

Original Article

Clinical evaluation on non venereal genital dermatoses in males

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ABSTRACT:

Aim: clinical evaluation on non venereal genital dermatoses in males. **Methods:** The prospective analytical investigation was carried out in the Dermatology Department. This study included a total of 100 male patients with nonvenereal genital lesions. Nonvenereal dermatoses were checked for in all male patients over the age of 18 who came with genital symptoms. External genitalia were inspected and observations were recorded. A thorough physical examination was performed to look for any related lesions elsewhere in the body. Gram stain, KOH mount, venereal disease research laboratory test, HIV test, and histopathological examination were performed as needed to establish the diagnosis. **Results:** The majority of patients are between the ages of 20 and 30 (45%), with the age range 30 to 40 (22%). 75 patients (75%) were from the city, whereas 25 patients (25%) were from the countryside. The remaining 43 (43%) patients were single, while 57 (57%) were married. The scrotum was implicated in 62% of instances, the penis in 30%, and both the scrotum and the penis were involved in 8% of cases. This research identified 16 different forms of nonvenereal dermatoses. Vitiligo was the most prevalent condition, accounting for 20 instances, followed by pearly penile papule, which accounted for 15 cases. Other disorders discovered were 13 instances of fixed drug eruption (FDE), 8 cases of scabies, 8 cases each of scrotal dermatitis and lichen planus, and so on. **Conclusion:** Lesions on the genitalia are not always contagious between sexes, contrary to popular assumption. Knowing the difference between venereal and nonvenereal genital dermatoses is crucial, since nonvenereal illnesses are a major source of anxiety and shame for their victims.

Keywords: Non venereal genital, dermatoses, males

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Received: 22-04-2014

Revised: 16-05-2014

Accepted: 18-05-2014

This article may be cited as: Tyagi V. Clinical evaluation on non venereal genital dermatoses in males. J Adv Med Dent Scie Res 2014;2(2):212-215.

INTRODUCTION:

Many types of STDs can be found in the male genitalia because it is a sexual organ (STIs). Many inflammatory diseases, such as psoriasis and zoon's balanitis, which are localised to or primarily affect the external genitalia, are not contagious in the sexual sense. Nonvenereal genital dermatoses refer to all genital skin conditions that are not spread through sexual contact.¹ Patients who present with genital dermatoses are fearful and anxious because they often attribute the symptoms to STDs (STDs). Many genital dermatoses are not contagious in a sexual sense, despite widespread perception otherwise. Non-venereal dermatoses are skin diseases that are not spread through sexual contact. Based on their potential causes, Fitzpatrick and Gentry² categorised the various dermatoses as follows: benign abnormalities, congenital abnormalities, trauma and artefacts, inflammatory diseases, non-venereal infections and infestations, benign tumours, premalignant lesions, malignant lesions, and miscellaneous lesions. Diagnosing genital dermatoses can be challenging because of the unique conditions found in the genitalia, such as heat, friction, and occlusion, which alter the appearance of the disease. Dermatoses of the genitalia that are not caused by a

virus may spread to other parts of the body. Therefore, the additional genital locations are important to check for a correct diagnosis. Unfortunately, some people have venophobia (a fear of cancer) even when their lesion is benign. Consequently, it is crucial to recognise these illnesses and tell them apart from sexually transmitted diseases. The dread of these lesions may be alleviated by explaining their actual and harmless nature. Most of these patients do not seek medical attention for their genital lesions until the disease burden becomes severe, which in the case of malignant lesions might be fatal, due to the shame associated with these conditions.³ For patients' sake, it's important that clinicians be willing to consider the possibility of these genital lesions. In order to properly manage these non-venereal dermatoses and alleviate the accompanying anxiety, a thorough awareness of the diverse presentations, their causes, and the appropriate treatment choices is required.⁴ Our study aimed to identify the clinical and etiological factors, as well as the various patterns of presentation, of non-venereal dermatoses affecting the male genitalia, and to determine which dermatoses have a preference for exclusive genital involvement, and which occur as part of the generalised skin involvement.

MATERIAL AND METHODS:

After receiving approval from the protocol review committee and the institutional ethics committee, the prospective analytical study was carried out in the Department of Dermatology. This study included a total of 100 male patients with nonvenereal genital lesions. Nonvenereal dermatoses were screened for in all male patients over the age of 18 who presented with genital complaints. We obtained informed consent. A detailed history was elicited and recorded, including demographic data, chief skin complaints, disease onset and duration, and associated medical or skin disorders. Sexual exposure history was also recorded. Cases with any type of venereal disease were excluded from the study. External genitalia were examined and findings were recorded. A thorough physical examination was performed to look for any associated lesions elsewhere in the body. Gram stain, KOH mount, venereal disease research laboratory test, HIV test, and histopathological examination were performed as needed to establish the diagnosis. A proforma was created to record the pertinent patient,

examination, investigations, and diagnosis information.

RESULTS:

The study included 100 male patients with nonvenereal dermatoses of the external genitalia. The patients' ages ranged from 20 to 60 years old, with a mean of 31.7 years. The majority of patients are between the ages of 20 and 30 (45%), with the age group 30 to 40 (22%). 75 patients (75%) were from the city, whereas 25 patients (25%) were from the countryside. The remaining 43 (43%) patients were single, while 57 (57%) were married. The scrotum was implicated in 62% of instances, the penis in 30%, and both the scrotum and the penis were involved in 8% of cases. This investigation identified 16 different forms of nonvenereal dermatoses [Table 1]. Vitiligo was the most prevalent condition, accounting for 20 instances, followed by pearly penile papule, which accounted for 15 cases. Other disorders discovered were 13 instances of fixed drug eruption (FDE), 8 cases of scabies, 8 cases each of scrotal dermatitis and lichen planus, and so on.

Table 1: Genital dermatoses

Genital dermatoses	Number (n=100)	%
Vitiligo	20	20
Pearly penile papule	15	15
Psoriasis	3	3
Scrotal dermatitis	8	8
Squamous cell carcinoma	1	1
Lichen planus	8	8
Dermatophytosis	6	6
Granuloma annulare	1	1
Scabies	11	11
Lichen nitidus	1	1
Fixed drug eruption	13	13
Sebaceous cyst	6	6
Lichen sclerosus	3	3
Lymphangiectasia scrotum	2	2
Zoon's balanitis	1	1
Papulo-necrotic tuberculid	1	1

Genital itching and loss of pigmentation were the most often reported symptoms. In addition to these, patients also reported experiencing discomfort, burning, redness, skin exfoliation, elevated lesions, leaking, ulceration erosions, and a general thickening of the skin. Many individuals presented with several symptoms.

DISCUSSION:

It is crucial to differentiate between venereal and nonvenereal dermatoses because venereal dermatoses are of major concern to the patient and generate mental tension and guilt feeling among patients. Typically, male patients with nonvenereal dermatoses will see genitor-urinary specialists or generalist doctors, whose education and experience are not geared toward providing proper dermatological diagnosis and treatment. Multiple medical professionals specialising in diagnosing and treating genital disorders have found the condition baffling. Even for a seasoned dermatologist, the challenge is complicated by the fact that the typical manifestations

of prevalent illnesses at flexural locations are lost or altered.

Nonvenereal dermatoses of male external genitalia include a broad range of diseases with varying etiologies.⁵ There have been relatively few extensive studies on the pattern of nonvenereal dermatoses in our country's men.^{6,7} Furthermore, our research is the first of its sort in this section of the nation. Acharya et al.⁶ conducted a research on 200 individuals with nonvenereal genital lesions. Karthikeyan et al.⁷ conducted research on the nonvenereal dermatoses of male external genitalia in South India. In Singapore, Khoo and Cheong⁸ conducted a similar investigation on male patients.

In the current research, the age varied from 20 to 60 years, with a mean age of 31.7 years, while in a study by Karthikeyan et al.⁷, the age ranged from 9 to 70 years, with a mean age of 33.7 years.

In the current research, the majority of patients (45%) are between the ages of 20 and 30 years old, which is comparable to Karthikeyan et al.⁷. This investigation found a total of 16 distinct nonvenereal dermatoses [Table 1]. Karthikeyan et al.⁷ studied 25 distinct nonvenereal dermatoses. Vitiligo was the most prevalent condition, accounting for 20 instances, followed by pearly penile papule, which accounted for 15 cases. Other disorders discovered were 13 instances of fixed drug eruption (FDE), 8 cases of scabies, 8 cases each of scrotal dermatitis and lichen planus, and so on.

According to Acharya et al.⁶, infections are the most frequent condition, accounting for 40% of cases. Another research, nearly identical to ours, found genital vitiligo to be the most frequent condition (16%).⁷ The most prevalent nonvenereal dermatoses in Khoo and Cheong⁸ were 14.3% pearly penile papules, which is comparable to our research (16%). 75 patients (75%) were from the city, whereas 25 patients (25%) were from the countryside. The remaining 43 (43%) patients were single, while 57 (57%) were married. The scrotum was implicated in 62% of instances, the penis in 30%, and both the scrotum and the penis were involved in 8% of cases.

Genital vitiligo may be isolated, or it may be accompanied with generalised vitiligo. Genital vitiligo accounted for 20% of instances in our research and is present in all age groups, from young adults to the elderly. This is in contrast to the research done by Karthikeyan et al.⁷, in which all vitiligo patients were older. In our research, ten individuals had related vitiligo elsewhere, whereas eight patients exclusively had genital vitiligo. The sickness lasted from 3 months to 8 years.

Pearly penile papule is a frequent condition that affects up to 50% of males.⁹ They were found in 15% of the patients in our investigation, which is almost identical to the study done by Khoo and Cheong.⁸ They are commonly confused for warts and misdiagnosed as Tyson's gland or Fordyce's ectopic sebaceous gland.⁵ All of the patients with pearly penile papules came to the OPD fearful of a sexual illness. They were advised about the disease's benign character.

As the third most prevalent condition in our investigation, fixed drug eruptions were identified in 13% of patients. In contrast, Karthikeyan et al.⁷ found just three instances of FDE, all of which were caused by cotrimoxazole. Various medicines were implicated in our research, including nonsteroidal antiinflammatory drugs, sulphonamides, ornidazole, fluconazole, ampicillin, and others. Half of our patients with FDE also had oral involvement.

In their investigation, Acharya et al.⁶ identified scabies as the most frequent nonvenereal dermatoses,

accounting for 30 cases (15%), while it was present in just 11% of our patients. This might be because scabies are less common in this demographic.

In our investigation, lichen planus was found in 8% of the patients, although Puri and Puri¹⁰ found it in only 6.6% of the cases and Karthikeyan et al.⁷ found it in just one instance. The oral mucosa was also involved in four of our instances. Itching, especially around the scrotum, is a typical presenting issue. Tight clothes, friction, maceration, atopy, overwashing, usage of different cosmetics, topical medicaments, and indigenous remedies are all contributing causes.¹¹⁻¹³

In our research, scrotal dermatitis accounted for 8% of cases, which included allergic contact dermatitis and irritating contact dermatitis. The majority of the patients were from rural areas. Acharya et al.⁶ reported no instances, however Karthikeyan et al.⁷ reported 13% cases of scrotal dermatitis.

Sebaceous cysts of the scrotum were found in 6% of the patients in our investigation, although it was the second most frequent finding 14% in Karthikeyan et al.⁷ Khoo and Cheong⁸ discovered them in just 3.7% of the instances. All of our patients were asymptomatic and younger in age.

Dermatophytic infection appeared as scaly pruritic plaques across the scrotum in 6% of the patients in our research. KOH mount verified each of them. Lichen sclerosus (LS) is a persistent inflammatory dermatosis with an unclear origin that causes significant pain and morbidity.

In our investigation,¹⁴ LS was detected in three instances, although Karthikeyan et al. noticed it in just two cases.⁷ All three instances had phimosis and were recommended to be circumcised. The sickness lasted anywhere from 6 months to 3 years. The clinical results in LS patients in this investigation were found to be consistent with the literature review.

Around 2% of the world's population has psoriasis, but many more may develop anogenital psoriasis at some point.¹⁵ Psoriasis of the anogenital area may also appear on its own. Because a mucosal region rather than keratinized skin is damaged, genital appearance may be difficult to discern, particularly in uncircumcised people.⁵ In our research, 3% of the participants had psoriasis. Karthikeyan et al.⁷ reported a single case of glans penis psoriasis, while Acharya et al.⁶ documented five instances of genital psoriasis. All of our patients had psoriasis lesions elsewhere. Zoon's balanitis or plasma cell balanitis was found in 1% of the cases in this study, which had not previously been reported by Acharya et al.,⁶ Khoo and Cheong⁸, or Karthikeyan et al.⁷ It is a disorder of middle and older age in uncircumcised males, with no known cause.¹⁵

CONCLUSION:

Lesions on the genitalia are not always contagious between sexes, contrary to popular belief. Knowing the difference between venereal and nonvenereal genital dermatoses is crucial, as nonvenereal disorders

are a major source of anxiety and shame for their patients. Insight into the epidemiological, clinical, and etiological features of nonvenereal genital dermatoses was greatly facilitated by this study. In our research, vitiligo was the most common underlying cause identified.

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