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Impact of non-venereal genital dermatoses among female patients on the quality of life in a tertiary care center

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ABSTRACT

Nonvenereal dermatoses of female external genitalia are genital diseases that are not transferred sexually and have a variety of etiologies. A prospective, observational study of adult female patients with nonvenereal dermatoses was conducted. A complete history and dermatological examination were performed, with skin biopsy in a few cases to aid in diagnosis. The data was collected and analyzed. During the course of this study, 82 cases of nonvenereal genital dermatoses were encountered. This study found that the most common age group was 20 to 45 years old [56%]. The most common presenting complaint was itching. In 42% of instances, fungal infections such as tinea cruris, vulval candidiasis, and scabies were identified. Lichen sclerosus et atrophicus, lichen simplex chronicus, contact dermatitis, vitiligo, psoriasis, seborrheic keratosis, and pemphigus vulgaris are among the other dermatoses identified. The Finlay dermatological life quality index (DLQI) questionnaire was used to assess the influence on patients' quality of life. Inflammatory illnesses such as lichen simplex chronicus lichen sclerosus et atrophicus, pemphigus vulgaris, psoriasis, hidradenitis suppurativa, and vitiligo reduced their quality of life moderately to severely.

1. Introduction

There are two types of genital dermatoses: venereal and nonvenereal. Non venereal genital dermatoses can also affect other regions of the body in addition to the genitalia.[1] The usual characteristics of common dermatoses are altered on the genitals due to increased wetness.[2] Because dermatoses can be an indicator of systemic disease, a systemic examination can help to establish the diagnosis. Inflammatory disorders, infections and infestations, benign illnesses, normal variants, and miscellaneous disorders are the different types of nonvenereal genital dermatoses.[3] Such dermatoses can cause a variety of psychological issues in patients. The genital area is a tough place for self-examination, and many people are hesitant to seek medical care for genital lesions, resulting in the persistence of these conditions. Determining the underlying cause can assist the patient in being freed of mental distress, consequently improving their quality of life.[4] Using the Finlay dermatological life quality index questionnaire, this study presents the pattern of nonvenereal genital dermatoses in adult females in a tertiary care centre and seeks to determine their influence on quality of life.[5]

2. Materials and Methods

It is a prospective, observational study that was conducted for two years in a tertiary care hospital. All new female patients aged 18 years and above who attended the dermatology and venereology outpatient division with genital dermatoses were included in the study. Informed written consent was obtained from all patients after

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excluding venereal diseases. Patients' confidentiality was maintained throughout the study period. A thorough history was taken, including age, occupation, and duration of employment, history of any drug intake or topical application, history of similar episodes, marital status, and history of sexual exposure. A thorough systemic and dermatological examination was performed. To rule out venereal disease, an RPR test for syphilis and an HIV ELISA test were performed. Gram's stain, KOH mount, mite scraping, and histopathology were performed as needed to rule out any venereal disease. Clinical characteristics and testing were used to make the diagnosis.

Infections and infestations, inflammatory disorders, benign ailments & normal variations, and miscellaneous conditions were the four primary groupings of diagnosed cases. We also used the Finlay dermatological life quality index questionnaire to assess the impact of non-venereal dermatoses on patients' quality of life. The dermatology life quality index (DLQI) interpretation was done as patients have mild effect on the quality of life if the score is 2 to 5, moderate effect if the score is 6 to 10 and severe effect if the score is above 10. Data were analyzed using IBM SPSS software.

3. Results

There were 134 adult female patients with genital lesions who had skin and STD exams. 52 of the patients had venereal diseases and were thus excluded from the research. As a result, 82 patients with nonvenereal genital lesions were included in this study. The average age of participation is 36 years. The range of ages is from 18 to 70 years. The patients in this study range in age from 20 to 45 years old, accounting for 56% of the total. The majority of the patients (42%) were housewives and students (15%). Table 1 contains demographic information.

Clinical signs that were frequently observed were genital itching, pain, burning sensation, redness, white discoloration, swelling, seeping, dyspareunia, burning micturition, erosion, and ulcer formation and thickening of skin. The majority of the patients had various symptoms. Symptom duration ranged from one to six months, with a mean of two months. Labia majora was the most commonly recognized site of association, accounting for 63% of cases. This investigation found a total of 19 different forms of nonvenereal dermatoses [Table 2]. Diseases and infestations accounted for 49% of cases, with fungal diseases such as tinea, vulval candidiasis, and scabies being the most frequent (42%). Inflammatory illnesses accounted for 22% of the cases, with lichen sclerosis et atrophicus accounting for 8%. 11% of instances were caused by benign tumors, cysts, or normal variations. Vitiligo, hidradenitis suppurativa, traumatic ulcer, vulvar lymphoedema, angioedema of vulva, and vulval intraepithelial neoplasia were among the additional

Table 1: Demographics

	Number of cases
Age (years)	
18-25	10
26-35	22
36-45	29
46-55	14
56-70	7
Area	
Urban	44
Rural	38
Marital status	
Married	57
Unmarried	25
Occupation	
Housewives	39
Agriculture	13
Students	15
Self employed	11
Clerical job	3

disorders encountered. In this study 18.4% of patients had severe effect (DLQI score 11-20) on the quality of life, while 45.7% of patients had moderate effect (DLQI score 6-10) and 35.9% of patients showed mild effect (DLQI score 2-5) on the quality of life. Each category's mean DLQI score was calculated and correlated with others. When compared to other categories, inflammatory disorders had the highest mean DLQI score [Table 2]. The increased morbidity brought on by the burning and itching sensations together with the chronic nature of those lesions may be the source of the elevated DLQI in inflammatory diseases. The average dermatological life quality index significantly increased with age (P = 0.004) and marital status (P 0.005).

4. Discussion

The purpose of this study was to learn about the pattern of nonvenereal genital dermatoses in adult female patients and to assess their influence on quality of life. There were very few studies on female non-venereal genital dermatoses in the literature. In a study of 120 female patients, the prevalence of nonvenereal vaginal dermatoses was 2.2 per 1000 cases, according to Singh N et al.[6] In contrast, Basheer ahammed et al. found 6.1 per 1000 individuals to have a nonvenereal genital lesion. The patients enrolled in this study ranged in age from 18 to 70 years. The average age of participation is 38, with the majority of them falling between the ages of 20 and 45. The study by Neerja Puri et al revealed that the majority of patients ranged in age from 21 to 40 years, with a mean age of 32 years.[7] TThe majority of patients were housewives (42%), followed by students (15%), were housewives. In another study, the majority of participants were employees, followed by students.[8] This investigation found about 25 distinct dermatoses, with

Table 2: Non-venereal genital dermatoses and their dermatology life quality index scores

S.No.	Group	Diagnosis	No.of cases	Mean DLQI
1	Infections and Infestations	Tinea corporis	13	6.7
		Vulval candidiasis	11	5.2
		Scabies	5	6.4
		Furunculosis/ Folliculitis	4	5.8
		Erythrasma	3	3.9
		Herpes Zoster	1	5
2	Inflammatory disorders	Lichen sclerosis et atrophicus	6	14.7
		Lichen simplex chronicus	6	17.1
		Contact dermatitis	5	8.6
		Pemphigus vulgaris	2	12.5
		Psoriasis	1	11
		Lichen planus	1	10
		Radiation dermatitis	1	13
		Fixed drug eruption	1	6
		Bullous pemphigoid	1	9
3	Benign and normal variants	Skin tags/ Seborrhoeic keratosis	5	2.3
		Nevi	3	2.5
		Epidermoid cyst	1	3
		Bartholin cyst	1	2
4	Miscellaneous and others	Vitiligo	5	9.1
		Hidradenitis Suppurativa	2	10.5
		Angioedema of vulva	1	7
		Vulvar intraepithelial neoplasia	1	8
		Traumatic ulcer	1	5
		Vulval lymphoedema	1	4

dermatophyte infections accounting for 16.3% of the cases, followed by vulval candidiasis (14.1%) and scabies (9.8%). In their study, Karthikeyan k et al and Singh N et al discovered 25 and 19 different cases, respectively.[6,9] In their investigation, Acharya et al. identified infections as the most common problem, accounting for 40% of the cases.[10] In this study, infections and infestations were widespread, in contrast to prior studies where inflammatory disorders were the most commonly detected dermatoses.[9,11,12]

There have been very few investigations on nonvenereal vaginal dermatoses in females, and lichen sclerosus et atrophicus has been described as the most common among inflammatory illnesses in those studies, which is equivalent to this study.[7,13] Lichen simplex chronicus was found in 6.5% of individuals, but Rajalakshmi et al found anogenital pruritus in just 2.5% of cases.[14] We discovered two cases of pemphigus vulgaris and one case of bullous pemphigoid with bullous lesions, which are identical to the findings of Basheer Ahammed et al. Allergic contact dermatitis and vitiligo, were reported more frequently in this study, which was consistent with Saraswat et al.'s findings.[11,15]

The Dermatology Life Quality Index is a critical tool used in many research to assess improvements in quality of life. There have been few studies on the quality of life in both venereal and non-venereal dermatoses.[16–19] This study found that married females had a higher mean DLQI score than unmarried females, which is similar to the findings of Vinay et al.

In this study, inflammatory illnesses such as lichen simplex chronicus, lichen sclerosis et atrophicus, pemphigus vulgaris, radiation dermatitis, and psoriasis had a significant negative influence on quality of life. Disorders such as hidradenitis suppurativa, vitiligo, vulvar intraepithelial neoplasia, and angioedema had a moderate impact on quality of life. Though the prevalence of infections and infestations was higher, they were only mild to moderate effect on the quality of life. Several research have been conducted to investigate the impact of genital lesions in psoriasis and vitiligo on quality of life.[18–20] There are few studies on non-venereal genital dermatoses and their impact on quality of life. The purpose of this study was to demonstrate the influence of nonvenereal genital dermatoses on patients' quality of life using the DLQI assessment.

5. Conclusion

The dermatology life quality index can help us understand the impact of non-venereal genital dermatoses on patients' quality of life. Knowledge of DLQI combined with appropriate counseling can improve the therapeutic component as well as their quality of life.

6. Declaration of Patient Consent

Obtained appropriate patient consent

7. Source of Funding

None.

8. Conflict of Interest

None.

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