Original Research Paper

Volume - 13 | Issue - 11 | November - 2023 | PRINT ISSN No. 2249 - 555X | DOI : 10.36106/ijar

Dermatology

PREVALENCE OF NON-VENEREAL GENITAL DERMATOSIS IN MALE PATIENTS ATTENDING TERTIARY CARE CENTER IN NORTH INDIA

Dr. Narendra Kumar — Final year PG resident, Department of Skin & VD, Dr. S.M.S. Medical College, Jaipur (RAJ.)

Dr. Vijay Paliwal — Professor, Department of Skin & VD, Dr. S.M.S. Medical College, Jaipur (RAJ.)

Dr. Deepak Kumar Mathur — Senior professor & HOD, Department of Skin & VD, Dr. S.M.S. Medical College, Jaipur (RAJ.)

ABSTRACT **Background:** Non venereal genital dermatoses constitute a major part of health problem in the dermatology OPD and associated with social stigma. Its prevalence varies from region to region in our country and keep changing over time. **Objective:** To know the prevalence of non-venereal genital dermatoses in a tertiary care center in north India. **Materials and Methods:** All male patients presenting in the OPD complaining of genital itching, pain, burning sensation with genital rash or any genital rash which is asymptomatic were included in the study which were not sexually transmitted. The demographic and epidemiological data collected. **Result and conclusion:** The study included 726 male patients with genital dermatoses. A total 17 type genital dermatoses were noted. The most common nonvenereal genital dermatoses were scabies (42.28%), candidal balanitis (41.73%), scrotal LSC (3.30%), sebaceous cyst (2.20%), scrotal dermatitis (1.92%) and LSA (1.92%). Other dermatoses included plasma cell balanitis or Zoon's balanitis, lichen nitidus, FDE, Fordyce spot, pearly penile papules, squamous cell carcinoma and tinea infections. The age ranged from 3 month to 65 years with majority in the age group of 15-45 years.

KEYWORDS : genital, non-venereal, dermatoses

INTRODUCTION

The genital dermatoses can be both venereal and non-venereal. The diseases, which are not sexually transmitted, are referred as non-venereal dermatoses[1]. Non-venereal genital dermatoses, include a wide array of diseases with varied etiology.

Lesion affecting skin and mucosa of male external genitals are frequently encountered in dermatology clinics. The diseases fall through cracks of medical education at all levels and in all specialities[2]. There is lack of proper training in Dermato-venereology. General public is not aware of the fact that there is a difference between venereal and non-venereal genital dermatoses. So occurrence of any genital lesion is associated with the feeling of guilt, shame and mental distress, apart from huge psychosexual problems (Male cause of dyspareunia, depression, relationship problems etc)[3].

The nonvenereal dermatoses can be classified into various groups based on pathogenesis[4]:

1. Normal variants (pearly penile papule, fordyces spot),
2. Inflammatory diseases (psoriasis, seborrheic dermatitis, lichen planus, lichen simplex chronicus, FDE, bullous disorder, lamphangiomacircumscripta, lymphedema),
3. Infections and infestations (scabies, dermatophytosis, candidiasis, furuncle, folliculitis, herpes zoster),
4. Congenital disorders (median raphe cyst, hypospadias),
5. Benign abnormalities (angiokeratoma of Fordyce, sebaceous cyst, steatocystoma multiplex),
6. Pigmentary disorders (Vitiligo, verrucous epidermal naevus),
7. Premalignant and malignant lesions (eryrthroplasia of Queyrat, zoons balanitis, Squamous cell carcinoma).

The various non-venereal dermatoses includes autoimmune (vitiligo), multisystem diseases (Behcet syndrome, Reiter syndrome, Crohn diseases), exogenous (contact dermatitis, corticosteroid abuse, fixed drug eruption, and benign and malignant neoplasms (extramammary Paget diseases)[4,5]. The non-venereal dermatoses in males encompasses two group of disorders[3,6]. Group one consists of disorders that are seen only in the genitalia e.g. angiokeratoma of Fordyce, median raphe cyst), group two comprises of disorders that affect genitalia as well as other parts of the body. It is important to differentiate between venereal and non- venereal dermatoses.

MATERIAL AND METHODS

We selected 726 male patients of non-venereal genital dermatoses for the study from the department of dermatology at tertiary care hospital in north india. All male patients presenting in the OPD complaining of genital itching, pain, burning sensation with genital rash or any genital rash which is asymptomatic were included in the study. Patient with sexually transmitted disease were excluded from the study. The demographic and epidemiological data collected. Consent was taken from the patients before they were included in the study and prior approval of the hospital ethical committee was taken for the study. A detailed history including demographic data, chief complaints related to skin, presence of itching, skin lesions, onset, pregnancy status, menstrual status, and associated medical or skin disorders was elicited and recorded. Enquiry was made with regard to history of sexual exposure. 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.

Inclusion Criteria

Only male patients having non venereal diseases.

Exclusion Criteria

Cases having venereal diseases were excluded from the study.

RESULTS

The study included 726 male patients with genital dermatoses. The data was collected and the results were analyzed. The mean age of the patients was 35 years and the commonest age group of patients was between 15-45 year of age. The majority of patients were married (72.45%) and 27.54% were unmarried.

A total 17 type genital dermatoses were noted. The most common nonvenereal genital dermatoses was scabies (42.28%) closely followed by candidal balanitis (41.73%). The prevalence of other genital dermatoses like scrotal LSC (3.30%), sebaceous cyst (2.20%), scrotal dermatitis (1.92%) and LSA (1.92%). Other dermatoses included plasma cell balanitis or Zoon's balanitis, lichen nitidus, FDE, Fordyce spot, pearly penile papules, squamous cell carcinoma and tinea infections

Fig No.1- Lichen Sclerosus Et Atrophicus

Fig No 2- Squamous Cell Carcinoma

Results Of Penile Dermatosis:

Disease	0-15 years	15-45 years	>45 years
Candidal balanitis	0	165	138
Scabies	122	169	16
LSA	0	12	2
Zoon's balanitis	0	4	2
Lichen planus	0	4	2
Lichen nitidus	0	2	0
Fixed drug eruption	1	4	2
Scrotal LSC	0	18	6
Scrotal dermatitis	0	12	2
Seborrheic dermatitis	2	0	0
Dermatophytosis	0	2	0
SCC	0	1	1
Angiokeratoma	0	6	2
Fordyce spot	0	4	0
Pearly penile papule	0	8	0
Scrotal sebaceous cyst	0	16	0
PKMB	0	1	0

Fig No.3- Pseudoepitheliomatous Keratotic And Micaceous Balanitis

Fig No 4- Scabies

DISCUSSION

As genital dermatoses are considered as social stigma in our country, it is very important to distinguish between venereal and non-venereal genital dermatoses. Majority of patients in our study was 15-45 age group. The mean age of patients was 35 years. We included only 726 males in our study.

The common presenting feature were itchy genitalia, white discoloration, swelling, pain, burning sensation, mass, dyspareunia, redness, exfoliation of skin, raised lesions over skin, oozing, burning micturition, ulceration, erosion and thickening of skin. Some patients had more than one complaint. Most of the patients with any kind of genital lesion are at immense mental stress and guilt. There is lack of proper knowledge in this field,not only among the general public but also among most of the health professionals. Male patients with non-venereal genital dermatoses usually presents to genito-urinary experts and physicians where the training and expertise are not oriented to adequate dermatological diagnosis and treatment[6].

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[7-9].

A total 17 type genital dermatoses were noted. The most common nonvenereal genital dermatoses was scabies (42.28%) closely followed by candidal balanitis (41.73%). The prevalence of other genital dermatoses like scrotal LSC (3.30%), sebaceous cyst (2.20%), scrotal dermatitis (1.92%) and LSA (1.92%). Other dermatoses included plasma cell balanitis or Zoon's balanitis, lichen nitidus, FDE, Fordyce spot, pearly penile papules, squamous cell carcinoma and tinea infections.

Acharya et al[8] had done a study on 200 patients with genital lesions of non-venereal origin and observed scabies as the most common non-venereal genital lesion. they did not report any cases of scrotal dermatitis.

Karthikeyan et al[9] had done a study on the pattern of non-venreal dermatoses on male external genitalia from south India and observed 25 different non-venereal dermatoses in their study. Non-venereal dermatoses were common in the 21-40 years age group. Most of the patients (74%) belonged to labourer class. Genital vitiligo was the most common disorder accounting for 16 cases. Sebaceous cyst of the scrotum was present 13 patients. Among infections and infestations, scabies was observed in 9 patients. Ariboflavinosis was seen in 9 cases.

Saraswat PK[10] had done a study in 100 male patients with nonvenereal genital lesions. A total of sixteen nonvenereal genital dermatoses were noted. The most common nonvenereal genital dermatoses were vitiligo (18%), pearly penile papule (16%), fixed drug eruptions (12%), scabies (10%), scrotal dermatitis (9%) and lichen planus (9%).

Ozkaya et al[11] carried out study on 105 patients with established fixed drug eruption and found cotrimoxazole, the most frequent drug to induce genital mucosal lesions. Karthikeyan et al[9] observed only 3 cases of FDE and all of them by cotrimoxazole.

Other less common causes of non-venereal genital dermatoses in our study were found to be, scrotal filariasis, zoon balanitis, squamous cell carcinoma, angiokeratoma (2.20%) cases of each were reported during 1 year of our study period. Zoon balanitis is an idiopathic, chronic, benign, inflammatory mucositis of the genitalia that clinically presents as solitary, shiny, well-defined erythematous plaque on the glands[12].It is also known as balanitis circumscriptaplasma cellularis or plasma cell balanitis of zoon[12]. Both the case in our study involved both prepuce and glans.

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.

The most common etiological diagnosis in our study was scabies and candida balanitis which are non-venereological in nature.

REFERENCES

1. Sharma VK, Khaitan BK. Non-venereal diseases of genitalia. Sexually transmitted diseases and AIDS.2003;1:413-21.
2. Margesson LJ. Vulvar diseases pearls. Dermatol Clin. 2006; 24:145-55.
3. Ross MW. Psychological perspectives on sexuality and sexually transmissible diseases and HIV infection. In: Holmes KK, Sparling PF. Stamm WE, Piot P, Wasserheit JN, Lawrence Corey et al., editors. Sexually transmitted diseases, 4 th edn. NewYork:McGraw-Hill, 2008, 137-48p
4. 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.
5. Fitzpatrick JA, Gentry RM. Non-venereal diseases of male external genitalia. In: Moschella SL, Hurley HJ, editors. Dermatology. 3rd ed. Vol. I. Philadelphia: WB Saunders Company; 1992. p. 1008-15.
6. Hillman RJ, Walker MM, Harris JR, Taylor-Robinson D. Penile dermatoses: A clinical and histopathological study. Genitourin Med 1992;68:166-9.
7. 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. p. 68.1-104.
8. 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.
9. 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.
10. Saraswat PK, Garg A, Mishra D, Garg S. A Study oof pattern of nonvenereal genital dermatoses of male attending OPD at a tertiary care centre. Indian J Sex Transm Dis AIDS.2014;35 (2):129-34.
11. OzkayaE. Specific site involvement in fixed drug eruption. J Am Academy Dermatol.2004;49(6):1003-7
12. Cooper SM, Wojnarowska F. Anogenital (nonvenereal) disease. In.BolognaJL.Jorizzo JL, Schaffer JV, Editors Dermatology.3rd ed. United states: Elsevier, 2012, 1171-86p.