

A Clinical Study on Patterns of Genital Dermatoses In Adult Males in A Tertiary Care Hospital In South India.

*¹Nagireddy Himaja, ²Gonu Bharathi, ³Grandhi Usha

^{1,2,3}Dept. of DVL, S.V. Medical College, Tirupati, Andhra Pradesh

Corresponding Author: Dr.GonuBharathi

Abstract

Introduction: Male genital dermatoses is a common problem in Dermatologists practice. This study is an overview of patterns of dermatoses affecting male genitalia. A prospective study was conducted to evaluate the patterns of genital dermatoses in males attending D.V.L. department of tertiary care hospital in south India.

Materials and Methods: After obtaining consent, 100 adult males of 18-70 years with genital dermatoses confirmed by relevant bedside & laboratory investigations were enrolled in the present study.

Results: Out of 100 adult males, 62% of patients had infective dermatoses and 38% of patients had non-infective dermatoses involving genitalia. Among infective dermatoses, fungal infections accounted for 35%, in which dermatophytosis accounts for 30% and were more common among the study population. Viral infections accounted for 13%, followed by Bacterial infections 7% and parasitic infestations 7%. Among non-infective dermatoses, physiological variants 7%, developmental lesions 1%, inflammatory conditions 24%, malignancy 1%, miscellaneous conditions 5% involving genitalia of adult male study group.

Conclusion: Infective diseases like fungal infections are more prevalent in adult males reflecting the status of health, poor personal hygiene & low socio-economic status. Our study suggests the need for proper hygiene of genitalia and health education can play vital role affecting genital dermatoses.

Keywords: Genital dermatoses, infective, non-infective

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I. Introduction

Males with genital skin disease may present to clinicians in primary care, dermatology, genitourinary medicine, or urology clinics which can include a wide array of diseases with varied etiology, some of which are limited to the genital area or can be generalised skin disorder, such as psoriasis. Genital dermatoses can impact the psychological, and sexual wellbeing of men[1]. Some dermatoses are premalignant & malignant conditions are associated with morbidity and mortality. Hence, this study intends to evaluate the clinical patterns of male genital dermatoses.

II. Materials And Methodology

This is a hospital based, prospective study conducted in S.V.R.R Govt. General Hospital, Tirupati. An informed consent was obtained from all the patients included in the study of 100 consecutive adult male patients attending OP of DVL department with a clinical diagnosis of genital dermatoses were included in the study. After taking patients consent, detailed clinical history, complete physical examination & relevant investigations were done to establish diagnosis, the data was analysed and tabulated.

III. Results

This study included 100 adult male patients who attended OP, DVL Dept., S.V.R.R. Govt. General Hospital, Tirupati, Andhra Pradesh.

Table 1: Age group vs Infective & Non- Infective Genital Dermatoses

Age group (yrs)	Total No. of patients	Infective	Non-infective
18-30	23	13	10
31-40	32	21	11
41-50	18	12	6
51-60	15	10	5
61-70	12	6	6
Total	100	62	38

Age of patients ranged from 18 to 70 years with mean age of 35.8 years. Common age group involved was 30-40 years.

The dermatoses involving genitalia were divided in to infective and non-infective conditions. Infective genital conditions accounted 62% & Non-infective genital conditions 38% in the present study

Table 2: Percentages of Infective (Venereal & Non- venereal) and Non-Infective genital dermatoses.

Infective		Non- Infective				
Venereal	Non-Venereal	Physiological	Developmental benign	Inflammatory	Malignant	Miscellaneous
13%	49%	7%	1%	24%	1%	5%
62%		38%				

Among Infective genital dermatoses, **fungal infections** were the most commonly encountered accounting for 35% of which 30% were dermatophyte infections and 5% were candidal balanoposthitis. These are followed by **viral infections** (13 %) of which Herpes genitalis (6%), warts (5% - filiform type 3%, plane warts 2%) & Molluscum contagiosum 2%. **Bacterial infections** accounted 7% which constituted folliculitis 5% & Erythrasma 2%. **Parasitic infections** were seen in 7% of study population which included Scabies (5%) , Phthiriasis 2%. **Non-infective genital dermatoses:** Physiological normal variants included pearly penile papules (5%) & skin tags (2%). Developmental benign acquired conditions affecting genitalia included angiokeratoma of Fordyce of scrotum (1%). Non-infective Inflammatory conditions seen in 24% of study population, included Psoriasis (3%), Lichen planus (2%), Vitiligo (7%), Fixed drug eruptions (3%), Pemphigus vulgaris (1%), Genital intertrigo (5%) and Lichen sclerosis et atrophicans (3%). Carcinoma of penis was observed in one patient (1%). Miscellaneous conditions affecting genitalia were seen in 5%, which included scrotal calcinosis (3%) and zoon balanitis (2%).

IV. Discussion

Genital dermatoses often pose a diagnostic dilemma to treating physician, who has to effectively manage & allay the anxiety associated with the condition. Contrary to the popular belief, all lesions on genitalia are not manifestations of venereal diseases. The prevalence and pattern of certain skin diseases in genital area can reflect the status of health, personal hygiene, external environment and socio-economic status [2,3]. There are very few comprehensive study on the pattern of genital dermatoses that included both venereal & non-venereal diseases in males from our country. [5,6] Acharya *et al.* [5] had done a study of 200 patients with genital lesions of non-venereal origin. Karthikeyan *et al.* [6] had done a study on the pattern of non-venereal dermatoses of male external genitalia from South India. Saraswat *et al.* [7] had done a study on patterns of non-venereal dermatosis in males. Khoo and Cheong [8] had done a similar study on male patients at Singapore.

The age ranged from 18 to 70 years in the present study with a mean age of 35.8 years whereas the age ranged from 9 to 70 years with a mean age 33.7 years in a study by Karthikeyan *et al.* [6] Most of the patients belong to the age group of 30-40 years (40%) in the present study which is in contrast to Saraswat *et al.* [7] & Karthikeyan *et al.* [6], where the common age group affected was 21-30 years.

Infections are more prevalent in the present study group. In our study, out of 100 male patients, infective dermatoses are seen 62%, while non-infective dermatoses are 38%.

Infective Dermatoses were more commonly observed among low socio-economic class and most frequently encountered probably due to warm & humid environment, lack of personal hygiene, wearing of tight under-garments, sunny climate, may enhance organisms to flourish and factors like overcrowding and sharing fomites may increase the risk of transmissibility [10]. Infective genital dermatoses are venereal & non-venereal. **Venereal infections** presented were Herpes genitalis (6%), Human papilloma virus (5%), Molluscum contagiosum (2%). Remaining other infections like gonorrhoea, syphilis, chancroid, LGV & donovanosis were not presented during the study period.

Non-venereal infections included fungal, bacterial and parasitic infections. Bacterial infections (causing folliculitis, boils, abscesses, trichomycosis & necrotising fasciitis, fourniere's gangrene), viral infections, fungal, parasitic (scabies, phthiriasis) may be acquired non sexually during contact or secondary to poor personal hygiene, immune-suppression. [2,3]. Other infections include amoebiasis presenting as painful balanitis, filariasis involving scrotum are frequently seen. Bacterial infections constituted 7%, which included erythrasma 2%, folliculitis 5%. Acharya *et al.* [5] in their study recorded scabies as most common non-venereal dermatoses accounting for 15%, Saraswat *et al.* [7] recorded 10%, while it was present only 5% cases in our study. In the present study, out of 100 cases, tinea cruris (30%) was found to be the most common dermatoses among all the other non-venereal infective dermatoses. This finding is in contrast to other studies of Saraswat *et al.* [7] found this condition in only 5% of cases.

Non-infective genital dermatoses are grouped into physiological variants, developmental and benign acquired anomalies of genitalia, dermatological conditions affecting genitalia, premalignant conditions, malignant & miscellaneous conditions [4].

Physiological variants are essentially normal and include pearly penile papules, skin tags, Fordyce spots, melanocytic nevi etc. They are harmless & need only reassurance. Penile papule is a common disorder found in up to 50% of men. They were present in 5% cases in our study, which is in contrast to Saraswat et al [7] & Khoo and Cheong [8], were recorded 16%, for all patients explained benign nature of disease & reassurance given. Dermatological conditions affecting genitalia: These can occur elsewhere & also on genitalia. They are eczemas, psoriasis, lichen planus, vesiculobullous disorders, lichen sclerosis et atrophicans, fox fordyce disease, hidradenitis suppurativa, vitiligo, fixed drug eruption, urticaria etc. Psoriasis was encountered in 3% cases in our study, similar finding in Saraswat et al., [7] Karthikeyan *et al.* [6] reported a solitary case of psoriasis of glans penis while Acharya *et al.* [5] reported 5 cases of psoriasis over genitalia. All of our cases had classical lesions of psoriasis elsewhere. Saraswat et al [7] found that vitiligo followed by pearly penile papules as most common non venereal genital dermatoses, we also found similar findings in our study. Lichen sclerosis (LS) is chronic inflammatory dermatoses which are associated with substantial discomfort and morbidity. LS was observed in 3 cases in our study, similar to other studies, Saraswat et al [7], Karthikeyan *et al.* [6]. All 3 cases had phimosis and were advised circumcision. Duration of illness ranged from 6 months to 3 years. Lesion due to trauma and artefacts, developmental & benign acquired malformations, benign tumours (hidradenomas, syringomas), Premalignant conditions (Bowenoid papulosis, erythroplasia of querat) were not presented in the study period. Malignant conditions SCC, BCC, melanoma, kaposi sarcoma may affect genitalia often. Squamous cell carcinoma involving penis 1% is recorded in the present study. Non venereal lesions peculiar to genitalia are peyronies disease, phimosis, para phimosis, zoon's balanitis, scrotal calcinosis etc may be frequently encountered. Zoon's balanitis or plasma cell balanitis was observed in 2% cases in this study, similar to Saraswat et al. [7], that had not been reported by Acharya *et al.*, [5] Khoo and Cheong [8] Karthikeyan *et al.* [6] It is a disorder of middle and older age in uncircumcised male, the etiology remains unknown. [9] Limitations of the study was inadequate sample size, & many genital disorders were not presented in the study population.

V. Conclusion

Male genital dermatoses was most common among age group 30-40 years. Infective venereal disease constituted 13 %, of which herpes genitalis was most common (6%). Non-venereal infections constituted 49%, of which dermatophytosis was more frequent (30%). Non-infective, non-venereal diseases constituted 38%, in which vitiligo (7%) was commonly encountered from this study. we conclude that, as genital dermatoses causes psychological morbidity & sexual dysfunction affecting the quality of life, proper clinical diagnosis & treatment are necessary. Poor genital hygiene and unprotected sex are the major risk factors in causation, hence health education plays a key role in preventing many of genital dermatoses.

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