



A Clinical Study Of Male Genital Dermatoses

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Abstract: **BACKGROUND:** Genital dermatoses are quite often a diagnostic dilemma to the treating physician, who has to effectively manage the condition and also relieve the associated anxiety of the patient. These genital disorders are the cause of considerable concern to patients causing mental distress and feeling of guilt in them.

METHODS: A total of consecutive 100 male patients with genital lesions, attending the Dermatology OPD at MVJMC and RH were included in the study. Due permission and approval were taken from the Institutional Ethics Committee. Based on the history and clinical examination a conclusive diagnosis was arrived at.

RESULTS: A total of 13 Non venereal dermatoses and 5 venereal dermatoses was observed in this study. Most common non-venereal dermatoses was Candidial balanoposthitis (35.8%) and Venereal dermatoses was chancre and Herpes genitalis (31.6%). Mean duration of symptoms in non-venereal dermatoses was 4.47 ± 11.15 months and venereal disease 1.99 ± 3.07 months and Mean age of presentation in Venereal dermatosis was 33.79 years and non-venereal dermatosis was 34.52 years. Youngest participant was 9 years and oldest participant was 69 years.

CONCLUSION: Genital dermatoses are the cause of considerable concern to patients causing significant mental distress. Genital dermatoses are quiet often a diagnostic dilemma to the treating physician, who has to effectively manage the condition and also relieve the associated anxiety of the patient.

Index Terms - Male genital dermatoses, Venereal Dermatoses, Non-venereal dermatoses.

I. INTRODUCTION

Genital dermatoses are the cause of considerable concern to patients causing significant mental distress. Genital dermatoses are quite often a diagnostic dilemma to the treating physician, who has to effectively manage the condition and also relieve the associated anxiety of the patient. Dermatoses involving genital areas are not always sexually transmitted. Genital dermatoses can be classified into venereal and non-venereal dermatoses.¹

Risk factors male genital infections include fungal infections of other body sites, local humidity, skin maceration, long-term use of tight-fitting garments, diabetes, atopic dermatitis, human papilloma virus (HPV) infection, immunosuppression, and unprotected sex. The use of condom and circumcision protects against infections of the penis.²

II. MATERIALS AND METHODS:

- a. **Source of data:** All the male patients attending the dermatology outpatient department with lesions over external genitalia
- b. **Study design:** Prospective Hospital based cross-sectional observational study
- c. **Place of study:** MVJ Medical College and Research Hospital, Hoskote, Bangalore, India
- d. **Study period:** 1year.
- e. **Sample size:** 100.
- f. **INCLUSION CRITERIA:** Male patients of all ages attending dermatology OPD with genital lesions.
- g. **EXCLUSION CRITERIA**
 - i. Excruciatingly painful lesions.
 - ii. Lesions that bleed on touch.
 - iii. Lesions under treatment
- h. **STATISTICAL ANALYSIS**

Data collected was entered into spread sheet and then tables and charts were generated. Qualitative and quantitative variables presented as percentages and mean $\pm$ SD respectively. Appropriate statistical tests were used wherever necessary.

III. RESULTS

A total of 100 participants were included in the study. These patients were diagnosed and classified into venereal and non-venereal dermatoses. 82 (82%) participants were diagnosed with non- venereal dermatoses and 18 (18%) participants were diagnosed with venereal dermatoses.

Table 1: Distribution of participants with non-venereal dermatoses

Serial no	Diagnosis	Number (82)	Percentage
1.	Candidial Balanoposthitis	29	35.3 %
2.	Scabies	21	25.6 %
3.	Scrotal ICD	6	7.3 %
4.	Genital LP	6	7.3%
5.	Vitiligo	5	6.0%
6.	Tinea genitalis	3	3.6%
7.	Steatocystoma	3	3.6%
8.	Pearly penile papules	2	2.4%
9.	Psoriasis	2	2.4%
10.	Fixed drug eruption	2	2.4%
11.	Hypospadiasis	1	1.2%
12.	Lichen nitidus	1	1.2%
13.	Porokeratosis	1	1.2%
	TOTAL	82	100%

Table no 2: Distribution of participants with venereal dermatoses

Serial no	Diagnosis	Number (18)	Percentage
1.	Chancre	6	33.3 %
2.	Herpes genitalis	6	33.3%
3.	Genital wart	4	22.2%
4.	Molluscum contagiosum	1	5.5%
5.	Gonorrhoea	1	5.5%
	TOTAL	18	100%

Age: The mean of age (years) was 34.38 (12.80). The age (years) ranged from 9 - 69.

Duration of illness:

The mean (SD) of Duration of Illness (Months) was 3.98 (10.11). The Duration of Illness (Months) ranged from 0.03 - 60. Majority of the patients presented within 1½ months (69%), 8 % patients presented between 1½ months to 3 months, 8% patients presented between 3 months to 6 months, 4% of patients presented between 6 months to 12 months and 11 % patients presented with > 12 months duration.

IV. DISCUSSION

The present study was conducted in MVJ medical college and Research hospital. A total of 100 male patients with complaints of genitals lesions were taken up for the study.

There are very few comprehensive studies on the pattern of genital dermatoses in males from our country.

The mean (SD) of Duration of Illness (Months) observed in our study was 3.98 (10.11). The Duration of Illness (Months) ranged from 0.03 - 60. The mean of Duration of Illness Venereal disease was 1.99 ± 3.07 months and non-venereal dermatoses was 4.47 ± 11.15 months.

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.,¹⁵

A total of 18 different Non venereal dermatoses and 5 different venereal dermatoses was observed in this study. A total of 16 different nonvenereal dermatoses were observed in Saraswat PK et al.,¹ and Karthikeyan et al.,¹⁵ had 25 different nonvenereal dermatoses in their study. The Most common non-venereal dermatoses observed in our study was Candidial balanoposthitis (35.3 %). Most common venereal dermatoses observed in our study was Chancre and Herpes genitalis (31.6%)

The study by Acharya et al.,¹⁴ reported infections as commonest disorder contributing 40% cases, which is similar to the results of the present study with infection accounting for 67 % of cases.

Lichen planus is autoimmune process triggered by metal ions, medications, bacterial and viral antigens or environmental stimuli.^{4,5} The most commonly affected sites are the skin and oral mucosa but genital involvement can also occur.³ Genital lichen planus was present in 6 % cases in our study which is comparable with the results of study conducted by Puri and Puri et al.,¹⁷ where it was seen in 6.6% cases and was in contrast to results of Karthikeyan et al.,¹⁵

Genital psoriasis can significantly reduce quality of life and be linked to significant psychosexual morbidity, discomfort, and humiliation.^{6,8,9} Psoriasis was encountered in 2 % cases in our study while 3% cases were reported by Saraswat PK et al.,¹ and Karthikeyan et al.¹⁵ reported a single case of psoriasis of glans penis while Acharya et al.,¹⁴ reported 5 cases of psoriasis over genitalia.

Porokeratosis is a morphologically distinct disorder of keratinization, characterized clinically by hyperkeratotic papules or plaques surrounded by a thread-like elevated border that expands centrifugally.¹⁰ One case of porokeratosis was reported in the present study.

Genital vitiligo presents as solitary or multiple well defined, hypopigmented/ depigmented macules on scrotum, penile shaft, pubis and/or on hairless, glans and inner foreskin.,¹³ Genital vitiligo was observed in 5% cases in contrast to 18% cases observed in Saraswat PK et al.,¹

Pearly penile papules (PPPs) are benign asymptomatic, painless, dome shaped lesions that appear in rows on the corona of the glans penis in late adolescence or early adulthood.¹⁴ Pearly penile papules was the most common genital dermatoses observed by Khoo and Cheong et al.,¹⁶ accounting for 14.25% of the patients. In the study by Karthikeyan et al.,¹⁵ only 4% of the study population had a pearly penile papule which can be compared to the results of our study (2 % cases).

Candidial balanoposthitis is characterized by dysuria, bleeding, moist curd-like accumulations, satellite-eroded pustules, mildly glazed erythema, and occasionally ulceration of glans penis.² Candidial balanoposthitis was observed in our study accounting for 35.3% cases (29 patients). Khoo and Cheong et al.,¹⁶ reported 4.88% cases of candidial balanoposthitis and 5% cases were reported in a study by Karthikeyan et al.¹⁵

Treponema pallidum, a spirochaete bacterium, causes chancre. The disease can spread through sexual intercourse, blood transfusions, and rarely vertical transmission during pregnancy. In males the lesions are usually located over balano-preputial region.¹¹ 6 cases of chancre was reported in our study.

Scabies presents as extremely irritating skin eruption of papules, nodules, and vesicles involving web space, wrists, axillae, groins, buttocks, genitalia, and breasts in females.¹² Scabies was the second most common genital dermatoses observed in our study accounting for 21% of cases, which is comparable with results of Acharya et al.,¹⁴ in which scabies was the most common nonvenereal dermatoses accounting for 30 cases (15%), while it was present in only 10% cases in Saraswat PK et al.,¹

Genital dermatophytosis also known as tinea genitalis and pubo-genital tinea, is superficial fungal infections caused by dermatophytes. Clinically present as an erythematous annular plaque with slightly raised scaly centrifugally advancing border and central clearing.¹³ Tinea genitalis was present in 3 % cases in our study as scaly pruritic plaques over scrotum and shaft of penis while it was observed in 5% of cases in Saraswat PK et al.,¹

Genital herpes in men manifests as 3 to 5 vesicles on the penis shaft. Recurrences of HSV infections are common. Neuralgias, paraesthesia's, and dysaesthesia's may accompany them prior to the emergence of skin and mucosal lesion eruptions.² Herpes genitalis was reported in 6 patients and was the most common venereal dermatoses observed in the study. All the patients had a risk of exposure to STI. These patients had unknown contact and had unprotected sexual intercourse.

Scrotal irritant contact dermatitis accounted for 6 % cases in our study and Saraswat PK et al.,¹ reported 9% of cases of scrotal dermatitis including allergic contact dermatitis and irritant contact dermatitis. Acharya et al.,¹⁴ did not report any case while Karthikeyan et al.,¹⁵ had 13% cases of scrotal dermatitis.

Fixed drug eruption was observed in 2% of cases in our study, similar results were observed by Karthikeyan et al.,¹⁵ where only 3 cases had FDE and all of them because of cotrimoxazole. In our study nonsteroidal anti-

inflammatory drugs was implicated as the offending agent. This was in contrast to the results of FDE observed by Saraswat PK et al.,¹ in which FDE accounted for 12 % of cases, various drugs were implicated such as, nonsteroidal anti-inflammatory drugs, sulphonamides, ornidazole, fluconazole, ampicillin.

One case each of lichen nitidus was reported in our study similar to Saraswat PK et al.,¹

One case each of porokeratosis, molluscum contagiosum, Hypospadiasis, and gonorrhea was reported in the present study.

V. Conclusion

Male genital dermatoses have a high impact on the quality of life, especially when it involves the sexual life. Genital dermatoses are often a diagnostic dilemma to the treating physician, who has to effectively manage the condition and also relieve the associated anxiety of the patient. All genital dermatoses are not sexually transmitted, it is very important to distinguish it into venereal and non-venereal dermatoses and also start the treatment promptly.

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