

Original Research Article

A study of genital pruritus in female patients attending the dermatology OPD at a tertiary care center in South Rajasthan

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ABSTRACT

Background: Genital pruritus is a common complaint among women, the cause of which could be multitude. Identification of these causes can lead to prompt resolution of pruritus with appropriate therapies. The objective of our study was to determine the clinical profile of genital pruritus and its impact on quality of life amongst all female patients attending Dermatology OPD at our tertiary care centre.

Methods: An observational, descriptive, cross-sectional study conducted from June 2020-May 2021 on 196 female patients attending the dermatology OPD with primary complaints of genital pruritus. Diagnosis was established by history and clinical examination and confirmed by bed side tests and laboratory investigations as and when required.

Results: The mean age of the patients was 36.87 ± 15.24 years with 41.8% in the age group of 18-35 years. In majority (47.4%) of patients, itch was of moderate severity according to the Numerical rating scale. Infectious diseases (45.9%) were the most common cause followed by inflammatory (33.2%), idiopathic (19.4%) and hormonal (1.5%). Vulvovaginal candidiasis was by far the commonest (36.2%). The most common inflammatory dermatoses were lichen simplex chronicus (12.2%) followed by lichen sclerosus atrophicus (10.2%) and contact dermatitis (6.1%). 7 patients with idiopathic itch were diagnosed to have an underlying psychiatric illness.

Conclusions: As genital pruritus has multiple causes, proper categorization and diagnostic evaluation would be appropriate to achieve optimal treatment to meet the diverse needs of women who suffer from it.

Keywords: Genital pruritus, Vulvovaginal candidiasis, Lichen simplex chronicus, Idiopathic itch, Numerical rating scale, Pruritus impact score

INTRODUCTION

Genital pruritus is a common complaint among young girls and women presenting to primary care physicians, gynaecologists, and dermatologists. The potential causes of vulvar itch are vast and more often than not multifactorial.¹ Although pruritus in general has a profoundly negative impact on quality of life because of disruption in work and sleep, female genital itch further interferes with intimacy and sexual function, making it exceptionally distressing. Moreover, the great

psychosocial stress secondary to the sensitive nature of vulvar disease as well as the pervasive desire to scratch cannot be overstated. Vulvar pruritus is often complicated by several factors that are unique to the female anogenital anatomy including the complex innervation of genital skin, presence of both stratified squamous and modified mucosal epithelia, as well as introduction of various irritants via a direct connection to the urinary, reproductive, and digestive tracts.² There are many causes for genital pruritus such as skin diseases, infections/infestations, contact factors,

carcinoma and many systemic diseases which needs to be categorized and identified for effective treatment.³ Even though genital itch can have a profound effect on the quality of life of patients, there are very few studies on female genital itch in literature. We have therefore designed this study in order to get a good insight into the various causes of genital itch and its impact on quality of life among females reporting to a tertiary care hospital in South Rajasthan.

METHODS

The study was conducted in the department of Dermatology, Venereology and Leprosy, RNT Medical College, Maharana Bhopal hospital, Udaipur, Rajasthan. It was a cross sectional observational clinical study conducted from June 2020 to May 2021. An informed consent was obtained from all patients or from their parents in case of patient being minor. All female patients across all age groups attending the Dermatology OPD with genital itch as the primary complaint were included except for those who failed to give consent. As per the available data from previous studies, the incidence of genital pruritus among female patients was calculated as 8% approximately.⁴⁻⁶ Using the formula mentioned below sample size was calculated:

$$n = Z^2 x P (i - P) / \epsilon^2$$

Where, P=Prevalence=8%, ϵ =allowable error (taken as 5%), Z=2.58 at 99%CI, considering 95% confidence interval and 10% as attrition rate, the sample size was calculated as 196.

Clinical diagnosis was established by history and clinical examination with the help of two senior consultants. The information about patients demographic data, duration and severity of itch, associated complaints, comorbidities, previous treatment history, itching in other sites etc. were recorded in a predesigned proforma. The effect on the patient’s quality of life was assessed using the Numerical rating scale and Pruritus impact score. The genitals were examined in adequate light to check for presence of erythema, discharge, sclerosis etc. During the examination, relevant bed side tests like KOH, Gram’s stain, saline mount and other laboratory investigations were carried out. Clinical photographs were taken after obtaining patient’s consent.

Statistical analysis

Statistical analysis of the data collected was done using the Statistical Package for Social Scientist, SPSS version16.0 and Microsoft Excel. Results on categorical measurements were presented as Frequency (%).

RESULTS

This study was carried out as a hospital based, descriptive, cross-sectional study in the dermatology out-

patients’ department at RNT Medical College, Udaipur. The total number of patients recorded were 196. The mean age of the patients was 36.87±15.24 with majority (41.8%) in the age group of 18-35 years (Table 1).

Table 1: Age distribution of patients.

| Age group (years) | N | % |
|-------------------|------------|--------------|
| <18 | 14 | 7.1 |
| 18-35 | 82 | 41.8 |
| 36-50 | 64 | 32.7 |
| >50 | 36 | 18.4 |
| Total | 196 | 100.0 |

97 (49.5%) patients had acute itch (≤6 weeks duration) which was almost similar to the number of patients with chronic itch (>6 weeks) i.e. 99 (50.5 %) (Figure 1). Itch alone was observed in 40.3% of our patients while 59.7% had itch associated with other sensations like burning and pain.

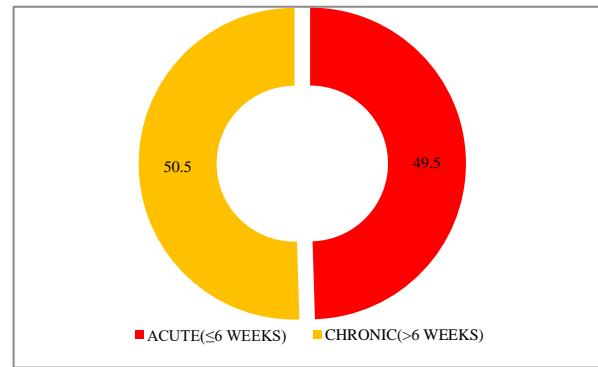


Figure 1: The total duration of itch whether acute or chronic.

In 47.4% of the patients, itch was of moderate severity (4-6) on the Numerical rating scale (NRS) and very severe itch (≥9) was seen in only 8.7% (Table 2). On the Pruritus impact score (PIS), majority (66.8 %) of the patients had only a small effect (4-8) on their quality of life.

Table 2: NRS for severity assessment of itch.

| Severity of itch | N | % |
|------------------|----|------|
| Mild (<4) | 19 | 9.7 |
| Moderate (4-6) | 93 | 47.4 |
| Severe (7-8) | 67 | 34.2 |
| Very severe (≥9) | 17 | 8.7 |

Very large effect (16-29) was seen only in 2% of the patients (Table 3). Vulval involvement alone was seen in 61.7% of the patients and vulvovaginal involvement in 35.7%. In majority (45.9%) of the patients, itch was due to infectious causes and in 33.2%, inflammatory dermatoses were the cause. Idiopathic itch was seen in 38 (19.4%) followed by hormonal causes in 1.5% (Table 4).

The commonest cause of genital itch overall was found to be vulvovaginal candidiasis (36.2 %) (Figure 2). Out of the total 90 patients with infectious causes, it accounts for 70% (Table 5).

Table 3: Quality of life assessment on the basis of PIS*.

| Pruritus impact score | Effect on patients | N | % |
|-----------------------|------------------------|-----|------|
| 0-3 | No effect on patients | 16 | 8.2 |
| 4-8 | Small effect | 131 | 66.8 |
| 9-15 | Moderate effect | 45 | 23.0 |
| 16-29 | Very large effect | 4 | 2.0 |
| 30-42 | Extremely large effect | 0 | 0 |

*PIS: a validated tool to measure impact of itch on quality of life, formulated in our department.

Table 4: Various aetiologies of itch categorized.

| Aetiology | N | % |
|--------------|-----|-------|
| Infections | 90 | 45.9 |
| Inflammatory | 65 | 33.2 |
| Idiopathic | 38 | 19.4 |
| Hormonal | 3 | 1.5 |
| Total | 196 | 100.0 |

A recurrent history of vulvovaginal candidiasis (≥ 4 episodes/ year) was observed in 9% of these cases. Among the risk factors for vulvovaginal candidiasis, we found pregnancy to be the most common risk factor, seen in about 6.3% of the patients followed by diabetes, HIV and use of intrauterine devices in 4.7% each (Table 6). 36.2% of the patients in our study had vaginal discharge on examination and in 90.2% of them, vulvovaginal candidiasis was found to be the cause of discharge. In the remaining 9.2% with vaginal discharge, vaginal trichomoniasis and bacterial vaginosis accounted for 4.3% each.

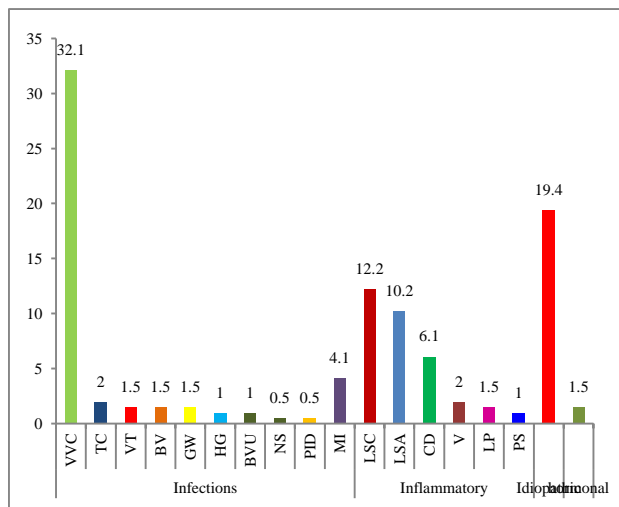


Figure 2: Distribution of diseases according to various etiologies.

Tinea involving the mons pubis and labia majora was seen in 4 of our patients along with involvement of the groin skin bilaterally. Sexually transmitted diseases like genital warts and herpes genitalis were the causes of itch in 3 and 2 patients respectively. Two of our patients had bacterial vulvitis and both of them were prepubertal girls (14.3%). Nodular scabies was found to be the cause of itch in one patient.

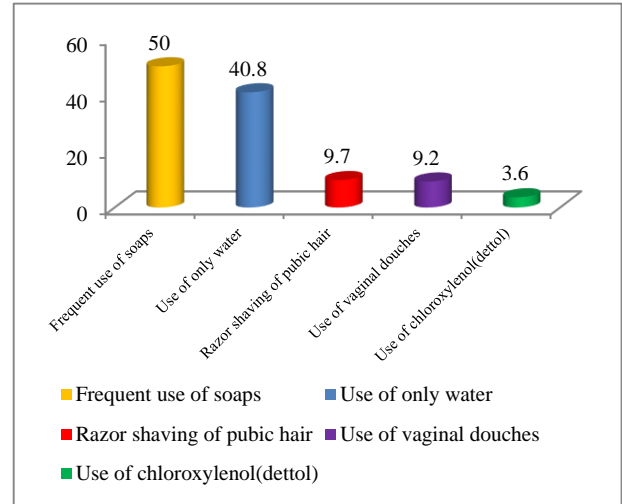


Figure 3: Hygiene practices followed by patients.

Amongst the inflammatory dermatoses causing genital itch, Lichen simplex chronicus was the most common diagnosis seen in 24 (12.2%) of our patients. A history of atopy was seen in 5 of them. The cause of itch was lichen sclerosus atrophicus in 20 (10.2 %) and 4 (20%) of them, had history of underlying autoimmune disorders like diabetes mellitus and hypothyroidism. Contact dermatitis (both irritant and allergic) was the cause of itch in 6.1% of the total number of patients (Table 7). Personal hygiene measures were used by 72.5% of our patients. (90) 50 % were using soaps and (18) 9.2% vaginal douches on the genital skin as a hygiene practise. Use of chloroxylenol (dettol) was seen in (7) 3.6% and razors for shaving pubic hair in (19) 9.7% (Figure 3). 25 % of our patients with an eczematous cause (LSC or contact dermatitis) were using one or the other hygiene measures. Vitiligo, which is usually a nonpruritic dermatosis of genital skin, was found to be the cause of itch in 4 of our patients. Lichen planus and psoriasis were diagnosed to be the cause in 3 (1.5%) and 2 (1%) of our patients respectively. The cause of genital itch in 5.8% of the postmenopausal patients was due to atrophic vulvovaginitis which accounts for 1.5% of the total number of patients examined. Idiopathic pruritus was the diagnosis in 38 (19.4%) of our patients where genital itch was the presenting complaint but on examination, the genital skin and mucosa appeared normal. A psychiatric referral was done for all these patients. 7 (18.4%) out of these 38 patients were diagnosed to have an underlying psychiatric illness with mood disorder in 3 of them and mild depressive disorder in 3 patients. 1 was already a known case of mixed anxiety depressive disorder.

Table 5: Various infectious causes according to age group.

| Infections, N (%) | <18 | 18-35 | 35-50 | >50 | Total | % |
|---------------------------------|---------|-----------|-----------|---------|-------|-------|
| Vulvovaginal candidiasis | 1 (1.6) | 37 (58.7) | 20 (31.7) | 5 (7.9) | 63 | 70 |
| Tinea cruris | 0 (0) | 1 (25) | 3 (75) | 0 (0) | 4 | 4.4 |
| Genital warts | 0 (0) | 3 (100) | 0 (0) | 0 (0) | 3 | 3.3 |
| Bacterial vaginosis | 0 (0) | 2 (66.7) | 1 (33.3) | 0 (0) | 3 | 3.3 |
| Vaginal trichomoniasis | 0 (0) | 2 (66.7) | 1 (33.3) | 0 (0) | 3 | 3.3 |
| Bacterial vulvitis | 2 (100) | 0 (0) | 0 (0) | 0 (0) | 2 | 2.2 |
| PID | 0 (0) | 1 (100) | 0 (0) | 0 (0) | 1 | 2.2 |
| Nodular scabies | 0 (0) | 1 (100) | 0 (0) | 0 (0) | 1 | 1.1 |
| Mixed infections | 0 (0) | 7 (87.5) | 1 (12.5) | 0 (0) | 8 | 1.1 |
| Herpes genitalis | 1 (50) | 1 (50) | 0 (0) | 0 (0) | 2 | 8.9 |
| Total | 4 (4.4) | 54 (60) | 26 (28.9) | 5 (5.6) | 90 | 100.0 |

Table 6: Risk factors for vulvovaginal candidiasis.

| Risk factors | N | % |
|-------------------|----|-------|
| Pregnancy | 4 | 6.3 |
| DM | 3 | 4.7 |
| PLHA | 3 | 4.7 |
| Use of IUD | 3 | 4.7 |
| Nil | 51 | 79.7 |
| Total | 64 | 100.0 |

Table 7: Various inflammatory causes according to age group.

| Inflammatory causes, N (%) | <18 | 18-35 | 35-50 | >50 | Total | % |
|------------------------------------|----------|-----------|-----------|-----------|-------|-------|
| Lichen simplex chronicus | 2 (8.3) | 11 (45.8) | 6 (25) | 5 (20.8) | 24 | 36.9 |
| Lichen sclerosus atrophicus | 2 (10) | 1 (5) | 6 (30) | 11 (55) | 20 | 30.8 |
| Contact dermatitis | 2 (16.7) | 2 (16.7) | 5 (41.7) | 3 (25) | 12 | 18.5 |
| Vitiligo | 0 (0) | 2 (50) | 1 (25) | 1 (25) | 4 | 6.2 |
| Lichen planus | 0 (0) | 1 (33.3) | 1 (33.3) | 1 (33.3) | 3 | 4.6 |
| Psoriasis | 0 (0) | 0 (0) | 1 (50) | 1 (50) | 2 | 3.1 |
| Total | 6 (9.2) | 17 (26.2) | 20 (30.8) | 22 (33.8) | 65 | 100.0 |

DISCUSSION

Genital pruritus is a frequently chronic and debilitating symptom associated with many vulvar disorders affecting about 10% of patients during their lifetime. The exact prevalence of genital pruritus is unknown, as epidemiologic data are limited and most reports focus on individual conditions involving genital itch.³ In a study conducted by Harlow et al that surveyed 480 women from the general population in Boston, Massachusetts, 6.6% of women reported vulvar itch.⁵ A similar prevalence of 5-10% was seen in Linn et al study on vulvar pruritus.⁶ Our's was a hospital based study done over a period of one year, where all female patients who attended dermatology OPD with complaints of genital itch were evaluated. The majority i.e. 41.8% of the patients in our study belonged to the age group of 18-35 years. The mean age was found to be 36.87±15.24 similar to the study by Utas et al.³ The study by Poindexter et al concluded that 7-15% of all cases of vulval itch are found

in the prepubertal age group similar to our study, where 10% of the patients were in the prepubertal age group.⁷ 26% of our patients were postmenopausal. A significantly higher prevalence was seen in <50 years of age which shows that they seek more consultation for genital itch compared to the elderly. In this study, 97 (49.5%) patients had acute itch (≤6 weeks duration) which was almost similar to the number of patients with chronic itch (>6 weeks) i.e. 99 (50.5 %). The duration of itch is variable in other studies. Harlow et al reported that 81.5% of the patient with vulvar pruritus had an acute itch while 18.5% had chronic itch.⁵ In Ozalp et al study, while 56.9% of the patients had an acute itch, 43.1% had chronic.⁸ In a study by Bedell et al the average duration of itch was 2 years.⁹ Itch alone was seen in 40.3% of our patients while 59.7% had itch associated with other sensations like burning and pain. This is similar to the study by Ozalp et al where itch alone was seen in 41.6% of the patients and associated sensations like burning and pain in 43.8%.⁸ Bedell et al found that 59% of the patients were found to have itch alone as the primary complaint

whereas additional symptoms were seen in 41%.⁹ Vulval pruritus can be associated with other symptoms of vulval irritation (VI) which includes a sensation of irritation, chafing, pain and burning. The severity of itch and its impact on quality of life was assessed by the numerical rating scale (NRS) and the pruritus impact score (PIS- is a validated itch assessment tool that has been developed in our department). We found that in 47.4% of the patients, itch was of moderate severity (4-6) on the numerical rating scale and very severe itch (≥ 9) was seen in only 8.7% of the patients. On the pruritus impact score grading of itch, 66.8 % of the patients had only a small effect (4-8) on their quality of life. Very large effect (16-29) was seen only in 2% of the patients. There are no previous studies in literature where the severity of female genital itch has been graded. Vulval involvement alone was seen in 61.7% of our patients. This is similar to a number of other studies conducted on female genital itch.^{3,5,8,9} Involvement of adjacent regions like the perianal skin and groin was seen in 9.2% of the patients.

The commonest cause of genital itch in our study was infectious diseases, out of which, vulvovaginal candidiasis was by far the commonest (36.2%). A recurrent history of vulvovaginal candidiasis (≥ 4 episodes/year) was observed in 9% of these cases. The diagnosis of VVC was made on the basis of a positive KOH mount in which fungal hyphae with yeast cells were seen. These results are similar to a study by Linn et al where vulvovaginal candidiasis was the most common cause in 40% of the patients with a history of recurrence in 8%.⁶ Foxman et al study also concluded that 35% to 40% of cases of genital pruritus was due to vulvovaginal candidiasis.¹⁰ Infectious diseases form a major part of the cause of female genital pruritus, with VVC being the most common, especially in the reproductive age group as it is an oestrogen dependent process. Among the risk factors for vulvovaginal candidiasis, we found pregnancy to be the most common risk factor, seen in about 6.3% of the patients followed by diabetes, HIV and use of intrauterine devices in 4.7% each. Kanya et al and Twinkle et al study also found pregnancy to be the most common risk factor seen in 29.1% and 33.6% of the patients respectively.^{11,12} Pregnancy was the most common associated risk factor in a number of studies, the reason being attributed to elevated steroid hormones in pregnancy which makes the vaginal mucosa acidic, predisposing it to infection. 36.2% of the patients in our study had vaginal discharge on examination and in 90.2% of them, vulvovaginal candidiasis was found to be the cause of discharge. In the remaining patients with vaginal discharge, vaginal trichomoniasis and bacterial vaginosis accounted for 4.3% each and pelvic inflammatory disease accounted for 1.4%. Vaginal trichomoniasis was diagnosed by the presence of mobile trichomonas vaginalis on wet mount and bacterial vaginosis by Amsel's criteria and with the presence of clue cells on wet mount. Pelvic inflammatory disease was diagnosed clinically and on ultrasonography, free fluid was found in the pouch of Douglas. Tewari et al study on vaginal

discharge also showed a similar prevalence (4.3%) of vaginal trichomoniasis.¹³ The prevalence of these diseases in patients with genital itch was less as they usually present with asymptomatic vaginal discharge.

Tinea involving the mons pubis and labia majora was seen in 4 of our patients along with involvement of the groin skin bilaterally. Tinea cruris is almost an epidemic these days. However, involvement of the external genitalia is seen only in very few cases. In the study by El Mazny only 2 out of the 298 cases of tinea cruris examined had genital involvement.¹⁴ Sexually transmitted diseases like genital warts and herpes genitalis were the causes of itch in 3 and 2 patients respectively. This is unusual since these patients usually present with either burning sensation or pain as the main complaint and rarely with itch. Two of our patients had bacterial vulvitis. Both of them were prepubertal girls (14.3%). The diagnosis of bacterial vulvitis was made clinically and on observing response to treatment with oral and topical antibiotics. In a study by Paek et al 9.1% of the prepubertal girls had bacterial vulvitis.¹⁵ Prepubertal girls are more susceptible to bacterial infections because of their thin, atrophic and more alkaline vaginal mucosa. Nodular scabies was found to be the cause of itch in one of our patients. Even though nodular scabies on the genitals is a common diagnosis in male patients, it is uncommonly seen as a cause of itch in female genital skin. Amongst the inflammatory dermatoses causing genital itch, Lichen simplex chronicus was the most common diagnosis seen in 24 (12.2%) of our patients. A history of atopy was seen in 5 of these patients. Lichen simplex chronicus is a morphological diagnosis and is recognized on clinical examination by the presence of lichenification and excoriation. The underlying cause of LSC could either be primary which arises denovo on tissues with a normal appearance or could be due to environmental factors (like heat and sweat retention, rubbing of clothing, extensive use of cleansers and irritating topical products) or underlying dermatological diseases (psoriasis, contact dermatitis, candidiasis or dermatophyte infections). Both types of LSC represent the same basic process in which itch scratch cycle assumes the predominate role by stimulation of type c, non-myelinated nerve fibres responsible for conveying itch to the central nervous system. The studies by Lynch et al and Cheung et al also concluded lichen simplex chronicus to be the most common inflammatory cause seen in 10-35% and 30.5% of the patients respectively.^{16,17}

The cause of itch was lichen sclerosus atrophicus in 20 (10.2%) of our patients similar to the studies by Haverhoek et al and Cheung et al where it was found to be the cause in 11.6% and 17.3% of the patients respectively.^{17,18} 4 (20%) of these patients, had history of underlying autoimmune disorders like diabetes mellitus and hypothyroidism comparable to the study by Cooper et al in which 21.5% of patients with LSA had an associated autoimmune disease and hypothyroidism

(12%) was the most common.¹⁹ LSA most commonly affects prepubertal girls and postmenopausal women. Out of the 24 cases of LSA in our study, 17 (71%) were postmenopausal. Lichen sclerosus atrophicus is an important cause of genital itch because if missed it can progress to squamous cell carcinoma of the vulva. Contact dermatitis (both irritant and allergic) was the cause of itch in 6.1% of the total number of patients. All these patients had an acute itch and were diagnosed clinically. Patch testing was not done in our study. Brennan et al found contact dermatitis to be the cause in 15% of his patients.²⁰ According to a study by Haverhoek et al 81.4% of patients with vulval pruritus had at least one positive contact allergen on patch testing with relevant allergens in 44%.¹⁸ Personal hygiene measures were used by 72.5% of our patients which included use of soaps in 50%, vaginal douches in 9.2%, chloroxylenol (dettol) in 3.6% and razors for shaving pubic hair in 9.7%. From our study, it was noticed that one or another hygiene measure was used by 25% of patients with an eczematous cause (LSC or contact dermatitis). In the study by Marin et al, damaging hygiene products were reported in 68% of patients.²¹ In an attempt to keep the genital area clean, patients usually indulge in overenthusiastic hygiene practices and start using over the counter medicinal products. With a large industry of feminine care products coming up, women have become regular users of these products which in turn worsen their preexisting symptoms. Even though this subject is important, there is little data on literature regarding the relevance of personal hygiene habits and their impact on vulval diseases.

Vitiligo, which is usually a nonpruritic dermatosis of genital skin, was found to be the cause of itch in 4 of our patients. It resembles lichen sclerosus atrophicus clinically and is sometimes difficult to differentiate between them. Dermoscopy and histopathology can aid in a proper diagnosis. However, our diagnosis was not confirmed with a biopsy as the patients did not comply. There are no previous studies in literature where genital itch was found to be the primary symptom in patients with vitiligo. Lichen planus was found to be the cause of itch in 3 (1.5%) of our patients. Similarly in the study by Ozalp et al 1 (0.7%) patient was diagnosed with lichen planus.⁸ The prevalence of genital psoriasis was 1% in our study, which was comparable to a previous study by Utas et al where psoriasis was the cause of itch in 2% cases.³ Meeuwis et al concluded that genital psoriasis can occur in 2-5% of cases of genital itch.²² Psoriatic lesions on the vulva are more common in children than adults according to the study by Fisher et al.²³ However in our study, both the patients with psoriasis were adults. 5.8% of the postmenopausal patients were diagnosed with atrophic vulvovaginitis which accounts for 1.5% of the total number of patients examined. This diagnosis was confirmed by cytologic examination of smears from the upper one third of the vagina which showed an increased proportion of parabasal cells and a decreased percentage of superficial cells. Bachmann et al in a study concluded

that an estimated 10 to 40% of postmenopausal women have symptoms of atrophic vaginitis.²⁴ In the postmenopausal state, estradiol levels are typically less than 30 pg/ml which causes thinning of the vaginal epithelium, loss of elasticity and an increase in the pH, all contributing to itch. Idiopathic pruritus was the diagnosis in 38 (19.4%) of our patients where genital itch was the presenting complaint but on examination, the genital skin and mucosa appeared normal. Following a thorough psychiatric assessment, 7 (18.4%) out of these 38 patients were diagnosed to have an underlying psychiatric illness. One of them was already a known case of mixed anxiety depressive disorder. Out the rest, 3 were diagnosed with mood disorder and the remaining 3 with mild depressive disorder. In Nicholas et al study, idiopathic pruritus was found to be the cause of itch in 7% of the cases including those with underlying psychological factors.²⁵ In the study by Bedell et al, 39% of the patients with genital itch were due to nonspecific or idiopathic causes.⁹ Paek et al reported idiopathic pruritus to be the cause of itch in 75% of patients in the prepubertal age group while in our study only 4 (28.6%) of the prepubertal girls had idiopathic or nonspecific pruritus.¹⁵ Idiopathic pruritus involving the genital region is not an uncommon condition and could be initiated by a somatic disease. One of the subsets of idiopathic pruritus is psychogenic. But there is a significant overlap between the two. We strongly believe that idiopathic pruritus is a manifestation of underlying psychological conflicts such as fear related to sexually transmitted disease or cancer, and guilt or shame over an issue of sexuality. In a study by Tey et al “functional itch disorder or psychogenic pruritus,” has been defined as an itch disorder, where itch is at the centre of the symptomatology, and where psychological factors play an evident role in the triggering intensity, aggravation, or persistence of the pruritus.” Functional itch disorder can be differentiated from idiopathic pruritus in that the former consists not only of negative features (no somatic cause) but it also has positive features (clinical characteristics and association with psychological disorders or stressful life events).²⁶ Localised vulval pruritus can also be due to neuropathic causes like nerve root compression at the levels of L4 to S2 secondary to spinal injury or lumbosacral arthritis. Small fibre neuropathy secondary to diseases such as Diabetes mellitus or viral infections can also be the cause of such neuropathic itch. Some of our patients with idiopathic pruritus could be having an underlying neuropathic cause. However, we did not attempt to investigate these patients further in our study. Vulvar pruritus is a complex symptom of multifactorial origin, varying from a benign parasitic pinworm in prepubertal girls to malignancy such as squamous cell carcinoma complicating lichen sclerosus in the older population. Therefore, it is of paramount importance to recognize that vulvar pruritus is a symptom and not a disease. In spite of the importance of the subject, there are very few studies on female genital itch and its impact on the quality of life. Our study aims to fulfil this unmet need.

Limitations

Limitations of current study were; patch testing was not done in our study to differentiate between allergic and irritant contact dermatitis and biopsy of suspected lesions could not be done because patients did not give consent for the same.

CONCLUSION

We categorized the causes of female genital itch into infectious, inflammatory, idiopathic and hormonal and also assessed the severity of itch and its impact on quality of life of the patients. It was found that infectious diseases are the most common cause of genital itch of which vulvovaginal candidiasis was the commonest. Among the inflammatory disorders, Lichen simplex chronicus was the most common cause. Various sexually transmitted diseases can also present with itch as the primary complaint. In 19.4% of our patients, the genitalia appeared to be normal on examination. These patients were categorized as having idiopathic pruritus and an underlying psychiatric disorder was found in 7 of them. The patients with lichen simplex chronicus and idiopathic pruritus have a strong underlying psychological distress. A detailed history of use of various hygiene practices and its relation to the occurrence of vulval dermatoses was obtained in our study. We found that these hygiene measures due to their significant impact on barrier function aggravate the already existing symptoms. Therefore, educating the female patients about the avoidance of these female intimate products and proper skin care should be an important component of any therapeutic strategy. It is central to the management of vulvar pruritus to offer a detailed discussion of the condition and treat patients with empathy. Their complaints should be taken seriously and patients should be informed about what could cause their symptoms and which treatment options are available for them.

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Ethical approval: The study was approved by the Institutional Ethics Committee

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