from vulvar intraepithelial neoplasia, and a biopsy should be performed before treatment with topical steroids is initiated. Biopsies in cases of lichen sclerosis are useful for confirmation of clinical diagnosis and to exclude early invasive malignancy.<sup>12</sup> Maintaining local hygiene, wearing cotton undergarments and avoiding use of cosmetics can be of great help in alleviating symptoms. Patients are treated with a potent topical corticosteroid ,such as Clobetasol propionate 0.05% ointment, applied twice daily for 1-3 months (with the dose gradually tapered) provides short-term relief and long-term control in most patients .Application of local moisturizer helps in maintaining symptom relief once achieved by steroid therapy. Lorenz et al found very high success rates in 81 symptomatic patients with biopsy-proven disease who had failed previous therapy<sup>13</sup>. Patients are to be followed closely, because of the risk of malignancy.

Lichen simplex chronicus of the vulva is a chronic eczematous condition characterized by intense and unrelenting pruritus, leading to scratching and lichenification. A biopsy is often necessary to exclude lichen sclerosis, lichen planus, or vulvar intraepithelial neoplasia <sup>14</sup>. They presented with pruritus, soreness and watery discharge from vulva. Treatment is aimed at halting the itch-scratch-itch cycle. All the irritant and allergens are to be identified and eliminated. High potency corticosteroid at the bed time and oral anti-histaminics for night time sedation are given to break the itch cycle

We have found total 16 cases of bartholins gland disorders . Problems with the bartholin glands include cysts, which are relatively painless enlargements of the gland, and abscesses, which are infections of the gland. Bartholin cysts are most likely to occur in women of child-bearing age, as in our study eight cases each from below 30 and between 30-40 age group were found. We have done excision of the cyst in nine cases with bartholin cysts and marsupialisation was done in 7cases of bartholin abscess.

**Conclusion:** The management of women with chronic vulvar disorders is one of the most difficult and challenging aspects of women's healthcare. Symptoms of vulvar disorders are usually nonspecific and diagnosis is mainly by morphologic findings. Biopsy should be done in cases not responding to standard medical treatment in order to exclude malignancy. General care of vulval

skin, maintenance of good hygiene and avoidance of irritants in vulvar area is a major adjunct to medical treatment. Hormonal, anti microbial, anti inflammatory and immunomodulator therapy is to be given according to the specific condition. Long-term surveillance is necessary, particularly in disorders like lichen sclerosus, that carry risk of developing malignant change. Combined efforts of gynecologist and dermatologist are essential in accurate diagnosis and effective treatment of vulvar disorders.

#### References:

1. Gokdemir G, Baksu B, Baksu A, Davas I, Koslu A. Features of patients with vulvar dermatoses in dermatologic and gynecologic practice in Turkey: is there a need for an interdisciplinary approach?. *J Obstet Gynaecol Res.* 2005 Oct. 31(5):427-31.
2. Fisher GO. The commonest causes of symptomatic vulval disease. a dermatologist's perspective. *Australias J Dermatol* 1996; 37:12.
3. Foster DC. Vulval disease. *Obstet Gynecol* 2002; 100:145.
4. Ridley CM, Frankman O, Jones IS, et al. New nomenclature for vulvar disease: International Society for the Study of Vulvar Disease. *Hum Pathol.* 1989 May. 20(5):495-6.
5. Hanprasertpong J, Chichareon S, Wootipoom V, Buhachat R, Tocharoenvanich S, Geater A. Clinico-pathological profile of vulva cancer in southern Thailand: analysis of 66 cases. *J Med Asso Thai* 2005;88(5):575-81.
6. Mohan H, Kundu R, Arora K, Punia RS, Huria A. Spectrum of vulvar lesions: a clinicopathologic study of 170 cases. *Int J Reprod Contracept Obstet Gynecol* 2014;3:175-80.
7. Doyen J, Demoulin S, Delbecque K, Goffin F, Kridelka F, Delvenne P. Vulvar skin disorders throughout lifetime: about some representative dermatoses. *Biomed Res Int.* 2014;2014:595286.
8. Eva LJ. Screening and follow up of vulvar skin disorders. *Best Pract Res Clin Obstet Gynaecol.* 2012;26(2):175-88.
9. O'Keefe RJ, Scurry JP, Dennerstein G, Sfameni S, Brennan J. Audit of 114 non-neoplastic vulvar biopsies. *Br J Obstet Gynecol* 1995;102(10):780-6.
10. Bowen AR, Vester A, Marsden L, Florell SR, Sharp H, Summers P. The role of vulvar skin biopsy in the evaluation of chronic vulvar pain. *Am J Obstet Gynecol* 2008;199(5):467
11. Meffert JJ, Davis BM, Grimwood RE. Lichen sclerosus. *J Am Acad Dermatol.* 1995 Mar. 32(3):393-416; quiz 417-8.
12. Murphy R. Lichen sclerosus. *Dermatol Clin.* 2010;28(4):707-15.
13. Lorenz B, Kaufman RH, Kutzner SK. Lichen sclerosus - Therapy with clobetasol propionate. *3 Reprod Med* 1998;43(9):790-4
14. Burrows LJ, Shaw HA, Goldstein AT. The vulvar dermatoses. *J Sex Med.* 2008;5(2):276-83.