A CLINICAL STUDY OF NON VENEREAL DERMATOSES IN ADULT MALE GENITALIA

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ABSTRACT
Non-venereal dermatoses include disorders involving genitalia which are not transmitted sexually. They are more likely to be confused with venereal diseases, which leads to diagnostic dilemma to physicians. Patients usually think of that they are suffering from some venereal diseases and can be a major concern to patient. MATERIALS & METHODS: It is a descriptive study of new cases with genital lesions among adults (which includes male patients above age of 18 years and excludes patients below 18 years of age, patients presenting with classical STDs, attending SKIN & STD outpatient clinic of Chettinad hospital and research centre for a period of one year from July 2018 to August 2019. RESULTS: A total of 216 cases with non-venereal genital dermatoses were encountered in our study. Majority of the patients were found in the age group of 26 – 35 years [27.8 %]. Scabies was found to be the commonest NVGD, occurring in 56 (22%) patients. Pearly Penile Papule was seen more commonly [15 (7%)] among benign conditions and normal variants. CONCLUSION: All lesions occurring over genitalia are not necessarily sexually transmitted. Many other non-venereal conditions can occur over the genitalia. All clinicians should view and examine these conditions with an open mind and treat with appropriate drugs. Scabies was commonest non venereal genital dermatoses in our study.

KEY WORDS: Genitalia, Dermatoses, Infection

INTRODUCTION

Disorders involving genitalia can be classified as venereal and non venereal disorders. Non venereal Genital diseases are group of disorder which are not sexually transmitted but involves the genitalia \(^1\). It is not restricted only to genitalia but can involve other areas like skin, mucous membrane, scalp and nail \(^1\). The cause for these disorders is often varied and it is essential to find the cause of the underlying disorder before treating the patient.

Since these disorders involve genitalia, it is often confused with venereal diseases and is of diagnostic difficulty to the treating physician. Hence compressive knowledge about the clinical presentation of these dermatoses is mandatory. They can be classified into Infection and infestations, Normal and benign lesions, inflammatory disorders, Premalignant and malignant disorders \(^2\).

It may also leads to psychological problems to the patients, since they may think of that they are suffering from some venereal diseases and they may feel uneasy to consult a physician, which may leads to chronic persistence of these disorders in them \(^3\). Determining the causal factor for these disorders can help the patient from agony of discomfort, thereby increasing DLQI (Dermatology life quality index) of the patient \(^4\).

This study tries to find the clinical pattern of non venereal genital skin disorders. A comprehensive understanding of various presentations of these disorders can help the treating physicians for effective management and also helps in relieving stress to the patients.

MATERIALS AND METHODS

This study was carried out at Chettinad hospital and research institute, Kelambakkam, Kanchipuram District, Tamilnadu. Study population: The sample for the present study was selected from adult male patients attending Dermatology department with non venereal skin lesions over genitalia Study design: The current study is descriptive study. Sample size is 216

Ethical considerations

The study was approved by Institutional Human ethical committee. Informed written consent was sought from all the participants. Only participants willing to provide informed written consent were included in the study. Confidentiality of the study participants was maintained throughout the study period.
METHODOLOGY

Informed consent is obtained from the patient prior to the examination, following which detailed history including age, occupation, duration of disease, site of involvement, history of any drug intake or topical application, history of similar episodes, marital status, history of sexual exposure (premarital or extra marital) was taken. Thorough general and dermatological examination of the whole body was done for findings.

RPR test for syphilis and ELISA test for HIV were done to exclude STD.

Investigations such as Gram’s stain, KOH mount, Scraping for mite, Histopathology were done whenever necessary and to exclude any venereal disease.

Based on clinical features and investigations, diagnosis of the underlying disease was made. After making the diagnosis of non-venereal genital dermatoses, based on etiology, we classified the conditions into five major divisions, namely,

1. Benign conditions & normal variants
2. Infections & infestations
3. Inflammatory conditions
4. Malignancy and
5. Miscellaneous conditions

Based on site of involvement in genitalia, we classified into two groups

- Single site involvement and
- Multiple site involvement

Based on the other site involvement, we classified into two groups as

- Genitalia alone involvement
- Genitalia with other site involvement

- A proforma was prepared and all the relevant details of the patients were recorded. Examination and investigations were done and the diagnosis was made. All these data were tabulated, analyzed and discussed.

OBSERVATION AND RESULTS

The total number of patients with genital lesions attended skin and STD opd was 382. Out of which, 166 patients had venereal disorders and were excluded from the study. The total number adult male patients with non venereal

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genital lesions included in this study were 216. The mean age of involvement is 36.9 with standard deviation of 13.9. The patient’s age varies between 18 years to maximum age of 76. The major age group of the patients in this study is between 21 to 40 years, accounting for 33% (72 patients).

DISCUSSION

In this study, of the 216 studied, the commonest age of involvement was between 26 and 35 years, seen in 27.8 % (60 patients). Age of patients with non-venereal genital dermatoses in this study was between 18 and 76 years old. And the mean age was 36.9 years. The majority of the patient’s age group was between 18 and 45.

A study by Saraswat et observed that age group of most of their study population was between the age group of 21 to 30 years (40%) [5].

In one study done by Karthitheyan K et al, the age group of non-venereal dermatoses commonly seen in age group of 21-40 years [6].

A study done by Shinde G et al, most of the patients (79%) belonged to age between 21 years to 50 years. The majority of study populations in Shinde G et al study were between 21 years to 40 years of age [7].

Observed Dermatoses

In our study, the most common non venereal genital dermatoses to be observed is Scabies (26 %), which is followed by vitiligo (17.2%) & candidial balanopostthritis (11%).

In Shinde G et al study, psoriasis was the commonest dermatoses seen in 17 % of the study population, whereas psoriasis was seen only in 2.8% of the study population in our study. [7]

In Ashok S. Hogade et al study done in dermatology OPD of BTGH for assessing the pattern of non venereal lesions in genitalia among fifty male patients and in that study, vitiligo was the most common dermatoses seen in 20%, which is followed by fixed drug eruptions seen in 16% and scabies in 14% of the study population. In our study fixed drug eruption was seen only in 3.3 % of the total study population, whereas vitiligo and scabies were the most commonly observed disorder in our study. [8]

In P. K. Saraswat et al study, which is done for observing non venereal dermatoses. They observed that the vitiligo was the most common non venereal dermatoses seen in 18% of the study population, which is followed by pearly penile papule seen in 16%. Other dermatoses that are seen in that study were fixed drug eruptions (12%), scabies (10%), scrotal dermatitis (9%) and lichen planus (9%) of total cases. [5]
In Rajakumari et al study, the Candidal balanoposthitis were present in 41.6% of total patients, which is followed by pearly penile papules, genital vitiligo, scabies etc.\(^9\)

In a study done by Neerja Puri et al,\(^10\) which was done to observe the pattern of non-venereal genital dermatoses patients of north India revealed that the most commonly occurring non -venereal dermatoses in males was scrotal dermatitis, which was seen in 16.6% patients, which is followed by vitiligo, seen in 14.3% patients. The presence of scabies, fixed drug eruptions and pearly penile papules were detected in 10% of patients each in this study.

Common genital dermatoses among male patients, visiting a public clinic for sexually transmitted diseases, in Singapore were studied by Khoo LS et al. The study revealed that out of the 467 patients studied pearly penile papules was present in 67 patients [14.3%], followed by sebaceous hyperplasia in 16 [3.4%], Tyson's glands in 32 [7%] and penile melanosis in 13 [2.8%]. But the study finding cannot be compared with our study population because our population and pattern may differ due to differences in the various factors affecting the diseases\(^11\).

In a retrospective study, by Balakrishnan Thenmozhi Priya et al, to study the incidence of NVGD in patients (both male and female) attending STI clinic among the 125 patients found that among their study population, 75 patients [40 males, 35 females], were diagnosed with Non venereal genital dermatoses. A total of 14 different non venereal dermatoses were detected in their review. The most common age range affected in their study was of 30 -40 year olds. They further found that the most common non-venereal dermatoses found in females, was Lichen sclerosus. And among males, the commonest presentations were, fixed drug eruptions (FDE), and followed by Pearly penile papules.\(^12\)

### Occupation

- Of the Various occupations observed in this study, the most common group of population to be affected in this study is student accounting for 31% of the study population, followed by IT employers in 10% of the study population.

### Site of involvement

- With regards to site of involvement, the genitalia were affected in 53% of the study population and the rest 47% were affected in the sites of genitalia and skin.
• Coming on to the number of sites involvement in genitalia, the single site was affected in 68% of total study population and the rest 32% were affected in the multiple sites. Of the site involvement in genitalia, scrotum was the most common site to be involved in this study.

Circumcisional status

• Of the total 216 patients, circumcision was done in only 9% (19 patients) of the study population. Rest of the 91% study population is uncircumcised. In this study, the involvement of prepuce was seen in 40 patients, of which prepuce alone involvement was seen in 21 patients.

Etiological classification

• With regards to the etiology, infections and infestations were most common, seen in 41% of the study population. This was followed by miscellaneous lesions in 21% and inflammatory dermatoses in 19%, normal and benign variants in 18% and premalignant and malignant disorders in 1% of the study subjects.

• In one study done by Shinde G et al, the inflammatory disorders was most commonly observed seen in 58% of the total cases, which is followed by infestation and infection. The presence of benign tumors and cysts (11%), pigmentary disorders (7%) was witnessed in about 10% of the patients. 

• In Nagireddy Himaja et al study done in Tirupati to assess the Genital Dermatoses pattern among Adult males, they observed that among the total 100 study population, the infective disorders were present in most of the patients accounting for 62% of total study population and rest of the 38% study population had non-infective genital dermatoses. They also added that infective disorders like dermatophytic infections were commonly observed in adult males, which reflects low socio-economic status, health status and improper personal hygiene.

CONCLUSION AND SUMMARY

1. A total of 216 cases of non-venereal genital dermatoses were observed in adult male patients, who attended dermatology and venereology OPD of our Hospital in the above-mentioned study period (July 2018 to August 2019).
2. The age group of the study population was between 18 and 76 years with the mean age of 36.9 years.

3. The age group involvement was more in 26 to 35 years which was seen in 60 patients (27.8%).

4. Most of the cases in this study with non venereal lesions were Students [67 (31.01%)] and IT employee [22 (10.18%)].

5. Scabies was the commonest observed dermatoses, observed in 56 patients (26%).

6. The second commonest observed dermatoses were Vitiligo, seen in 37 patients (17.2%) and were followed by Candidal Balanoposthitis, seen in 24 (11%) patients.

7. The infection and infestations were the most common etiological cause of non venereal dermatoses [90 (41%)], which was followed by miscellaneous disorders [45 (21%)]

8. Among the benign conditions & normal variants, the Pearly Penile Papule was observed mostly in the study [15 (7% of total study population)].

9. Among the infections & infestations, Scabies was the commonest observed dermatoses.

10. Among the inflammatory conditions, Scrotal eczema was the most commonly observed lesion [13 (6% of the total study population)].

11. Among the miscellaneous disorder, vitiligo was found to be more.

12. A single case of each penile Squamous Cell Carcinoma and erythroplasia of queyrat were observed.

13. Conditions involving Genitalia alone 114 (53%), were found to be more in number.

14. Among the sites involved in genitalia, the most common site to be involved was scrotum.

15. Skin involvement in addition to genital involvement was seen in 100 patients of the study population.

16. The examination of genitalia revealed circumcision was done only in 19 patients (9 %) in this study. The prepuce was involved in 40 patients and prepuce alone was involved in 21. Thus, circumcision in the younger age may prevent these disorders

17. This study was quite useful in gaining an understanding regarding the clinical and etiological characteristics of various non-venereal genital dermatoses.

18. All the genital lesions need not be sexually transmitted. Many other non-venereal dermatoses may occur in the genitalia. All the clinicians should examine these conditions with an open mind and treat them with appropriate drugs.
19. An unbiased approach of management gives the patient more confidence to come forth for medical help, without which, the patients may feel shy and may have a fear to consult physician, when they have genital lesion. This may leads to chronic persistence of this disorder or may leads to usage of inappropriate over the counter (OTC) drugs. Identifying the common non venereal genital conditions and reassuring the patients will help to remove Venerophobia.

20. Hence and adequate knowledge and understanding the etiological and clinical features of various Non venereal genital dermatoses helps in the better diagnosis of the underlying disorder and also creates an awareness in patients about the importance of proper personal hygiene and wherever relevant. Patients, who have fear and a lack of knowledge, need more attention, education and privacy.

REFERENCES


