

www.jmscr.igmpublication.org

Impact Factor 3.79

ISSN (e)-2347-176x



Journal Of Medical Science And Clinical Research

An Official Publication Of IGM Publication

Non-Venereal Female Genital Dermatoses – A Clinical Study

Authors

Muktamani G¹, Shivakumar V², Rajendra Okade³

Corresponding Author

Dr.Muktamani Gurumayum

Department of Dermatology, Venereology, Leprosy.

Sri Devaraj Urs Medical College & Research Centre, Kolar, Karnataka

Email- dolly123sharma@yahoo.com

ABSTRACT

Background- Non- Venereal genital dermatoses is always confused with venereal dermatoses because of its similar presentation and it causes a diagnostic delimita to the treating physician as well as considerable concern to the patients. Non- venereal dermatoses need not be restricted to the genitalia alone, it can affect other mucous membrane and skin. So, a proper knowledge of various dermatoses and its varied presentation with proper knowledge of the anatomical structure is required for its correct diagnosis.

Methods-It was a descriptive study which included a series of 150 patients presenting to the Dermatology department over a period of 15 months from DEC 2011 to March 2013. Some venereal conditions which were transmitted through non- venereal route were also included. Cases having any venereal diseases were excluded from the study.

Results-The frequency of non-venereal dermatoses among female patients attending OPD is very common. The age ranged from 3 months to 65 years with majority of age group between 21-40 years (61%) which is reproductive age group. The non – venereal genital lesions were grouped into 4 groups according to the involvement of site with labia majora 96(64%), most common dermatoses being folliculitis 25(16%), oro-genital 12 (8%) and skin involvement 43(28%). Oro- genital involvement predominantly included vitiligo in 5 cases followed by candidiasis in 2 cases, SJS in 2 cases and PV in 2 cases and lichen planus in 1 cases. Among skin disorders with the oro - genital involvement i.e. 11(7%), 5(3%) cases of vitiligo, 2 cases of SJS and 2 cases of PV and 1 cases of LP. A total of 26 non – venereal genital dermatoses were encountered with folliculitis 25(16%) being the most common dermatoses followed closely by LSC 22(14%) and vitiligo

21(14%). A total of 43 cases (28%) with systemic involvement was recorded with most common association being DM-2, 13(8%) followed by HTN 9(6%) and thyroid 7(4%). Among 150 patients, 115 patients were in postpubertal, 17 patients were in postmenopausal and 7 patients in prepubertal age group.

Key word: Genital, Non- Venereal, Dermatoses.

INTRODUCTION

Vulvar disease is an orphan disease. Diseases of vulva are not a priority in any of the women's health initiatives. Many care givers looking after women's genital disease are busy passing through the vulva and seldom stop to look, even if they see changes, these may go unrecognized.

Women themselves have little to genital education and many were brought up with prevailing cultural taboos about female genitalia and are members of "down there generation" where almost no words are spoken to refer to female genitalis, internal or external.¹ Because of these factors women suffer with undiagnosed symptoms.

- Urogenital complaints are among the most important problems encountered by dermatologist. Vulvar dermatoses which trouble the clinicians the most are benign inflammatory disorders which represent a wide spectrum of diseases and can be classified according to the International Society For The Study Of Vulvovaginal Disease (ISSVD) clinical classification 2011 as follows :^{2,3}

1) SKIN-COLOURED LESIONS

a. Skin coloured papules and nodules

Eg- Vulvar Intraepithelial neoplasia, skin tag, Nevus, Mucinous cysts of vestibule,

Epidermal cyst, Bartholin gland cyst, Syringoma.

b. Skin coloured plaques

Eg- Lichen simplex chronicus.

2) RED-LESIONS: PATCHES AND PLAQUES

a) Eczematous & lichenified disease.

Eg- Allergic contact dermatitis, Irritant contact dermatitis.

b) Red patches and plaques.

Eg- Candidiasis, Psoriasis, Lichen Planus, Bacterial infection, Infestations.

c) Bullous and Erosive Diseases

Eg- Lichen planus, Toxic epidermal necrolysis, Pemphigus vulgaris, Fixed drug eruption.

3) RED LESION - Papules and Nodules.

Eg- Folliculitis, Angiokeratoderma, Hidradenitis suppurativa, Hailey-Hailey disease.

4) WHITE LESIONS

Eg- Fordyce spots, Miliun, Vitiligo, Lichen Sclerosus, Post-inflammatory hyperpigmentation.

5) DARK COLOURED (BROWN, BLUE, GRAY OR BLACK LESION)

Eg- Melanocytic nevus, Vulvar melanosis, Acanthosis nigricans, Seborrheic Keratosis, Benign tumors.

6) BLISTERS

Eg- Lymphangioma circumscriptum, Immune blistering disorders, Drug eruption.

7) EROSIONS AND ULCERS

Eg-Excoriations due to systemic disease, Trauma, Erosive Lichen planus, Fissuring arising on abnormal tissue (candidiasis, LSC, Crohns disease), Erosion due to neoplasia, Behchets disease.

8) EDEMA (Diffuse Genital Swelling)

Eg- Idiopathic Lymphatic abnormality, Post-radiation lymphatic obstruction, Post –infectious edema, Venous obstruction, Cellulitis.

METHODS

The Study was conducted between December 2011 to March 2013. All female patients reporting to the Department of Dermatology in R.L. Jalappa Hospital and Research centre attached to Sri Devaraj Urs Medical College were evaluated for entry into the study and patients having genital lesions were enrolled in the study.

- A written consent was taken. Thorough history like chief complaints, duration of the disease, vaginal discharge, sexual functions, urinary symptoms, any treatment, drug history (OCP or HRT) was taken. Personal and family history of atopy, psoriasis or autoimmune disease was asked for.

Inclusion criteria:

All female patients attending the Dermatology OPD was screened for inclusion.

Exclusion criteria:

- a) Sexually transmitted infections.
- b) All post traumatic cases.
- c) Post-Surgical cases.

d) Congenital malformations.

e) Malignancies.

EVALUATION

For the study, detailed history including the age, occupation, duration of the disease and site of affection and history of exposure was taken. Physical examination was done to see any associated lesions elsewhere in the body. Investigation like KOH mount, Grams stain, biopsy, histopathological examination was done to establish diagnosis whenever required. The patients satisfying the inclusion and exclusion criteria as mentioned were taken after an informed written consent. The study included 150 patients presenting with genital, orogenital and skin lesions of non-venereal conditions presenting over a period of 15 months from DEC 2011 to March 2013. Data was collected from the selected subjects by recording relevant patient's details and a thorough general, systemic and dermatological examinations. A proforma was prepared to record the relevant details of the patients, examination, investigation result and diagnosis. The data were finally tabulated and analysed.

OBSERVATIONS & RESULTS

The following observation were made in the study

1. Total number of cases studied – 150
2. Total number of dermatoses observed – 26
3. Most common dermatoses observed – Folliculitis

4. Most common area of involvement- Labia majora
5. Most common age group affected – (21-40) years
6. Number of patients with systemic association- 43
7. Most common presenting complaints – Itching
8. Most of the patients were housewives – 84
9. Most common genital dermatoses with involvement of skin –Vitiligo
10. Most common Oro-genital dermatoses – Vitiligo
11. No of patients affecting after puberty – 115.

Table.1-List of Dermatoses

Sl. No.	Conditions	No. of patients	Percentage
1.	Folliculitis	25	16
2.	LSC	22	14
3.	Vitiligo	21	14
4.	Candidiasis	13	8
5.	Intertrigo	13	8
6.	Psoriasis	9	6
7.	T.Cruris	5	3
8.	Scabies	5	3
9.	LSEA	4	2
10.	LP	4	2
11.	SJS	4	2
12.	Cyst	3	2
13.	ICD	3	2
14.	Vulval Edema	3	2
15.	BP	3	2
16.	PV	2	1
17.	Others	10	6

Table 2 : Age Distribution

Age (Yrs)	No. of patients	Percentage
0-20	10	06
21-40	92	61
41-60	43	28
>60	05	03
Total	150	100

Table 3: Associated Systemic Diseases

Sl.no.	Associated disease	No. of patients	Percentage
1.	Diabetes mellitus	13	8
2.	Hypertension	09	6
3.	Thyroid	07	4
4.	Asthma	05	3
5.	Anemia	04	2
6.	Cataract	03	2
7.	Others	02	1

Table 4: Area of Involvement

Area Involved	No. Of Cases	Percentage
Labia majora	96	64
Labia minora	19	12
Introitus	13	8
Mons pubis	09	6
Vulva	04	2
Others	09	6



Fig-1 Folliculitis



Fig 3- Maggot Infestation



Fig 2 –Mucosal vitiligo



Fig 4- Hemangioma



Fig 5- Steven Johnsons Syndrome



Fig 6-Lichen Sclerosus Et Atrophicus

DISCUSSION

Non -Venereal genital disorder includes a wide array of diseases with varied etiology. Not many comprehensive studies exist with regard to pattern and distribution of the lesion. Singh et al had done a study on pattern of non-venereal Dermatoses of female genitalia in south India.⁴ Puri et al has done a similar study in Punjab.⁵

AGE:- Age ranged from 3months to 60 years and above in the present study, whereas the age was from 1month to 80 years in the study population by Acharya et al.⁶

- The age range varied from 1to 85 years in the study by Singh et al with the mean age of 37 years among the female patients from a total of 120 patients.

- Another study in Punjab by Puri et al in both male and female patients with genital dermatoses had age group 21-40 years with maximum number of cases recorded and males out numbering the females.

- Most of the patients belong to age group of 21-40 years (61%) in the present study whereas in contrast, another study by Singh et al most common dermatoses were in post-menopausal age group with 41%.

OCCUPATION

The majority of patients were housewives 84(56%) followed by teacher 23(15%) in the present study. Various other studies had labourers (48%, 74% and 35%) forming the predominant occupational group in their respective studies^{4,5,6}.This is mostly due to dependent population being rural population.

COMMONEST NON-VENEREAL DERMATOSES

In the present study, a total of 26 different types of non- venereal dermatoses encountered. Singh et al had 19 different dermatoses in their study .The most common disorder was genital folliculitis which accounted 25(16%) followed by Lichen

simplex chronicus 22(14%) and Vitiligo with 21(14%) in the present study whereas Singh et al reported lichen sclerosus (21%) as the most common disorder followed by vitiligo (15%). In another study by Puri et al also, Lichen Sclerosus atrophicus was the most common dermatoses 3(15%) followed by Lichen simplex chronicus 2(10%).

LSC was seen in 22(14%) patients in present study with the most common symptoms being itching 56 (37%) and most common site being labia majora 96(64%). In the study by Singh et al 16 (13.3%) cases with LSC were recorded with pruritus being the common symptom similar to the present study. In another study by Puri et al also, LSC was one of the common dermatosis 2(10%) with itching and hyperpigmentation being the most common symptoms. In study by Karthikeyan et al also in male population, LSC is recorded as the most common dermatosis.⁷

Vitiligo was one of the commonest disorder which accounted for 21(14%) cases of total study population in present study and most common site of involvement being labia majora and minora 96 (64%) whereas Vitiligo was the most common dermatoses accounted with 19 cases with symptoms being asymptomatic white discoloration over the labia majora and labia minora as the most common site of involvement in the study by Singh et al. In another study by Puri et al Vitiligo formed 15 % of the non -Venereal dermatoses in female in similar to reported by Singh et al.

Genital lichen planus was encountered in 4 (2%) patients in the present study with 3(2%) associated genital and skin involvement and 1 patient with oro-genital involvement whereas in study by Singh et al 3 female patients had genital involvement in LP.⁸ In another study by Cheung et al in 200 patients lichen planus accounts for (11.5%) Of the total population.¹⁰

In the present study, genital candidiasis accounted for 13(8%) of the total population with symptoms being itching and burning sensation and among the 13 patients, 2(1%)had oro-genital involvement. In another study by Puri et al, 3(15%) had genital candidiasis with associated systemic DM-2. Singh et al encountered 11 patients of candidiasis involving female external genitalia.

In the present study, folliculitis is being recorded as the most common dermatoses with 25(16%) patients and common symptom being pain with common site of involvement over the labia majora in the age group of(21-40)years whereas in another study by Puri et al 2 patients had folliculitis and furunculosis in contrast to the figure recorded in the present study. Similarly Singh et al also recorded very less case of folliculitis 7(5.2%) which is different from the dermatosis recorded in this study.

In this study, Psoriasis accounted for 9 (6%) patients with 5(3%) patients having genital and generalized body involvement which is in contrast to the study by Puri et al which accounted in only 2(10%) patients with only genital involvement. Singh et al reported 5 cases of psoriasis involving

female genitalia which is one of the common inflammatory condition.

In the present study, only 2(1%) patient had seborrheic dermatitis with genital involvement mainly the labia majora and itching, pain and burning being the common presenting complaints with other body area involvement in 1 patient which is same as study by Puri et al who also reported only 2 cases of seborrheic dermatitis in his study.

In this study, 4(2%) patients of LSEA were recorded mainly in the post menopausal age group with burning sensation and itching being the presenting complaints 4 (2%) and change in colour 2(1%) whereas in study by Singh et al recorded 26(21.7%) patients which is in contrast to the present study. Another study by Puri et al, he recorded 3 (15%) patients of LSEA which has close similarity to the present study. In all the study compared above, postmenopausal age group were the common presenting age group.

Four cases of SJS (2%) recorded in present study mainly with the suspected drug as sulfonamides, nimuselide, ayurvedic drug. Out of 4, 2 patients had oro-genital involvement and 2 had other body part involvement with first symptom being fluid filled lesion and then burning whereas in study by, Puri et al and Singh et al, no cases of drug eruption was recorded in their studies. In the study by Meneux et al, toxic epidermal necrolysis with involvement of labia majora and vulva was reported.¹⁰

Irritant contact dermatitis was seen in 3 (2%) patient in the present study which was caused by

sanitary napkin, hair removing cream and antifungal. Singh et al encountered 2 cases of irritant dermatitis to antiseptic lotion. In study by Puri et al, 3 patients had ICD due to antiseptic lotion and female condoms which is similar to our study.

In the present study, 2(1%) patients of Pemphigus Vulgaris was recorded with initial area of lesion being scalp with oral and genital mucosa. 2(1%) of patient had oro - genital involvement and 2(1%) patients had skin and genital mucosa involvement. Pemphigus vulgaris with oro-genital involvement was noticed in one female patient who had associated seizure disorder. Vulvar involvement of Pemphigus Vulgaris was reported by Marren P et al.¹¹ 3(2%) patient had Bullous Pemphigoid with genital involvement in 70 year old lady with the common site of involvement being labia majora and mons pubis.

In the present study, 3(2%) patient of cystic lesion were recorded mainly on the inner lip of the labia minora whose proper diagnosis could not be made out. Singh et al reported cystic swelling in female patient in his study which is similar to our study.

In our study, 5 (3%) patient had scabies with genital involvement mainly the mons pubis and labia majora with involvement of whole body and family being other associated finding where as in study by Singh et al and Puri et al, scabies with genital involvement has not been recorded .

Present study had T.cruis 5(3%) patient and intertrigo 13(8%) patient accounted with common symptoms being itching and burning sensation with common site being labia majora and mons. In

another study by Singh et al 8 patients with pyoderma and 6 patients with T.cruis was recorded which is in contrast to study by Khoo et al where in his study not a single case of tineas cruris in female patients were recorded.¹²

In the present study, 3(2%) patient of vulval edema due to folliculitis were recorded whereas in study by Singh et al 5 patients in the age group of 45 to 60 years were recorded secondary to radiotherapy induced lymphatic damage.

A rare case of maggot infestation after vaginal delivery in 23 year old lady was recorded which has not been recorded in any of the previous studies.

A case of extensive pediculosis capitus and pubis was recorded in young emaciated girl which is very rare presentation of non-venereal dermatoses. One patient of molluscum contagiosum of labia majora was noted in a young girl with involvement of other body area following self inoculation.

A case of physiological hyperpigmentation, hemangioma, diaper dermatitis each was recorded which is mainly seen in prepubertal age group. Similar study by Fischer and Rogers et al in prepubertal age group in 130 patients, irritant dermatitis and lichen sclerosus was recorded in 44 patient in contrast to our study.¹³

A case of erythrasma, Leukoderma and acrochordon was also encountered in the present study which has not been recorded in any other studies done previously.

No premalignant lesions were noticed in the present study. The reason may be due to less

prevalence of the disease among the study population.

CONCLUSION

A total of 150 cases of non-venereal dermatoses were recorded. Among that three disorders which were very common were folliculitis, vitiligo and Lichen simplex chronicus. Localized genital involvement were found to be quite significant among non-venereal dermatoses. This study was quite useful in clinical diagnosis and management of non-venereal dermatoses and differentiating them from venereal dermatoses which helps in allaying the guilt and fear among patients.

REFERENCES

- 1) Schlosser BJ, Mirowski GW. Approach to the patient with vulvovaginal complaints. *Dermatol Ther.* 2010 ; 23 : 438-48.
- 2) Lynch PJ, Moyal-Barracco M, Bogliatto F, et al. 2006 ISSVD classification of vulvar dermatoses: pathologic subsets and their clinical correlates. *J Reprod Med* 2007; 52: 3- 9, 110.
- 3) Lynch PJ. 2011 International Society for the Study of Vulvovaginal Disease terminology and classification of vulvar dermatological Disorders: An approach to clinical diagnosis. *J Low Genit Tract Dis* 2012.
- 4) Singh N, Thappa DM, Jaisankar TJ, Syed H, Pattern of non- venereal dermatoses of female external genitalia in south India *Dermatology onlin Journal* 14: 1.

- 5) Puri N, Puri A. A study on non-venereal genital dermatoses in north India. *Our Dermatol Online*. 2012; 3: 304 - 307.
- 6) Acharya KM, Ranapara H, Sakia JJ, et al. A study of 200 cases of genital lesions of non - venereal origin. *Ind J Dermatol Venereol Leprol* 1999; 64: 68-70.
- 7) Karthikeyan K, Jaisankar TJ, Thappa DM. Non-venereal dermatoses in male genital region - prevalence and patterns in a referral centre in South India. *Indian J Dermatol* 2001; 46:18-22.
- 8) Erlap . Concurrent oral and genital involvement in lichen planus. *Ind J Dermatol Venereol Leprol* 2009; 75 : 77-78.
- 9) Cheung ST, Gach JE, Lewis FM. A retrospective study of the referral patterns to a vulval clinic: highlighting educational needs in this subspecialty . *J Obstet Gynaecol*; 26: 435-7.
- 10) Meneux E, Paniel BJ, Pouget F, Revuz J, Roujean JC, Wolkenstein P. Vulvovaginal sequelae in toxic epidermal necrolysis. *J Reprod Med*. 1997; 42: 1536.
- 11) Marren P, Wojnarowska F, Venning V et al. Vulvar involvement in autoimmune bullous diseases. *J Reprod Med* 1993; 38: 101-7. 118.
- 12) Khoo LS, Cheong WK. Common genital dermatoses in male patients attending a public sexually transmitted disease clinic in Singapore. *Ann Acad Med Singapore* 1995; 24: 505-9.
- 13) Fischer G, Rogers M. Vulvar diseases in children: A clinical audit of 130 cases. *Pediatr Dermatol* 2000; 17: 1-6.