

Research Article

Non venereal benign dermatoses of vulva in sexually active women: a clinical study

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Received: 03 July 2016

Accepted: 22 July 2016

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ABSTRACT

Background: Vulvar complaints are usually an uncomfortable discussion not only for the patient but also for the health care provider. Vulva remains one of the most covered regions of the body and seems truly to be a forgotten pelvic organ. Any genital lesion or related symptoms are erroneously considered to be sexually transmitted. Hence this study was conducted to emphasize on the fact that all genital lesions are not sexually transmitted. Objective of the study was to determine the clinical pattern and relative frequency of non-venereal benign dermatoses of vulva in sexually active women at a tertiary health care centre.

Methods: It was a prospective, observational study. All sexually active women attending the outpatient department of Dermatology and Gynecology, who presented either with vulvar complaints or with vulvar dermatoses on routine clinical examination were included in the study. Women with six classical venereal diseases or with vulvar malignancies were excluded from the study. After detailed history & examination, results were tabulated and analysed by SPSS software.

Results: A total of 70 sexually active women were observed. Majority of women were from rural background (54.28%), were housewives (81.42%) and were illiterate (42.85%). The commonest presenting feature was itching. Labia majora was the most common site of involvement and Tinea cruris was the most common dermatoses involved.

Conclusions: All vulvar dermatoses are not sexually transmitted.

Keywords: Benign, Dermatoses, Sexually active, Vulva, Venereal

INTRODUCTION

Vulvar complaints are usually an uncomfortable discussion not only for the patient but also for the health care provider. Complicated complaints such as pelvic pain and infertility, situations such as prolapse uterus and leiomyoma, and uterine or cervical malignancies are no challenge to the clinicians nowadays but if a women walks into an OPD with vulvar symptoms, she is often met with a blank stare. Vulva truly seems to be a forgotten pelvic organ.¹

Vulva remains one of the most covered regions of the body, commonly with layers of fabric, minimally pervious to moisture. Continued contact of excessive moisture with vulvar skin can macerate the skin and predispose it to trauma, itching and burning. Unlike other areas of the skin, the vulva is difficult for the patient to examine herself, and compared to an area like the scalp or back, it is awkward to ask a family member or a friend to help.² Additionally any genital lesion or related symptoms are erroneously wrongly considered to be sexually transmitted. Because of the associated

embarrassment and psychological sequelae, women do not seek medical care. Therefore it is of immense importance to diagnose these non-venereal dermatoses so as to relieve the patients from the associated anxiety, embarrassment and fear, and emphasize on the fact that the dermatoses involving the vulva are not always sexually transmitted.

Those vulvar diseases which are not sexually transmitted are known as non-venereal vulvar dermatoses and include inflammatory cutaneous disorders like psoriasis, lichen planus, lichen sclerosus et atrophicus; autoimmune diseases like vitiligo; infections and infestations like folliculitis, bartholin gland abscess, tinea cruris and scabies; multisystem diseases like behcet's disease; exogenous like contact dermatitis; cysts and benign tumors like bartholin cyst and haemangioma.³ We conducted a study to observe the clinical pattern of vulvar dermatoses amongst the sexually active women of western Uttar Pradesh, visiting our hospital.

METHODS

This was a prospective, observational study carried out in the department of Dermatology and Gynecology, for a period of six months, from October 2012-March 2013. All sexually active women attending the outpatient department of Dermatology and Gynecology, who presented either with vulvar complaints or with vulvar dermatoses on routine clinical examination were included in the study.

Exclusion criteria

- Patients with 6 classical venereal diseases- Syphilis, Chancroid, Gonorrhoea, Lymphogranuloma venereum (LGV), Donovanosis and Herpes genitalis were excluded from the study.
- Patients with vulvar malignancies were also excluded.

Informed consent was obtained. Detailed history including demographic profile, chief complaints with duration, menstrual, obstetric and contraception history, history of sexual exposure, treatment history and whether the treatment has led to improvement or worsening of symptoms and associated medical or skin disorders was taken. A personal or family history of diabetes, autoimmune thyroid disorders or skin disorders such as eczema and psoriasis was also taken. External genitalia were examined along with thorough physical examination for lesions elsewhere on the body. Clinical photographs were taken with informed consent. Laboratory procedures like KOH mount, gram's stain and vulvar punch biopsies were performed as and when required to confirm the diagnosis. The results were tabulated and analyzed using SPSS 13.0 software.

RESULTS

A total of 70 sexually active women with non-venereal benign dermatoses of vulva were included in the study. Age of patients ranged from 20 to 46 years with mean of 34.9 years. Most of the patients (18/70;25.71%) belonged to the age group of 36-40 years (Figure 1). Of the total 70 patients, seven patients were post-menopausal and five were pregnant.

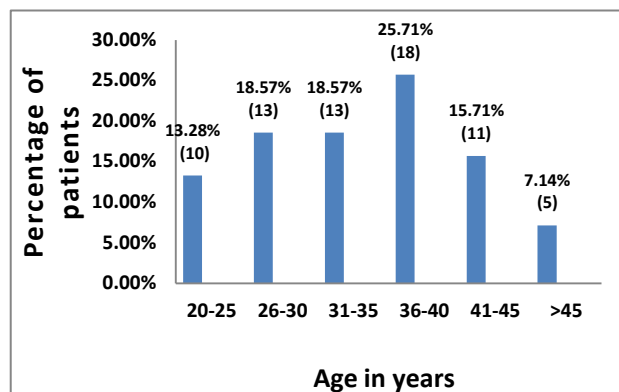


Figure 1: Correlation of vulvar dermatoses with age.

Thirty eight patients (54.28%) were from rural areas while thirty two patients (45.71%) were inhabitants of urban areas. Majority of these cases were housewives (57/81.42%), followed by teachers (6/8.57%), farmers (4/5.71%), students (2/2.85%) and laborers (1/1.42%).

Majority of the patients were illiterate (30 patients, 42.85%), followed by 16 patients (22.85%) who had high school education, followed by 15 patients (21.42%) with primary education and 9 (12.85%) were graduates.

The commonest presenting feature was itching seen in 42 cases (60%), followed by asymptomatic skin lesion in 16 (22.85%) and the rest having pain, white discoloration and erosion (Figure 2). Duration of symptoms ranged from one week to eight years, with majority of patients, 33/70 (47.14%) having symptoms of less than a month duration.

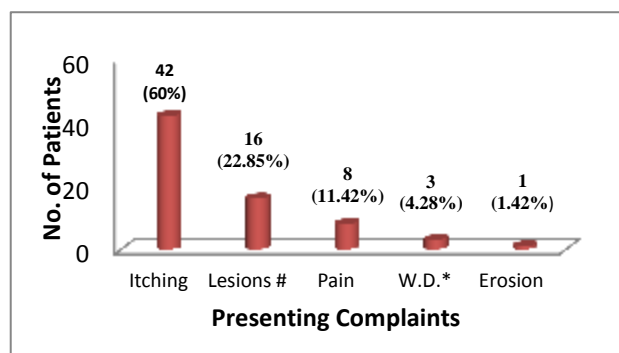


Figure 2: Presenting Symptoms.

Labia majora was the most common site of involvement seen in 48 cases, followed by mons pubis in 40, labia minora in 11, clitoris in 8, introitus in 4 and fourchette in 1 patient.

In the morphology of lesions, plaques were the most common lesions seen in 44 patients, followed by papules in 33 patients, pustules in 7 patients, nodules in 6 and macules, erosion and other lesions each in 3 patients. Majority of the lesions were erythematous, seen in 48 cases, followed by depigmented lesions in 8, pearly white in 7, skin colored in 3 and violaceous, hyper pigmented, and grey each in 2 of cases (Figure 3).

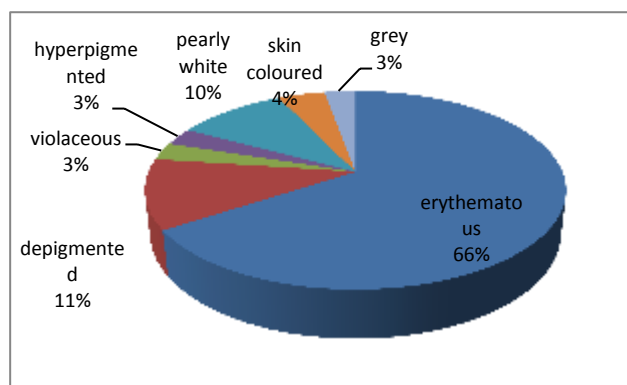


Figure 3: Type of lesions.

Table 1: Incidence of vulvar infections and infestations among patients presenting with vulvar dermatoses.

	No. of patients (n)	Percentage (%)
Bacterial infections	8	11.4
Folliculitis	1	1.42
Furuncle	7	10
Fungal infections	30	42.85
Tinea cruris	21	30
Candidiasis	9	12.85
Viral infections	10	14.28
Genital warts (Figure 6)	2	2.85
Molluscum contagiosum	7	10
Herpes zoster (Figure 7)	1	1.42
Infestations	2	2.85
Scabies	2	2.85

A total of 19 different non venereal benign dermatoses were noted. Out of which infections and infestations were seen in 50 patients (71.42%) followed by inflammatory dermatoses in 14 patients (20%); (Table 1 and 2). Benign tumors and cysts were seen in 4 (5.7%) and blistering and pigmentary disorders in 1 patient each (1.42%).

Table 2: Incidence of vulvar dermatoses other than infections and infestations.

Dermatoses	No. Of patients N=20	Percentage %
Inflammatory dermatoses	14	20
Lichen sclerosus et atrophicus	7	10
Lichen planus	2	2.85
Psoriasis	2	2.85
Lichen simplex chronicus	1	1.42
Pityriasis rosea	1	1.42
Irritant contact dermatitis	1	1.42
Pigmentary dermatoses	1	1.42
Vitiligo	1	1.42
Benign tumors and cysts	4	5.7
Acrochordon	2	2.85
Pyogenic granuloma	1	1.42
Lymphangioma	1	1.42
Blistering disorders	1	1.42
Pemphigus vulgaris	1	1.42

The most common non venereal benign dermatoses were tinea cruris (Figure 4A) which constituted 21 cases (30%) and confirmed by KOH smear (Figure 4B), followed by 9 cases (12.85%) of candidiasis, furuncle, molluscum contagiosum (Figure 5) and LSA in 7 (10%) cases each.



Figure 4A: Erythematous plaque covering the vulva and extending onto lower abdomen and upper thigh; along with multiple striae.



Figure 4B: KOH mount showing fungal hyphae.



Figure 5: Molluscum Contagiosum with multiple pearly umbilicated papules over labia majora and minora.



Figure 6: Venereal Warts showing multiple flesh coloured growth around posterior forchette.



Figure 7: Herpes Zoster showing multiple tense vesicles and bullae over vulva on the right side.

DISCUSSION

Diseases of vulva are unfortunately not a priority in any of the women's health initiatives. These diseases fall through the cracks of medical education at all levels and in all specialties. Women themselves have little to no genital education. Many were brought up with prevailing cultural taboos about female genitalia and are members of the 'down there' generation where almost no words are spoken to refer to the female genitalia, internal or external.⁴ Because of these factors women suffer with undiagnosed symptoms, especially the sexually active

women who consider their symptoms to be due to some sexually transmitted disease.

Vulvar dermatoses may present in a number of ways ranging from asymptomatic to chronic disabling conditions and may severely affect the woman's quality of life. Multifactorial nature of symptoms and physical expression of disease on vulva complicate the evaluation and management of genital dermatoses.⁵ Although the literature is saturated with case reports of non-venereal vulvar dermatoses, very few formal studies have been reported on the overall occurrence, both in India and abroad. An effort was made to scan the literature for similar studies wherein only a single study on non-venereal vulvar dermatoses could be found from the Indian subcontinent (South India). Our study comprises a comprehensive analysis based on observations made on 70 women belonging to western Uttar Pradesh, presenting with non-venereal benign vulvar dermatoses. Keeping in view the unique blend of population, economics and ecology of this region, the clinical pattern and frequency of vulvar dermatoses was observed and correlated with similar studies in other parts of the world (Table 3).

Table 3: Studies on vulvar dermatoses.

Study	Year	Country	Number of cases
Fischer and Rogers ¹²	2000	Australia	130
Gokdemir et al ¹⁴	2005	Turkey	310
Singh et al ⁷	2008	India (Pondicherry)	120
Pathak et al ⁶	2011	Nepal	105
Present Study	2014	India (Uttar Pradesh)	70

In our study the mean age of patients was (34.9) years. We studied the demographic profile of the patients with regard to their inhabitation, education status and occupation and it was found that majority of the patients were inhabitants of rural areas (54.28%), were housewives (81.42%) and were illiterate (42.85%). These findings were comparable to a similar study conducted by Deeptara Pathak et al.⁶

The commonest presenting complaint in our study was vulvar itching (60%) which was in concordance with other studies except for a study conducted by Harlow et al who found vulvar pain to be the commonest presenting symptom seen in nearly 12% of patients followed by itching and burning in 6.6% of patients.⁶⁻⁹

The most common group of vulvar dermatoses noted in our study was infections and infestations seen in 50 patients (71.42%), followed by inflammatory dermatoses in 20%, benign tumors and cysts in 5.7%. The incidence of these dermatoses was similar to that observed in a study conducted in Nepal but was in contrast to the study

conducted by Singh et al where inflammatory dermatoses were most frequently observed (49.16%).^{6,7}

Among the infections and infestations, fungal infections were the most common, seen in 30 patients (42.85%). This finding is in concordance with the study conducted in Thuringia, Germany.¹⁰ While in our study, Tinea cruris was amongst the most frequent fungal infection observed, vulvovaginal candidiasis was more common (11.4%) in the study conducted in Nepal.⁶ Although it was seen in 12.85% of our patients, but it was outnumbered by tinea cruris.

Looking at the individual dermatoses, most commonly observed vulvar dermatoses in our study were tinea cruris, candidiasis, furuncle, molluscum contagiosum and LSA. Our finding is in contrast to studies quoted in western literature where lichen sclerosus et atrophicus was the most most frequently observed vulvar dermatoses.^{8,11,12} The reason for this variation could be due to the age group of patients in our study which mainly comprised of women of reproductive age group, while it has been mentioned in medical literature that LSA has two peak ages of presentation: prepubertal and post-menopausal. A study of 350 women with LSA by Thomas et al showed that the mean age of patients was 56 years.¹³ In a retrospective study conducted by Cheung et al the most common vulvar conditions that were noted were lichen sclerosus (39%), lichen simplex (30.5%), lichen planus (11.5%) and vulvar pain syndromes (10.5%) followed by other dermatoses.⁸ Similarly Fischer et al conducted a prospective study of 141 patients with vulvar complaints and the most common vulvar dermatoses noted were lichen sclerosus (13%), vulvovaginal candidiasis (10%), vulvodinia (9%) and psoriasis (5%).¹² The approach to patients with vulvar disorders varies from country to country. However, multidisciplinary clinics seem to improve the understanding of vulvar diseases, to make correct diagnoses and to raise patients' quality of life.¹⁴

CONCLUSION

This study highlights the importance of diagnosing non venereal vulvar dermatoses and refutes the general conception that all vulvar dermatoses in sexually active females are sexually transmitted. It also underlines that there is more to vulvar dermatoses than sexually transmitted diseases.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the institutional ethics committee

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Cite this article as: Singh G, Rathore BS, Bhardwaj A, Sharma C. Non venereal benign dermatoses of vulva in sexually active women: a clinical study. *Int J Res Dermatol* 2016;2:25-9.