VOLUME - 14, ISSUE - 08, AUGUST - 2025 • PRINT ISSN No. 2277 - 8160 • DOI : 10.36106/gjra

Original Research Paper

Dermatology

"A STUDY OF PATTERN OF NON-VENEREAL GENITAL DERMATOSES IN PATIENTS ATTENDING SKIN OPD AT A TERTIARY CARE CENTER"

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ABSTRACT **Background:** Non-venereal dermatoses tend to create confusion from venereal dermatoses. This is responsible for anxiety and considerable concern in the patients. Now the incidence of venereal diseases has declined so sharply that the non-venereal diseases affecting genitalia have assumed greater importance in dermatologic practice. **Aim:** To determine the clinical pattern and relative frequency of non-venereal dermatoses of external genitalia in sexually active patients. **Methodology:** This study was conducted in a tertiary care centre. Sexually active patients who presented with genital lesions, after excluding venereal diseases were recruited. A detailed history was taken and dermatological examination done for all the cases. **Results:** A total of 201 patients with non-venereal genital dermatoses were included in our study. Males 135(67.2%) outnumbered females 66(32.8%). The majority of the patients 105 (52.2%) were from the age group of 15 to 30 years. In males the most common non venereal dermatosis was vitiligo 25(18.5%) followed by scabies 17(12.6%) while in females it was vitiligo 18 (27.3%) followed by lichen sclerosis 12 (18.2%). **Conclusion:** This study emphasizes that non-venereal genital dermatoses are not uncommon and the need for health education and counselling regarding the same is essential.

KEYWORDS : Nonvenereal dermatoses, Nonvenereal genital dermatoses, Non sexually transmitted diseases.

INTRODUCTION

Dermatoses involving genital areas are not always sexually transmitted. They can be divided into two groups: Venereal and non-venereal dermatoses. The diseases, which are not sexually transmitted are referred to as non-venereal dermatoses.[1] Non-venereal genital dermatoses include a wide array of diseases with varied etiology. They can affect genitalia alone or may also affect other body parts.[2]

These non-venereal disorders are a cause of considerable concern to patients, causing mental distress and a feeling of guilt in them[3]. Non-venereal dermatoses often pose a diagnostic dilemma to the treating physician, who must effectively manage the condition and allay the associated anxiety. Determining any causal agent or aggravating factor can save the patient from the agony of persistent discomfort and restricted social life, thereby considerably improving the Dermatology-specific quality of life[4]. A comprehensive understanding of various presentations, their cause and appropriate management options is therefore essential. This study aims to determine the clinical pattern and relative frequency of non-venereal genital dermatoses in patients.

Now that the incidence of venereal diseases has declined so sharply[5], the non-venereal diseases affecting the genitalia are assuming an increasingly greater importance in dermatologic practice. Non-venereal dermatoses tend to be confused with venereal diseases, which may be responsible for mental distress.[6] We undertook this study to highlight the importance of diagnosing common non-venereal genital dermatoses and thereby helping to avoid the general misconception that all genital lesions are sexually transmitted.

Methodology

This study was conducted at HIMS, Hassan Hospital, a tertiary care center among the patients attending the Dermatology OPD from January to December 2021. A total of 201 consecutive (male and female) patients, satisfying the inclusion criteria constituted the study group.

Inclusion Criteria:

1. Age group 15-65 years.
2. Patients complaining of genital lesions.

Exclusion Criteria:

1. Patients with genital lesions associated with sexually transmitted diseases.
2. Patients with positive HIV and VDRL reports.
3. fungal balanitis and vulvovaginitis.

Ethical committee approval was obtained and a written informed consent was taken from all the cases. All patients who presented with genital lesions were screened for nonvenereal dermatoses. A detailed history including demographic data, chief complaints related to skin, onset and duration of disease and associated medical or skin disorders was elicited and recorded. History of sexual exposure was also recorded. Patients having venereal diseases were excluded from the study. Certain specific history like history of trauma, drug intake, topical irritant application and history of recurrence was elicited in relevant cases.

Thorough examination of genital lesion was done with special relevance to the morphology, number, tenderness, regional lymph node involvement etc. A detailed physical examination was done to see any associated lesions elsewhere in the body. Laboratory investigations such as HIV and VDRL were done for all cases for proper exclusion of venereal disorders. Gram stain, KOH and histopathological study were carried out as and when required.The nonvenereal dermatoses seen in the study were classified based on etiopathology as below:

1. **Normal:** Pearly penile papule, Fordyce spots
2. **Benign:** Angiokeratoma Fordyce, Skin tag, Steatocystoma, Sebaceous cyst
3. **Pigmentary:** vitiligo

4. **Inflammatory:** Lichen planus, Psoriasis, Balanitis Xerotica Obliterance, FDE, ICD
5. **Infestations And Infections:** Scabies, Dermatophytosis, Furuncle
6. **Miscellaneous:** Paraphimosis, Traumatic injury
7. **Malignant:** Squamous cell carcinoma, Melanoma

RESULTS

A total of 201 patients with non-venereal genital dermatoses were included in our study. The mean age of the male patients was 30.2 years and female patients was 36.2 years. Majority of the patients 105 (52.2%) were from the age group of 15 to 30 years. About 44(21.9%) of them belonged to the age group 31 to 40 years and 41(20.4%) patients were of 41 to 50 years. Least patients, 11(5.5%) belonged to the age group of 51 to 65 years.

This study showed that a higher proportion of them110(54.7%) were married and 91(45.3%) were unmarried. Males 135(67.2%) outnumbered females 66(32.8%). Majority of the patients were students 51(25.4%), Farmers 45(22.4%) and Housewives 29(14.4%) by occupation. A total of 28 different types of non-venereal skin diseases were identified in our study and the duration of symptoms among the patients ranged from one to 36 months with the mean of four months. Overall, the most common disease among the patients was vitiligo 43(21.3%), followed by lichen planus 18(8.9%) and scabies 17(8.4%). According to etiopathological classification of diseases, the most common disorders were Inflammatory 92(45.7%), followed by pigmentary 43(21.3%) and infestation and infections 26(12.9%). The least common disorders were malignant lesions, seen in only 2(0.9%) patients. (Figure 1)

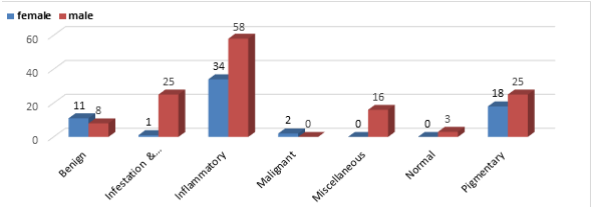

Figure 1: Etio-pathological classification of diseases

Most common disease in age group 15- 30 years is vitiligo 34(32.4%) followed by scabies 15(14.3%). In 31- 40 years, lichen planus 9(20.5%) followed by vitiligo 7(15.9%). In 41-50 years, lichen sclerosis 11(26.8%) and lichen planus 9(22%). In 51-65 years, Balanitis Xerotica Obliterance 3(27.3%) and Lichen Simplex Chronicus 2(18.2%). (Table 1)

Table 1: Age Wise Distribution Of Non-venereal Diseases

DISEASES	15-30 Years	31-40 Years	41-50 Years	51-65 Years
Total	105 (52.2%)	44 (21.9%)	41 (20.4%)	11 (5.5%)
Angiokeratoma	01(1.0%)	04(9.1%)	01(2.4%)	00(0.0%)
Bartholine Cyst	02(1.9%)	01(2.3%)	00(0.0%)	00(0.0%)
Balanitis Xerotica Obliterance	00(0.0%)	00(0.0%)	01(2.4%)	03(27%)
Dermatophyte	04(3.8%)	00(0.0%)	00(0.0%)	00(0.0%)
Fixed Drug Eruption	01(1.0%)	03(6.8%)	00(0.0%)	00(0.0%)
Fordyce Spots	01(1.0%)	00(0.0%)	00(0.0%)	00(0.0%)
Fourniers Gangrene	00(0.0%)	00(0.0%)	00(0.0%)	01(9.1%)
Furuncle	04(3.8%)	01(2.3%)	00(0.0%)	00(0.0%)
Irritant Contact Dermatitis	08(7.6%)	5(11.4%)	00(0.0%)	00(0.0%)
Lichen Nitidus	05(4.8%)	00(0.0%)	00(0.0%)	00(0.0%)
Lichen Sclerosis	00(0.0%)	00(0.0%)	11(26.8%)	01(9.1%)
Lichen Planus	00(0.0%)	9(20.5%)	09(22%)	00(0.0%)
Lichen Simplex Chronicus	00(0.0%)	00(0.0%)	01(2.4%)	2(18.2%)
Lymphangioma Curcumscriptum	00(0.0%)	00(0.0%)	01(2.4%)	00(0.0%)
Melanocytic Nevi	01(1.0%)	00(0.0%)	00(0.0%)	00(0.0%)
Paraphimosis	03(2.9%)	03(6.8%)	00(0.0%)	00(0.0%)
Pearly Penile Papule	02(1.9%)	00(0.0%)	00(0.0%)	00(0.0%)
Psoriasis	00(0.0%)	03(6.8%)	01(2.4%)	00(0.0%)
Immunobullous Disorders	02(1.9%)	6(13.6%)	03(7.3%)	00(0.0%)
Scabies	15(14%)	01(2.3%)	00(0.0%)	01(9.1%)
Sjs/Ten	08(7.6%)	01(2.3%)	00(0.0%)	01(9.1%)
Seborrheic Keratoses	00(0.0%)	00(0.0%)	02(4.9%)	00(0.0%)
Skin Tag	00(0.0%)	00(0.0%)	03(7.3%)	00(0.0%)
Squamous Cell Carcinoma	00(0.0%)	00(0.0%)	02(4.9%)	00(0.0%)
Steatocystoma	04(3.8%)	00(0.0%)	00(0.0%)	00(0.0%)
Vitiligo	34(32.4 %)	07(16%)	01(2.4%)	01(9.1%)
Zoons Balanitis	00(0.0%)	00(0.0%)	05(12%)	01(9.1%)
Traumatic	10(9.5%)	00(0.0%)	00(0.0%)	00(0.0%)

In males the most common non venereal dermatosis reported was vitiligo 25(18.5%), followed by scabies 17(12.6%), lichen planus and Irritant Contact Dermatitis 11(8.1%) each. While in females it was vitiligo 18 (27.3%), followed by lichen sclerosis 12 (18.2%) and Bullous disorders 8(12.1%). (Table 2)

Table 2: Gender wise distribution of Non-venereal Genital Dermatoses

DISEASE	FEMALE	MALE	TOTAL
Total	66(32.8%)	135(67.2%)	201(100%)
Angiokeratoma	04(6.1%)	02(1.5%)	06(2.9%)
Bartholine Cyst	03(4.5%)	00(0.0%)	03(1.4%)
Balanitis Xerotica Obliterance	00(0.0%)	04(3.0%)	04(1.9%)
Dermatophyte	00(0.0%)	04(3.0%)	04(1.9%)
Fixed Drug Eruption	00(0.0%)	04(3.0%)	04(1.9%)
Fordyce Spots	00(0.0%)	01(0.7%)	01(0.4%)
Fourniers Gangrene	00(0.0%)	01(0.7%)	01(0.4%)
Furuncle	01(1.5%)	04(3.0%)	05(2.4%)
Irritant Contact Dermatitis	02(3.0%)	11(8.1%)	13(6.4%)
Lichen Nitidus	00(0.0%)	05(3.7%)	05(2.4%)
Lichen Sclerosis	12(18.2)	00(0.0%)	12(5.9%)
Lichen Planus	07(10.6%)	11(8.1%)	18(8.9%)
Lichen Simplex Chronicus	01(1.5%)	02(1.5%)	03(1.4%)
Lymphangioma Curcumscriptum	01(1.5%)	00(0.0%)	01(0.4%)
Melanocytic Nevi	01(1.5%)	00(0.0%)	01(0.4%)
Paraphimosis	00(0.0%)	06(4.4%)	06(2.9%)
Pearly Penile Papule	00(0.0%)	02(1.5%)	02(0.9%)
Psoriasis	00(0.0%)	04(3.0%)	04(1.9%)
Immunobullous Disorders	08(12.1%)	03(2.2%)	11(5.4%)
Scabies	00(0.0%)	17(12.6%)	17(8.4%)
Sjs/Ten	03(4.5%)	07(5.2%)	10(4.9%)
Sebor	00(0.0%)	02(1.5%)	02(0.9%)
Skin Tag	03(4.5%)	00(0.0%)	03(1.4%)
Squamous Cell Carcinoma	02(3.0%)	00(0.0%)	02(0.9%)
Steatocystoma	00(0.0%)	04(3.0%)	04(1.9%)
Traumatic	00(0.0%)	10(7.4%)	10(4.9%)
Vitiligo	18(27.3)	25(18.5%)	43(21.3%)
Zoons Balanitis	00(0.0%)	06(4.4%)	06(2.9%)

DISCUSSION

In our study, majority of the patients were from age group 15 to 30 years (52.2%) and males (67.2%) outnumbered females (32.8%).

Our study noted a total of 28 types of Non-venereal dermatoses which was higher than the studies conducted by Saraswat PK et al[6] and Rao et al[7], who noted 16 and 15 different types of Non-venereal dermatoses. Studies by

Karthikeyan et al[8] (25) and Kumar PS[9] (28) showed similar number of types as our study.

Male Dermatoses

In our study, the most common non venereal dermatosis reported in males was vitiligo (18.5%), followed by scabies (12.6%), lichen planus (8.1%) and ICD (8.1%). A similar study conducted by Hogade AS et al[10] that assessed the pattern of non venereal genital lesions among fifty male patients showed that vitiligo (20%) was the most common dermatoses followed by fixed drug eruptions (16%) and scabies (14%). Another study by Saraswat PK et al[6] also reported vitiligo as the most common non venereal dermatoses seen in 18% of their study population, followed by pearly penile papule seen in 16%. Other dermatoses seen in their study were fixed drug eruptions (12%), scabies (10%), scrotal dermatitis (9%) and lichen planus (9%).

Our study reported 12.6% of genital scabies and 3% of Steatocystoma multiplex of scrotum (all of which were asymptomatic) among the male patients. Similar findings were also observed by Lal YA et al[11] (13.4% and 1.56% respectively)

Studies by Lal YA et al[11] and Mamatha P et al[12] reported Fordyce spots in 1.25% and 1.61% of cases respectively which corresponded with our finding of 0.7% cases.

Female Dermatoses

In our study, the most common nonvenereal genital dermatoses detected in females was vitiligo (27.3%), followed by lichen sclerosis (18.2%) and Bullous disorders (12.1%). Similar pattern of non-venereal dermatoses was also noted by a study conducted by Singh N et al[13], where lichen sclerosis (21.7%) followed by vitiligo (15.8%) and lichen simplex chronicus (13.3%) were seen commonly. Another study by Prasad AM et al[14], observed that the most common dermatoses were vitiligo (15.4%), candidal intertrigo (13.4%), lichen sclerosus (11.3%), lichen simplex chronicus (10.3%) and irritant contact dermatitis (10.3%).

Etio-pathological Classification

Among all the patients in our study we noted that Inflammatory diseases were seen in majority (45.7%) followed by pigmentary disorders (21.3%) and infeststion and infections (12.9%). A similar study conducted by Kumar A et al[15], reported that infections and infestations (41%) were most common, followed by miscellaneous lesions (21%) and inflammatory dermatoses (19 %) in their study population. They also reported normal and benign variants in 18% and premalignant and malignant disorders in 1% of their study subjects. Another study by Shinde G et al[16], observed that the inflammatory disorders (58%) followed by infestation and infection were more common among their cases. Benign tumors and cysts (11%), pigmentary disorders (7%) were witnessed in about 10% of their patients.

CONCLUSION

The study reflects various causes of non-venereal dermatoses of external genitalia commonly encountered among both male and female patients in the dermatological OPD. Our study also emphasizes that non-venereal genital dermatoses are not uncommon and patient awareness about these lesions is essential. Hence health education and counseling become an integral part of treating non venereal genital dermatoses.

Declarations:
Funding: No source
Conflict Of Interest: None
Ethical committee approval obtained

REFERENCES

1. Khaitan BK. Non-venereal diseases of genitalia. In: Sharma VK, editor. Sexually Transmitted Diseases and AIDS. 1st ed. New Delhi: Viva Books Pvt Ltd; 2003. pp. 413–21.
2. Fitzpatrick JA, Gentry RM. Non-venereal diseases of male external genitalia. In: Moschella SL, Hurley HJ, editors. Dermatology. 3rd ed. I. Philadelphia: WB Saunders Company; 1992. pp. 1008–15.
3. Bystritsky, Alexander et al. "Current diagnosis and treatment of anxiety disorders." P & T: a peer reviewed journal for formulary management vol. 38,1 (2013): 30-57.
4. Bhosle, Monali J et al. "Quality of life in patients with psoriasis." Health and quality of life outcomes. vol. 4(35). 6 Jun. 2006.
5. Workowski, Kimberly A et al. "Sexually transmitted diseases treatment guidelines, 2015." Morbidity and mortality weekly report. Recommendations and reports vol. 64, RR-03 (2015): 1-137.
6. Saraswat PK, Garg A, Mishra D, Garg S. A study of pattern of nonvenereal genital dermatoses of male attending skin OPD at a tertiary care center. Indian J Sex Transm Dis AIDS. 2014; 35(2):129 –34.
7. Rao MKP, Prasad PG. A study of pattern of various non venereal genital dermatomes in male patients attending to skin & STD OPD, RIMS general hospital, IOSR Journal of Dental and Medical Sciences (IOSR-JDMS) 2018;17:1- 9.
8. Karthikeyan KE, Jaishankar TJ, Thappa DM. Nonvenereal dermatoses of male genital region-prevalence and pattern in a referral centre in South India. Indian J Dermatol 2001;46:18- 22.
9. Kumar P S, Ramatulasi S, Darla S, Acharya A. A clinical study on non venereal genital dermatoses in adult males at a tertiary care center. IP Indian J Clin Exp Dermatol 2019;5(2):98-102.
10. Hogade AS, Mishra S. A study of pattern of nonvenereal genital dermatoses of male attending skin OPD of tertiary centre in Kalaburagi. International Journal of Research. 2017 Jul;3(3):407.
11. Lal YA, Kumari A. Clinico-Epidemiological Study of Non-Venereal Male Genital Dermatoses at a Tertiary Care Center in North India. International Journal of Health and Clinical Research. 2021 Apr 29;4(8):124-8.
12. Mamtha P et al. Incidence of non-venereal lesions of the male genitalia: a study of 248 male cases at a tertiary care centre. Int J Dermatol.2020;6(2):187-192.
13. Singh N, Thappa DM, Jaisankar TJ, Habeebullah S. Pattern of non-venereal dermatoses of female external genitalia in South India. Dermatology online journal. 2008;14(1).
14. Prasad AM, Babu AR, Shivakumar V. A Clinical Study of Non-venereal Genital Dermatoses in Women in a Rural Setup. International Journal of Medicine and Public Health. 2020;10(1).
15. Kumar A, Pun J, Neupane D, Subedi S, Mohammad A, Sathian B. Non-Veneral Genital Dermatoses: A Study from Western Nepal. Nepal Journal of Dermatology, Venereology & Leprology. 2020 Oct 8;18(1):18-23.
16. Shinde G, Shinde G, Popere S. A Clinical Study of Non Venereal Genital Dermatoses of Adult in a Tertiary Care Center. Int J Biomed Adv Res. 2017 Apr 28;8(4):168–73.