

# Non - Venereal Genital Dermatoses and Their Impact on Quality of Life

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**Abstract:** Background: Genital dermatosis could be either venereal or non-venereal. Patients are unaware about non-venereal diseases and often associate it with STI which creates a lot of anxiety in them. Objectives: Purpose of our study is to enumerate the non-venereal dermatosis and to find the impact it has on quality of life using DLQI index. Methods: Our study included patients aged 18 years and above who were diagnosed with non-venereal dermatosis. A detailed history, examination and related investigations were done to rule out STI. Quality of life was assessed in these patients using the Finlay's dermatological life quality index questionnaire. Result: A total of 120 patients (86 males and 34 females) aged 18 years and above attending our outpatient department of dermatology with genital complaints and dermatosis involving genitalia were included. Most of the patients belonged to age group of 25-45 (33.3%). In male's scrotum (56%) was most commonly involved followed by penis (44%) and both in 20%. Labia majora was commonly involved in females. In our study the mean DLQI was 10, seen mostly in patients of scrotal dermatitis 14.9, scabies 10.8, genital pruritus 9.8 and Lichen simplex of scrotum 7.8. Patients with multiple sexual partners and history with CSW had higher mean DLQI though it was not clinically significant. Conclusion: Non venereal genital dermatosis is common especially among men. They are often mistaken to be associated with sexually transmitted infections. Recognizing and addressing this will help managing these patients effectively.

**Keywords:** Non venereal dermatosis, Dermatology Life Quality Index, Scrotal Dermatitis, Genital Pruritus, Genital Psoriasis

## 1. Introduction

Dermatosis involving genitalia can be of two types venereal and non-venereal. Diseases that affect external genital and are not sexually transmitted are referred to as non-venereal dermatosis.<sup>[1]</sup>

Non Venereal Dermatitis can be classified on the basis of their pathogenesis: Inflammatory diseases (psoriasis, eczema, pemphigus lichen planus), infections and infestations (fungal infection, scabies), benign tumors (scrotal calcinosis, mucoid cyst ,median raphe cyst, angiokeratoma of fordyce), premalignant and malignant lesions (erythroplasia of Queyrat, bowen disease, carcinoma penis and scrotum).<sup>[2]</sup>

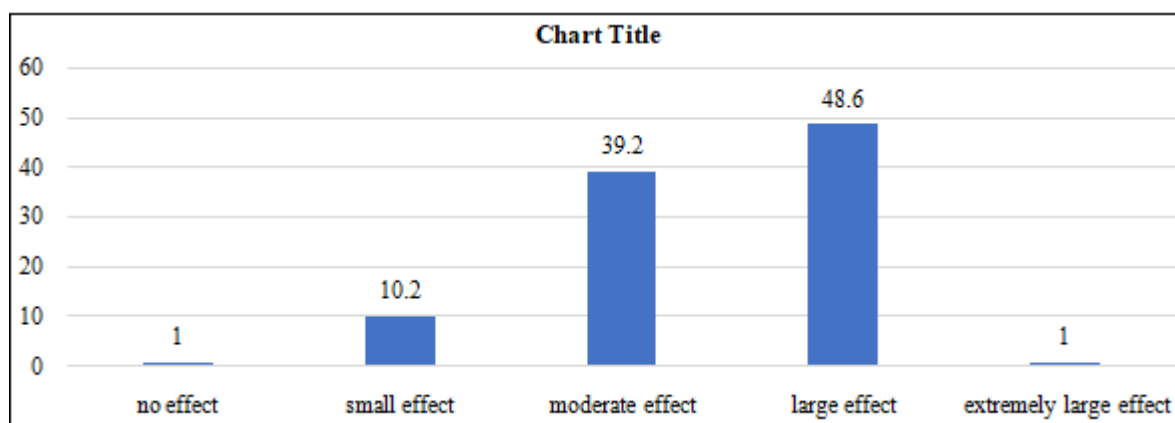
Non-Venereal disorders can create a lot of anxiety and guilt to the patient, specially if they are noticed after sexual intercourse.<sup>[3]</sup> Finding the root cause can save the patient from lot of anguish. Hence determining the Dermatology

Life Quality Index is important so that these patients can be counselled and treated accordingly.<sup>[4]</sup>

## 2. Material and Method

A total of 120 patients (86 males and 34 females) aged 18 years and above attending our outpatient department of dermatology with genital complaints and dermatosis involving genitalia were included in the study. Detailed history including onset and progression of the disease, medical history was taken. Patients with history of sexual contact were excluded. Relevant investigations like Gram stain, KOH, VDRL, HIV were done wherever required.

Dermatology life quality index was assessed in all patients using Finlay dermatology life quality index questionnaire as shown in [Figure 1](#)



**Statistics**

We used SPSS version 22 for statistical analysis.  $P < 0.05$  was considered statistically significant.

**3. Results**

Out of 120 patients in our study, 86 (71.7%) were male and 34 (28.3%) were female. Most of the patients belonged to age group of 25-45 (33.3%) followed by 45-65 (30%). 93(77.5%) were married and 27(22.5%) were unmarried. Most of the study population was labourer by occupation 39(32.5%). History of multiple partners was positive in 47(39.1%). Pre/extramarital sexual history was found in 55 (45.8%) patients. Among 120 patients, sexual history with known partner and CSW was 101(84.2%)and 19(15.8%)respectively. In males scrotum (56%) was most commonly involved followed by penis (44%) and both in 20%. Labia majora was commonly involved in females. Most common non venereal dermatosis in our study found is Genital pruritus (22) followed by LSc(21) and scrotal dermatitis (14). Mean DLQI was 10 seen mostly in patients using Finlay’s Questionnaire.

Vitiligo	1	5	6	3.9
Angiokeratoma of Fordyce	4	0	4	3.8
FDE	4	0	4	1.0
Paraphimosis	1	0	1	5.5
Genital Pruritus	10	12	22	9.8
Scabies	9	0	9	10.8
Pearly Penile Papule	3	0	3	.3
SCC	1	0	1	.5
Lymphangiectasia	1	0	1	.5

**Table 1: Patient Demographics**

<b>Gender</b>	Parameters
Male	86 (71.7%)
Female	34 (28.3%)
<b>Age (years)</b>	
18-25	25(20.8%)
25-45	40 (33.3%)
45-65	36(30%)
>65	19(15.8%)
<b>Marital status</b>	
Married	93 (77.5%)
Unmarried	27(22.5%)
<b>Occupation</b>	
Shopkeeper	28(23.3%)
Labourer	39(32.5%)
Student	14(11.7%)
Housewife	22(18.3%)
Others	17(14.2%)
<b>Multiple partners</b>	
Yes	47(39.1%)
No	73(60.8%)
<b>Pre/extramarital sexual contact history</b>	
Yes	55(45.8%)
No	65(54.2%)
<b>Person known/CSW</b>	
Known	101(84.2%)
CSW	19(15.8%)

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

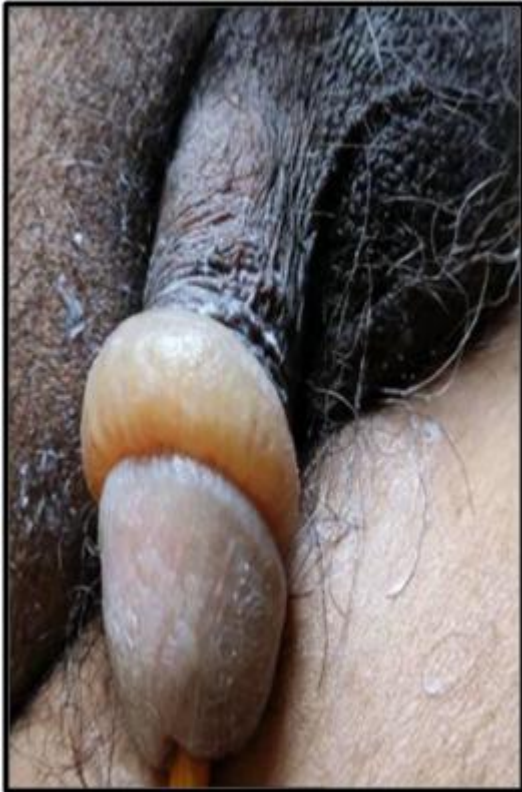
Diagnosis	Cases (Men)	Cases (Women)	Total Cases	Mean DLQI
Scrotal Dermatitis	14	0	14	14.9
Irritant contact dermatitis	6	4	10	5.2
LSEA	3	2	5	2.0
LSC	11	10	21	7.8
	4	0	4	1.3
Pemphigus	1	0	1	1.1
Psoriasis	1	0	1	.8
Lichen planus	5	1	6	2.0
Steatocystoma Multiplex	7	0	7	2.5



**Irritant Contact Dermatitis**



**Lymphangiectasia**



**Paraphimosis**



**Norwegian Scabies**



**Scrotal Dermatitis**



**Nodular Scabies**



**Pemphigus**



**Zoon's Balanitis**



**LSEA**



**Psoriasis**



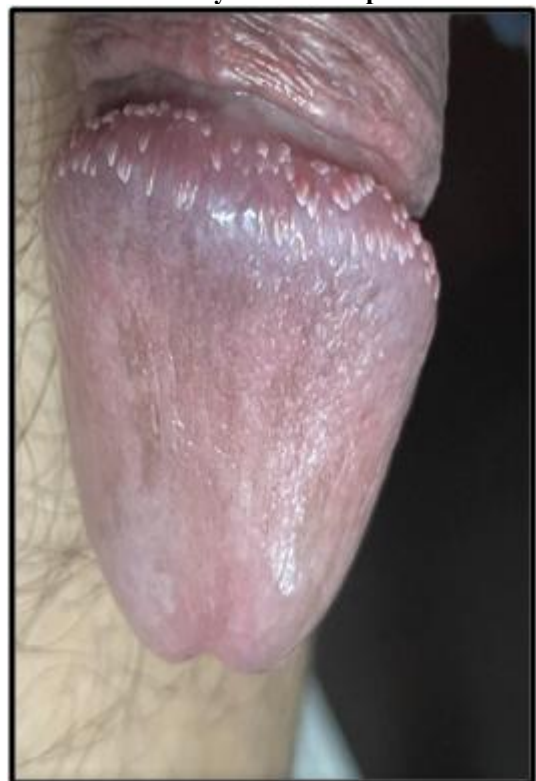
**SCC Of Penis**



**Steatocystoma Multiplex**



**Angiokeratoma Of Fordyce**



**Pearly Penile Papule**

#### **4. Discussion**

Venereal dermatosis is of utmost importance as they cause a lot of anguish amongst the patients. Also, these patients mostly visit urologists or physicians which lack the expertise to treat these dermatological conditions.

Neeraj Puri et al conducted a study on 50 patients of which the most common non-venereal dermatoses in males were scrotal dermatitis in 16.6% patients, vitiligo was seen in 14.3% patients, pearly penile papules fixed drug eruption and scabies were seen in 10% patients each. The common presenting feature were white discoloration, swelling, pain, mass, dyspareunia, redness, skin exfoliation, burning sensation, itchy genitalia, raised lesions over skin, oozing, constipation, ulceration, erosion and thickening of skin. The most common site of involvement in females was labia majora 87% followed by labia minora in 48% cases and mons pubis in 10% cases. In males, penis (52%) was the common site of involvement, followed by prepuce (32%) and scrotum in 20% cases.<sup>[5]</sup>

PK Saraswat et al in a study of 100 male patients of non venereal dermatosis found that most of the affected patients suffered from vitiligo (18%), pearly penile papule (16%), fixed drug eruptions (12%), scabies (10%), scrotal dermatitis (9%) and lichen planus (9%). The age ranged from 18 years to 65 years with majority in the age group of 21-30 years (40%).<sup>[6]</sup>

N Vinay et al conducted a study of 293 patients and observed 25 different dermatoses pertaining to genitalia. Commonly scrotal dermatitis was observed in total of 46(15.7%) patients followed by lichen simplex chronicus 37(12.6%) and vitiligo 31 (10.6%). Impact of DLQI was seen in 133(45.4%) with large impact on the quality of life and 111(37.9%) had moderate effect. 144(50%) individuals affected were of age group 31-50 years.<sup>[7]</sup>

The Dermatology Life Quality Index (DLQI) is a dermatology-specific QOL measure that has been well validated. Lot of skin diseases have been known to have a detrimental effect on the quality of life of the patients.<sup>[8]</sup> Several studies state that even the asymptomatic or localized lesions had huge psychological impact and interfered with the wellbeing of the affected patients as well as their family members.<sup>[9]</sup> The genital problems often instil a fear among the patients toward the sexual intercourse or the fear that it can spread to their partners. Very few studies have been there in the literature which states the effect of non-venereal dermatosis on the quality of life amongst affected population.<sup>[10]</sup> In our study the mean DLQI was 10 seen mostly in patients of scrotal dermatitis 14.9, scabies 10.8, genital pruritus 9.8 and Lichen simplex of scrotum 7.8. Patients with multiple sexual partners and history with CSW had higher mean DLQI though it was not clinically significant. Chronic dermatosis are difficult to treat or can have repeated recurrence like lichen simplex of scrotum, which was one of the contributing factors of impairing the life quality.

## 5. Conclusion

Non venereal dermatosis is very common especially in males. Lack of awareness among the general population, that these are not a part of STI infections instils a lot of fear and hampers their quality of life. So, we as Dermatologist, by providing proper counselling and information can improve their wellbeing.

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