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A Study Of Pattern Of Various No venereal Genital Dermatomes In Male Patients Attending To Skin & Std Pod, Rims General Hospital, Srikakulam, Andhrapradesh.

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Abstract:

Background: *Nonvenereal dermatoses tend to create confusion from venereal dermatoses. This may be responsible for considerable concern to the patient as well as may cause diagnostic dilemma to the physicians. They may be responsible for mental distress and guilt feelings in patients. Nonvenereal dermatoses may not be restricted to genitalia alone; it may affect skin and mucous membrane also. Most of the patients with genital lesions had apprehension of suffering from some venereal disorders. Objective & Aim: We conducted this study to find the pattern of non-venereal dermatoses of male external genitalia and to correlate nonvenereal dermatoses with various clinical parameters. The aim was to determine clinical and epidemiological pattern of nonvenereal dermatoses of male external genitalia. The present study was undertaken to know about non-venereal genital dermatoses in detail as this topic is neglected as compared to venereal genital dermatoses Materials and Methods : The study included a series of 120 male patients with non-venereal dermatoses of external genitalia who were screened amongst patients visiting SKIN & STD OPD of RIMS General Hospital,Srikakulam.The demographic characteristics and clinical findings were recorded. Cases having venereal diseases were excluded from the study. Results: The study included 120 male patients with nonvenereal genital lesions. A total of 15 different types of nonvenereal dermatoses were noted in the study. Most of the patients (74 percent) belonged to rural area. The most common disorder was pearly penile papules present in 26 cases, followed by genital scabies , which accounted for 22 cases. The other disorders encountered included candidal balanoposthitis in 18 cases, fixed drug eruption (FDE) in 11 cases, vitiligo in 14 cases, sebaceous cysts of scrotum in 8 cases, scrotal dermatitis in 4 cases and lichen nitidus in 5 cases . Other dermatoses included zoon's balanitis, lymphangiectasia of the scrotum, angiokeratoma of Fordyce, invasive squamous cell carcinoma, psoriasis, lichen planus, irritant contact dermatitis due to condomes etc.The age ranged from 18 years to 65 years . The majority of patients (79%) were in age group of 21-50 years and which constitutes about 3/4th bulk of total patients. Summary & Conclusion : The study has been quite useful in understanding the clinical and aetiological characteristics of various types of non-venereal dermatoses in males in this backward zone of AndhraPradesh and highlights the importance of diagnosing common non-venereal dermatoses. It also helps in avoiding the general misconception that all genital lesions are sexually*

transmitted. So, physician and other health professonial related to these conditions should have proper knowledge, so that they can diagnose the disease promptly and manage properly. KEYWORDS: Nonvenereal dermatoses, Nonvenereal genital dermatoses, Nonsexually transmitted diseases.

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I. Introduction

Venereology is a branch of medicine that is concerned with the study and treatment of sexually transmitted diseases. The specialty is usually combined with dermatology. Dermatoses involving genital areas are not always sexually transmitted. They can be divided into two groups: Venereal and nonvenereal dermatoses. The diseases, which are not sexually transmitted, are referred as nonvenereal dermatoses. Nonvenereal genital dermatoses, include a wide array of diseases with varied etiology.[1] They can either effect genitalia alone or may affect other body parts also.[1] However, penile dermatoses are not strictly classified. They include infective (bacterial, viral, fungal, parasitic), inflammatory (psoriasis, lichen planes , lichen scleroses, seborrhea dermatitis), autoimmune (vitiligo), multisystem diseases (Behcet's Syndrome, Reiter's Syndrome, Crohn's disease), exogenous (contact dermatitis, corticosteroid abuse, fixed drug eruption, Steven Johnson Syndrome) and benign and malignant neoplasms and others. As these groups include various types of disorders, the identification of diseases is quite challenging. Sometimes this leads to confusion between venereal and nonvenereal dermatoses which cause mental distress and guilt feelings to the patients.. Patient usually attends the physician only if there is a complaint. A comprehensive understanding of various presentations, their cause and appropriate management options is therefore essential. These nonvenereal disorders are the cause of considerable concern to patients causing mental distress and guilt feeling in them. Nonvenereal dermatoses are quiet often a diagnostic dilemma to the treating physician, who has to effectively manage the condition and also allay the associated anxiety. We undertook this study to find out the pattern of nonvenereal dermatoses presenting with genital lesions and to correlate its various parameters. External genitalia are common site for rashes, itching and minor infection. This area is always warm, moist and occluded and it is frequently exposed to irritating substances like urine, faeces, seminal fluid and vaginal secretion. In addition, concerns about hygiene and sexually transmitted diseases prompt some people to use overly vigorous cleaning regimens, deodorants and specialized hygiene products. Suddenly the dermatoses become complicated by both the local environment and psychological factors. The lesions that occur at the external genitalia have varied etiology and it causes anxiety in patients and therefore they should be explained the true nature of the disease and this requires a knowledge about nonvenereal genital dermatoses [3]. Hence the identification of diseases is quite challenging. There is a wide variation in the pattern of penile dermatoses reported from different parts of the world, even in same country due to factors such as genetic constitution, hygiene standards, climate, customs, sexual behavior, religion, socioeconomic condition, occupations, and quality and quantity of medical care. Although the literature is saturated with the pattern of overall skin diseases, no formal study has been done on the overall occurrence of penile dermatoses, hence we undertook this study to find out the pattern of penile dermatoses at a tertiary care centre like RIMS MEDICAL COLLEGE ,Srikakulam.

The majority of patients were workers (daily labour , night guard, industrial labour, construction workers etc) 29 patients , followed by students (25 patients), driver of all types of vehicals (bus driver, truck driver, rickshaw puller, taxi driver etc) 24 patients, Service holder (official staff of government & non-government (18 patients), businessmen of all types 16 patients, and others (8 patients). Some patients also had other sites of body involvement particularly patients with psoriasis, lichen planus, lichen nitidus, scabies, drug reaction and vitiligo. Diabetes mellitus was present in two patients of fungal disease. Uncircumbscribed patients were associated with candidiasis, dermatitis and phimosis.

II. Materials and Methods

A total of consecutive 100 male patients with genital lesions of nonvenereal origin, attending the SKIN & STD OPD at RIMS General Hospital Srikakulam constituted the study group. All male patients >18 years of age who presented with genital complaints were screened for nonvenereal dermatoses. Informed consent was obtained. 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. Cases having any venereal diseases were excluded from the study. The external genitalia were examined and findings were noted. A detailed physical examination was made to see any associated lesions elsewhere in the body. Investigations such as Gram stain and KOH mount were done as and when required to establish the diagnosis. Biopsy and histopathological examination of the specimen was done when required to confirm the diagnosis. VDRL and Elisa test for HIV were done in all the patients to exclude any sexually transmitted disease. A proforma was prepared to record the relevant details of patient, examination, investigations and diagnosis. Because venereal and non-venereal dermatoses tend to be confused, the occurrence of these dermatoses may be associated with mental distress and guilt feelings in affected patients. It is also important to distinguish between venereal and non venereal dermatoses, as venereal diseases are of primary concern to the patient

III. Result

A total of 120 male patients with nonvenereal dermatoses of external genitalia were included in the study. The age of the patients ranged from 18 years to 65 years, with the mean age of 32.2 years. Most patients belong to the age group of 21-30 years (40%), followed by the age group of 31-40 years (20%). Seventy-four patients (74%) were from the rural area while twenty-six patients (26%) belong to urban area. Fifty-two (52%) patients were married and the remaining forty-eight (48%) patients were unmarried. Penis was involved in 60% and scrotum in 30% while both scrotum and penis were affected in 10% cases.

A total of fifteen (15) types of nonvenereal dermatoses were noted in this study [Table 1]. The most common disorder was pearly penile papules [Figure 1] present in 26 cases, followed by genital scabies [Figure 2], which accounted for 22 cases. The other disorders encountered included Candidal balanoposthitis [Figure 3] in 18, vitiligo [Figure 4] in 14, fixed drug eruption (FDE)[Figure 5] in 11,sebaceous cysts of scrotum[Figure 6] in 8 cases, lichen nitidus [Figure 7] in 5 cases and scrotal dermatitis [Figure 8] in 4 cases, Zoon's balanitis or plasma cell balanitis [Figure 9] in 2cases, Lymphangiectasia of scrotum [Figure 10] was seen in 2 cases, both of them were due to filariasis. Angiokeratoma of Fordyce [Figure 11] in 4 cases, squamous cell carcinoma [Figure 12] in 1 case, psoriasis[Figure 13] in 1 case, lichen planus [Figure 14] in 1 case and 1 case of Irritant contact

dermatitis due to condom were also observed in this study. The majority of patients were workers (daily labour, night guard, industrial labour, construction workers etc) 29 patients , followed by students (25 patients), driver of all types of vehicals (bus driver, truck driver, rickshaw puller, taxi driver etc) 24 patients, Service holder (official staff of government & non-government (18 patients), businessmen of all types 16 patients, and others (8 patients). Some patients also had other sites of body involvement particularly patients with psoriasis, lichen planus, lichen nitidus, scabies, drug reaction and vitiligo. Diabetes mellitus was present in two patients of candidal balanoposthitis. Uncircumbscribed patients were associated with candidiasis, dermatitis and phimosis. The common presenting features were itchy genitalia, depigmentation. Other complaints were pain, burning sensation, redness, exfoliation of the skin, raised lesions over the skin, oozing, ulceration, erosions and thickening of the skin. Some patients had more than one complaint.

TABLE 1 : Marital Status:

Married	57%
Unmarried	43%

TABLE 2: Involvement of genitalia:

Penis	60%
Scrotum	30%
Both penis and scrotum	10%

TABLE 3: %age of cases according to AREA –WISE

RURAL	89cases (74%)
URBAN	31cases (26%)

TABLE 4 : %age of cases according to AGE-GROUP

18-20	9 cases (8%)
21-30	48 cases (40%)
31-40	30 cases (25%)
41-50	17 cases (14%)
51-60	12 cases (10%)
61-65	4 cases (3%)

TABLE:5

GENITIAL DERMATOSES	NUMBER (n=120)&%age
1.Pearly Penile Papules	26(21.66%)
2.Genital scabies	22(18.33%)
3.Candidal balanoposthitis	18(15%)
4.Genital vitiligo	14(11.66%)
5.Fixed drug eruption	11(9.16%)
6.Sebaceous cysts of scrotum	8(6.66%)
7.Lichen nitidus	5(4.16%)
8.Scrotal dermatitis	4(3.33%)
9.Zoon's balanitis	2(1.66%)
10.Lymphangiectasia of the scrotum	2(1.66%)
11.Angiokeratoma of Fordyce	4(3.33%)
12.Squamous cell carcinoma	1(0.83%)
13.Penile psoriasis	1(0.83%)
14.Lichen planus	1(0.83%)
15.Irritant contact dermatitis due to condom	1(0.83%)

Genital dermatoses :

Figure 1: Pearly penile papules.

Figure 2: Genital Scabies.

Figure 3: Candidal balanoposthitis

Figure 4 :Genital vitiligo

Figure 5: Fixed drug eruption

Figure 6: Multiple sebaceous cysts of scrotum

Figure 7: Lichen nitidus

Figure 8: Scrotal dermatitis

Figure 9: Zoon's balanitis or plasma cell balanitis

Figure 10: Lymphangiectasia of scrotum

Figure 11: Angiokeratoma of Fordyce

Figure 12: Squamous cell carcinoma of glans penis

Figure 13: Psoriasis

Figure 14: Lichen planus.

IV. Discussion

Penile dermatoses include a spectrum of diseases with varied etiology. These diseases may cause severe psychological trauma and fear in the mind of patients. So it is necessary to diagnose and manage these non-venereal dermatoses to relieve the patient from the stigma of sexually-transmitted diseases and cancer phobia even in benign conditions There are no comprehensive studies on the pattern of penile dermatoses from a developing country like us.There is little literature about the incidence and distribution of other penile dermatological diseases. There was lack of knowledge, misconceptions in beliefs and attitude, poor personal and sexual hygiene, overcrowding in living and working environment, poor sanitary condition in living and working environment of our attending patients. Health service facilities in the working area are also poor which need to be modified to ensure early diagnosis and treatment. Modern diagnostic techniques are not widely developed and little standardization of medical arrangements. People also sometimes contact pharmacies or traditional healers, homeopathic doctors instead of health care facilities and sometimes self medications worsen the diseases. Our working place is RIMS General Hospital, which is the only tertiary care hospital in this arena. The catchmanent area of this hospital is large. Number of factories, day labour of various classes, drivers of various categories, poor socio-economic status people stay in this area. There are lot of schools, colleges under private and government sector present in this area. There are very few comprehensive studies on the pattern of non-venereal dermatoses from India, [4,5]. Thus, the present study was carried out on 120 cases of clinically diagnosed nonvenereal genital dermatoses with a view of studying the clinical pattern, aectiological factors, age/sex distribution and the percentage of cases studied constituted by the particular dermatoses. Majority of our patients belonged to age group of 21-50 years. Maximum incidence (30%) of non-venereal dermatoses was observed in 21-30 years age group, 29% in 31-40 years, 20% in 41-50 years, i.e. total 79% in 21-50 years which constitutes about 3/4th bulk of total patients .out of which 5 were alcoholic, 3 were diabetic and 3 were infected with HIV disease.

As venereal dermatoses are of primary concern to the patient and causes mental stress and guilt feeling among patients, it is therefore, utmost important to distinguish between venereal and nonvenereal dermatoses. The nonvenereal dermatoses of male external genitalia include a wide spectrum of disease with varied etiology.[1] There are very few comprehensive studies on the pattern of nonvenereal dermatoses in males from our country.[2,3] Also, our study is first of its kind from this remote and underdeveloped part of the state

Acharya *et al.*[2] had done a study of 200 patients with genital lesions of nonvenereal origin. Karthikeyan *et al.*[3] had done a study on the pattern of nonvenereal dermatoses of male external genitalia from South India.

The age ranged from 18 to 65 years in the present study with the mean age of 32.2 years whereas the age ranged from 9 to 70 years with a mean age 33.7 years in a study by Karthikeyan *et al.*[3]

Most of the patients belong to the age group of 21–30 years (40%) in the present study which is similar to Karthikeyan *et al.*[3]

A total of 15 different nonvenereal dermatoses were observed in this study [Table 1]. Karthikeyan *et al.*[3] had 25 different nonvenereal dermatoses in their study.

The most common disorder was pearly penile papules [Figure 1] present in 26 cases, followed by genital scabies [Figure 2], which accounted for 22 cases. The other disorder encountered included Candidal balanoposthitis[Figure 3] in 18 cases in the present study. The study by Acharya *et al.*[2] reported infections as

commonest disorder contributing 40% cases. Pearly penile papule is the most common disorder. They were present in 26 cases in our study [Figure 1], which is almost similar to the study conducted by Khoo and Cheong[4]. All the patients with pearly penile papule came to visit OPD in apprehension of some venereal disease and they are frequently mistaken as warts. They were counseled about the benign nature of the disease. Acharya *et al.*[2] in their study recorded genital scabies as most common nonvenereal dermatoses accounting for 30 cases (15%), while it was present in 22 cases in our study [Figure 2] as second commonest disorder. This may be due to more prevalence of scabies in this population. Candidal balanoposthitis[Figure 3] was observed in 18 cases in the present study, as third most common disorder

Genital vitiligo[Figure 4] could be an exclusive finding, or it can be associated with generalized vitiligo. Genital vitiligo accounted for 14 cases in our study and is seen in all age group from young adult to older age group. This is in contrast with the study conducted by Karthikeyan *et al.*,[3] where the entire patients with vitiligo were in older age group. Five patients in our study had associated vitiligo elsewhere while nine patients had only genital vitiligo. Duration of illness ranged from 3 months to 5 years.

Fixed drug eruptions[Figure 5] were observed in 11 cases in our study. This is in contrast with Karthikeyan *et al.*,[3] where only 3 cases had FDE and all of them because of Oflaxacin. In our study, various drugs were implicated such as, sulphonamides, oflaxacin, fluconazole, etc., Half of our patients with FDE had oral involvement also.

Lichen planus[Figure 14] was present in 1 case in our study that is in contrast with Puri and Puri[5] where it was seen in (3) cases and Karthikeyan *et al.*[3] where it was seen in only 1 case.

Itching particularly around scrotum is a common presenting problem. Contributory factors include, tight clothing, friction, maceration, atopy, over-washing, use of various toiletries, topical medicaments and indigenous preparations.[6,7,8] Scrotal dermatitis [Figure 8] accounted for 4 cases in our study. Most of the patients were from the rural background. Acharya *et al.*[2] did not report any case while Karthikeyan *et al.*[3] had 13% cases of scrotal dermatitis. Irritant contact dermatitis due to condome was noticed in 1 case. Sebaceous cysts of scrotum [Figure 6] were observed in 8 cases in our study, while it was second most common finding (14%) by Karthikeyan *et al.*[3] They were observed in only 3.7% cases by Khoo and Cheong[4] All of our cases were asymptomatic and from younger age group. Zoon's balanitis or plasma cell balanitis [Figure 9] was observed in 2 cases in this study that had not been reported by Acharya *et al.*,[2] Khoo and Cheong[4] Karthikeyan *et al.*[3] It is a disorder of middle and older age in uncircumcised male, the etiology remains unknown.[9] Seventy-four patients (74%) were from the rural background while twenty-six patients (26%) belong to urban area. Fifty-seven (57%) patients were married and the remaining forty-three (43%) patients were unmarried. Scrotum was involved in 60% and penis in 30% while both scrotum and penis were affected in 10% cases in our study.

V. Conclusion

Contrary to normal belief all the lesions on genitalia are not sexually transmitted. It is very important to distinguish between venereal and nonvenereal genital dermatoses, as these nonvenereal disorders are a considerable concern to patients causing mental distress and feeling of guilt. Also, these nonvenereal disorders are quiet difficult in making a diagnosis by the treating physicians. A comprehensive understanding of the

various presentations, their etiology is, therefore, essential. This study was quiet useful in understanding the epidemiological, clinical and etiological characteristics of various nonvenereal genital dermatoses. This study was quite useful in clinical diagnosis and management of non-venereal dermatoses and differentiating them from venereal dermatoses which helps in allaying the guilt and fear among patients

References

[1]. Bunker CB, Neill SM. The genital, perianal and umbilical regions. In: Burns T, Breathnach S, Cox N, Griffiths C, editors. Rook's Textbook of Dermatology. 7th ed. Oxford: Blackwell Science; 2004. pp. 68.1–104.

[2]. Acharya KM, Ranpara H, Sakhia JJ, Kaur C. A study of 200 cases of genital lesions of non-venereal origin. Indian J Dermatol Venereol Leprol. 1998;64:68–70. [PubMed]

[3]. Karthikeyan KE, Jaishankar TJ, Thappa DM. Non-venereal dermatoses of male genital region-prevalence and pattern in a referral centre in South India. Indian J Dermatol. 2001;46:18–22.

[4]. Khoo LS, Cheong WK. Common genital dermatoses in male patients attending a public sexually transmitted disease clinic in Singapore. Ann Acad Med Singapore. 1995;24:505–9. [PubMed]

[5]. Puri N, Puri A. A study of non-venereal genital dermatoses in North India. Our Dermatol Online. 2013;4:304–7.

[6]. Ramam M, Khaitan BK, Singh MK, Gupta SD. Frictional sweat dermatitis. Contact Dermatitis. 1998;38:49. [PubMed]

[7]. Bauer A, Geier J, Elsner P. Allergic contact dermatitis in patients with anogenital complaints. J Reprod Med. 2000;45:649–54. [PubMed]

[8]. Hindson TC. Studies in contact dermatitis. Trans St Johns Hosp Dermatol Soc. 1966;52:1–9. [PubMed]

[9]. Zoon JJ. Balanitis and vulvitis plasma cellularis. Dermatologica. 1955;111:157.

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