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Original Research Article

A study of pattern of non-venereal genital dermatoses in female patients at a tertiary care center

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ABSTRACT

Background: Nonvenereal genital dermatoses are responsible for considerable concern for the patients as any genital lesion, or related-symptom is often misinterpreted as being sexually transmitted. To the physician, it may create confusion from venereal dermatoses and cause diagnostic challenge. The study is aimed to determine the clinical pattern and relative frequency of nonvenereal genital dermatoses in sexually active female patients.
Methods: The study was conducted as a prospective, observational study in sexually active female patients who presented with genital lesions, after excluding venereal diseases. A detailed history and dermatological examination along with skin biopsy in selected cases to aid in diagnosis was done, and the results were tabulated and analysed.
Results: This study included 100 female patients with nonvenereal genital lesions. A total of 23 genital dermatoses were noted. Most of the patients belonged to 25-40 years of age group. Infections and infestations were responsible for 39% of cases of which vulval candidiasis was the most common disorder. Other dermatoses noted include lichen sclerosus et atrophicus, lichen simplex chronicus, psoriasis, lymphangioma circumscriptum, epidermoid cyst, seborrheic keratosis, vulval intraepithelial neoplasia, vitiligo, angioedema of vulva and vestibular papillomatosis.
Conclusions: This study underscores the importance of considering non-venereal dermatoses in the differential diagnosis of genital lesions, thus avoiding the misbelief that all genital lesions are sexually transmitted.

Keywords: Nonvenereal dermatoses, Nonvenereal genital dermatoses

INTRODUCTION

A number of dermatoses and skin tumors affect the genitalia in a unique and distinct manner that they warrant separate discussion. The normal characteristics of common dermatoses are modified on genitals. For most of them this may be the only one of the many sites involved, while in others it may be predominantly confined to the genitalia. The features are frequently modified by moisture in local environment.[1-3] Dermatoses involving the genital region which are not sexually transmitted are referred to as non-venereal genital dermatoses. Any genital lesion or symptom is often misinterpreted as being sexually transmitted. The vulva is a difficult site for self-examination, which along with hesitation to seek medical care for genital lesions leads to anxiety and fear.[4] Being able to recognize and treat the vulval dermatoses is vital for the wellbeing of the patient. The dermatoses may also be a sign of systemic diseases and proper examination can give a clue to establish the diagnosis. Nonvenereal genital dermatoses may be grouped under papulosquamous dermatoses, bullous disorder, infections and infestations, congenital disorders and premalignant and malignant conditions. A detailed

history followed by physical examination along with necessary investigations like biopsy will help to establish the diagnosis in most of the cases.[5] Determining the causal factors can help the patient from mental distress and allay the associated anxiety. It is a general belief that genital dermatoses are poorly understood, difficult to diagnose and treat. But, careful history taking which includes sexual practices, environmental factors, topical agents application, the presence of other cutaneous diseases and complete dermatological examination with relevant investigations enable for easy diagnosis and satisfactory medical and surgical management in most of the cases.

Aim

The aim of the study was to determine the clinical pattern and relative frequency of nonvenereal genital dermatoses in sexually active female patients.

METHODS

This prospective observational study was done in female patients attending venereology department from April 2016 to March 2017. A total of 100 female patients in the sexually active age group who presented with genital complaints attending the outpatient clinic were taken as a study group. Patients with venereal diseases were excluded from the study. After getting informed consent, detailed history regarding demographic data, chief complaints with duration, history pertaining to associated skin disorders and medical conditions, sexual exposure history, obstetric history and treatment history was taken. Examination of external genitalia as well as other sites for lesions elsewhere in the body was done. Clinical photographs were taken. Laboratory investigations like gram stain, KOH examination, pus culture and sensitivity, rapid plasma reagin test, HIV testing and skin biopsy wherever indicated was done to establish the diagnosis. The data were recorded and analysed.

RESULTS

A total of 100 female patients with nonvenereal dermatoses of external genitalia were included in the study. The age group of patients studied range from 18-55 years. Most of the patients (64%) belonged to 26-40 years. 72% of patients were married.

A total of 23 types of nonvenereal dermatoses were noted in this study (Table 1). Infections and infestations were responsible for 39% of cases of which vulval candidiasis was the most common disorder (16%). It was followed by lichen sclerosis et atrophicus which accounted for 10%. Tumors and cysts were responsible for 14% of cases. The other conditions that were encountered include vitiligo (7), angioedema of vulva (1), hidradenitis suppurativa (1), and vestibular papillomatosis (8).

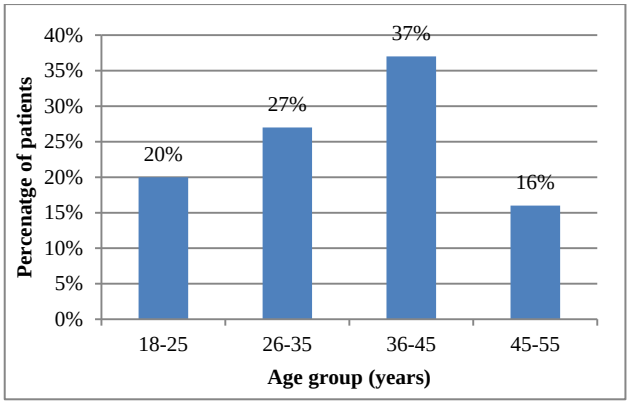

Figure 1: Correlation of vulvar dermatoses with age.

Table 1: List of vulval dermatoses.

Genital dermatoses		Number
Infections and infestations	Vulval candidiasis	14
	Folliculitis/furuncle	8
	Tinea corporis	5
	Scabies	4
	Erythrasma	3
	Herpes zoster	2
Inflammatory dermatoses	Lichen sclerosis et atrophicus	10
	Lichen simplex chronicus	9
	Contact dermatitis	4
	Lichen planus	3
	Psoriasis	2
	Radiation dermatitis	2
Tumors and cysts	Seborrheic keratosis	5
	Lymphangioma circumscriptum	3
	Epidermoid cyst	2
	Syringocystadenoma papilliferum	1
	Paraurethral cyst	1
	Secondary metastasis following Ca gut	1
	Vulval intraepithelial neoplasia	1
Others	Vestibular papillomatosis	8
	Vitiligo	7
	Hidradenitis suppurativa	1
	Angioedema of vulva	1

The common presenting complaints were itching genitalia, pain and burning sensation, raised asymptomatic skin lesions and ulceration of the skin.

DISCUSSION

Vulvar dermatoses may present with varied manifestations ranging from asymptomatic to chronic disabling conditions and may severely impair the quality

of life. The classical characteristics of common dermatoses are modified in genitals due to moisture in the local environment and may present in a distinct manner and warrant separate discussion. This present study was undertaken to identify the pattern of different nonvenereal dermatoses.

The nonvenereal dermatoses of female external genitalia include a wide spectrum with varied etiology. There are many studies in male patterns. Karthikeyan et al have done a study on the pattern of nonvenereal dermatoses in male external genitalia from South India.[6] Studies in female patients are limited. Singh et al have done a study on 70 female patients.

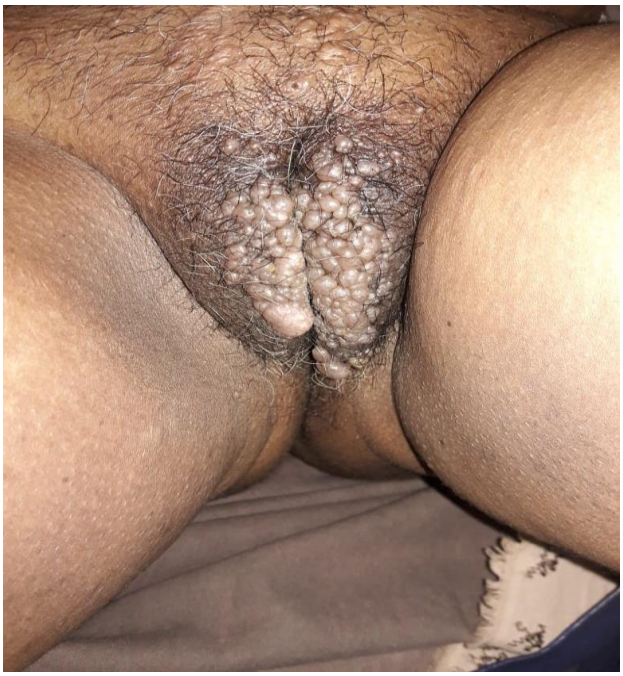

Figure 2: Acquired lymphangiectasia.

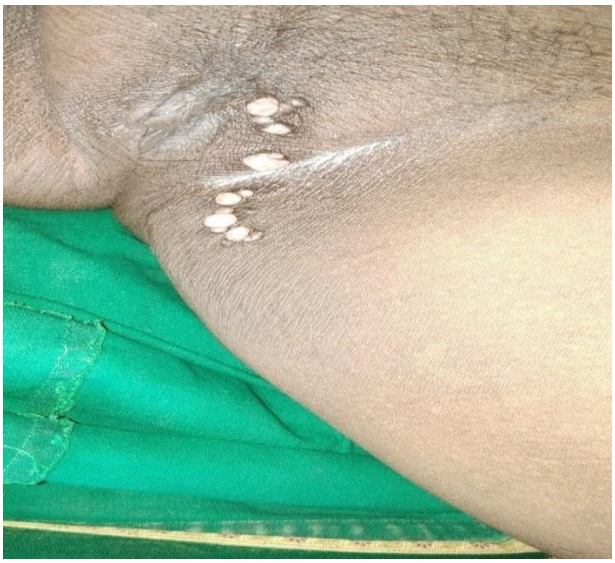

Figure 3: A case of syringocystadenoma.

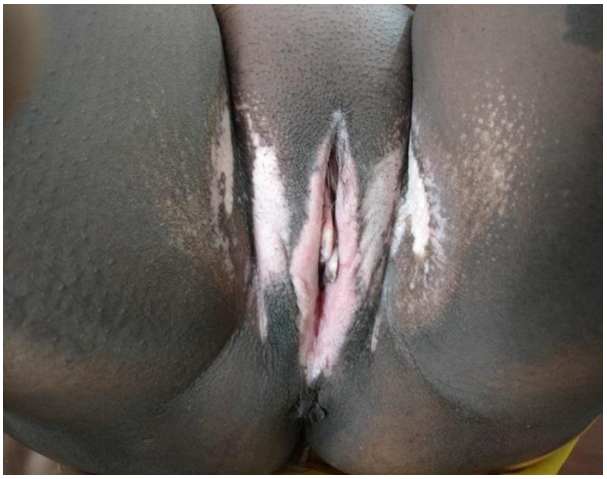

Figure 4: The case of genital vitiligo.

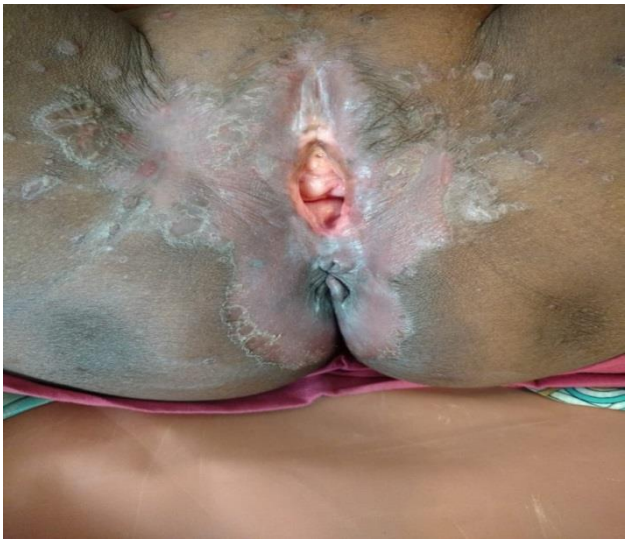

Figure 5: Case of genital psoriasis.

In our study a total of 23 types of nonvenereal dermatoses were encountered whereas Singh et al reported 19 types.[7] Most of the patients belonged to the age group of 25-40 years whereas Singh et al reported more patients in 36-40 years of age.

The most common presenting complaint in our study was genital itching followed by pain and burning sensation, which was similar to most of the studies.

The most common disorder noted in our study was infections and infestations seen in 39% patients who are in contrast to study by Singh et al who reported 71.42%.[7] Among the infections and infestations the most common disease encountered was vulval candidiasis (14%) whereas Pathak et al reported an incidence of 11.4%.[8] All the patients with vulval candidiasis had type II Diabetes mellitus in our study.

Among the inflammatory dermatoses which constituted 30% of cases, Lichen sclerosis et atrophicus as noted in

10% cases which is in contrast to study by Singh et al (21.7%).[7] Lichen simplex chronicus was seen in 9% cases whereas Rajalakshmi et al reported only 2.5% incidence with anogenital pruritus.[9] Genital lichen planus was seen 3 cases as exclusive genital lesion in the age group of 30-40. A study by O' Connell showed more patients with vulval lichen planus in the sixth decade.[10]

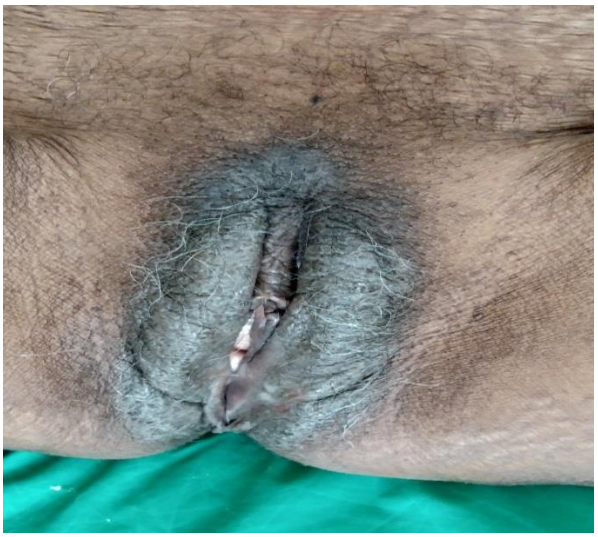

Figure 6: Lichen simplex chronicus.

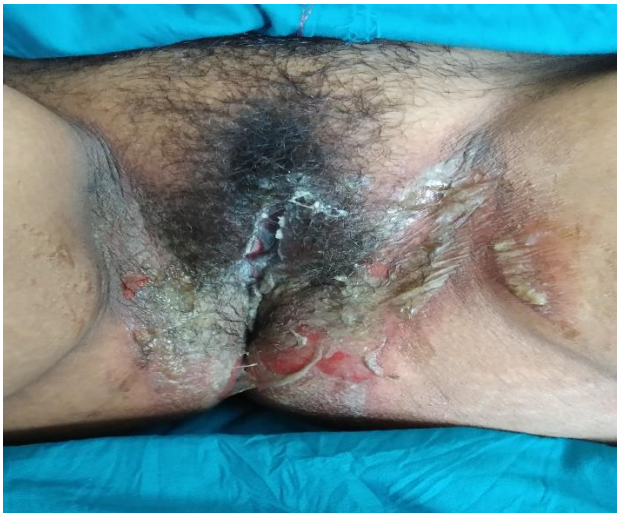

Figure 7: Irritant contact dermatitis.

Contact dermatitis due to exogenous agents like povidone iodine application and antifungal preparation was seen in 4 patients. A study by Crore et al showed 97% of patients with vulval dermatitis had endogenous predisposition like underlying atopic dermatitis which was not seen in our study which may be due to the small number of cases.[11]

Analysis of the pattern of 14 cases of tumors and cysts revealed seborrheic keratoses was most common, seen in 5% of patients. Seborrheic keratoses involving the genital region is a rare entity which can easily be misdiagnosed as genital warts. A rare and unusual case of large seborrheic keratosis which caused diagnostic confusion with condyloma acuminata was reported by Nath et al.[12]

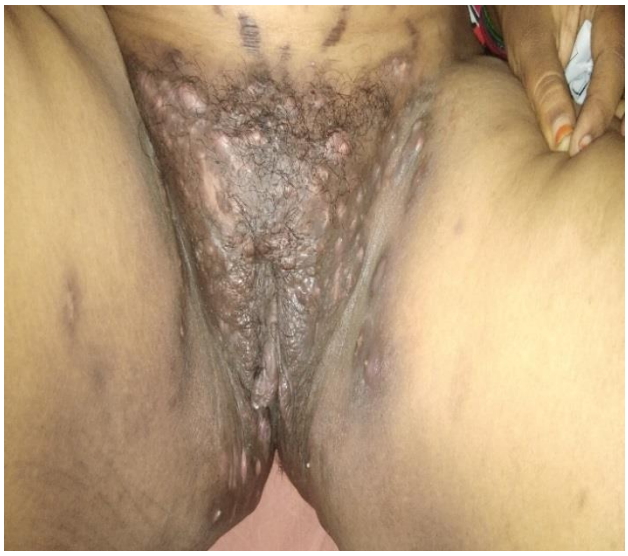

Figure 8: A case of hidradenitis suppurativa.

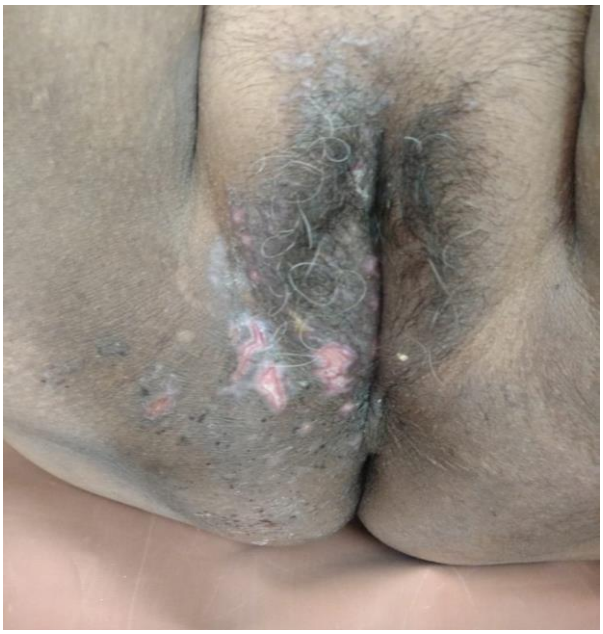

Figure 9: A case of herpes zoster.

Acquired lymphangioma circumscriptum was seen in 3 patients. All the patients developed the lesion following radiotherapy for carcinoma cervix and the clinical appearance was mimicking genital warts as has also been reported by Sharma et al.[13]

A single case of syringocystadenoma papilliferum which presented as polypoidal growth in the genital region was seen in our study. An incidence of 12.5% of cases presenting in the genital region has been reported.[14] Other conditions mimicking genital wart reported in our study include secondary malignant deposits from rectal carcinoma and vulval intraepithelial neoplasia.

Genital vitiligo was reported in 7% of patients in our study. An incidence of 3.4% of genital mucosal vitiligo was reported in a study by Agarwal et al.[15]

Vestibular papillomatosis which is considered as an anatomical variant of vulva and female equivalent of pearly penile papules was seen in 8% cases. This condition can be misdiagnosed as genital wart and prevalence reported in various studies has ranged between 1-33%.[16]

CONCLUSION

Although venereal diseases have predominantly genital lesions, other diseases which may be infections and inflammatory dermatoses can affect the genitalia. Careful history taking regarding sexual practices, topical medication applications, complete dermatological examination with relevant investigations enable prompt recognition of the cause of genital lesions which not only minimize the duration of ailment, but helps to avoid damage to self-esteem and sexual relationship.

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Conflict of interest: None declared
Ethical approval: The study was approved by the institutional ethics committee

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