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Review Article

Vulvar lesions in females - exploring to management

Richa Garg*

Department of Dermatopathology, Universal Eye and Skin Care, Moradabad, Uttar Pradesh, India

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***Correspondence:**
Dr. Richa Garg,
E-mail: richag24@gmail.com

ABSTRACT

Vulvar lesions in females are not uncommon. They affect females of all age groups. The common infections at vulvar skin are fungal, viral and bacterial. They present with rash, itch, boils, fissures and scales. Many of these lesions mimic each-other. The patients with vulvar lesions present at late stage due to social stigma modifying the disease. This article highlights the salient features to diagnose and manage the vulvar lesions early and promptly before their modification at later stage.

Keywords: Infections, Vulva, Females, Fungal, Viral, Bacterial

INTRODUCTION

Vulvar problems in females are commonly encountered in gynecology and dermatology departments. The common vulvar infections encountered in outpatient department (OPD) are genital warts, herpes, molluscum contagiosum, fungal and bacterial infections.

Due to paucity of studies that have symmetrically studied the prevalence of vulvar disorders, the prevalence is not known exactly. However, Mundhe et al and Pathak et al in their study showed the prevalence as 2.12% and 1.9% respectively among all female disorders attending the OPD.[1,2]

Vulvar disorders may occur in females of all ages. The common clinical symptoms observed are rash, itch, bumps, vesicles, fissures, scales, sexual discomfort, fever and pain.

Sometimes, the patient presents a later stage due to inability to discuss clinical symptoms with family members or general practitioners aggravating and modifying the disease. These infections should be diagnosed early and promptly for proper management of the condition.

METHODS TO DIAGNOSE

Skin scrapping

This is the most common method to diagnose fungal infections. The scrapping is done by 23 G scalpel blade and sample is taken from the edge of fresh lesion, placed on the glass slide and sent for microscopic examination in pathology lab. A drop of 10% potassium hydroxide is put on the scrapping and observed under 40X. Fungal hyphae will be seen as elongated branching thread like structures.[3]

Skin puncture

Skin puncture is done with the help of toothpick when there is a case of suspected molluscum contagiosum infection. The material is collected on the glass slide and stained with Giemsa stain to observe HP bodies under microscope at 40X.[4,5]

Tzank smear

This is a simple and rapid technique to detect bullous etiology like herpes. The crest of fresh vesicle is removed with 23 G scalpel blade or edge of spatula from the base of the lesion. Under the microscope at 40X, ballooning of multinucleated giant cells is seen in herpetic infection.[4,5]

Skin swab

In case of discharge coming out from skin lesions, swab can be taken and sent to pathology lab. Gram stain is used to know bacterial etiology. Culture of the swab can be sent further to know the drug sensitivity.[4,5]

Skin biopsy

Skin biopsy with 2 mm to 5 mm punch should be taken from the edge of lesion for accurate histopathological diagnosis. Histopathology is the gold standard for any skin lesion.[5]

DISCUSSION

Fungal infections

Vulvar skin fungal infections are caused by dermatophytes of the genera Trichophyton, Epidermophyton, Microporum.[3,4] It occurs commonly in summer and rainy seasons due to increased humidity. The lesions are itchy, annular or polycyclic with active scaly margin on erythematous base. Immunity plays a significant role as fungi affect people with low immunity and cause recurrence. The patient needs to avoid synthetic or wet clothing. Treatment includes use of azoles creams with oral itraconazole capsules or terbinafine tablets for 1 week. Anti-fungal powder may be used to avoid moisture. Oral or topical steroids are avoided and used only when severe inflammation is present. Zinc tablets are given to increase immunity as fungal infections recur in immune-compromised patients. Maintenance of intimate hygiene is important to avoid recurrence (Figure 1).[3]

Figure 1: Fungal infections.

Genital warts

Genital warts are caused by human papilloma virus and commonly found in sexually active females. Sometimes, they present as anogenital warts. They appear as soft, fleshy, pinkish- or skin-colored papules. Large genital warts may cause transmission of virus from mother to child during labor. Warts can be treated by podophyllotoxin cream applied for 8 hours for three days. Imiquimod 5% cream may also be prescribed. Other modalities to treat include application of 100% trichloroacetic acid (TCA), chemical cautery by 10% potassium hydroxide solution, radiofrequency (RF) cautery and cryotherapy. Large anogenital warts can be surgically removed. HPV vaccines at 9-14 years of females play a great role to prevent the occurrence of these warts (Figure 2).[6]

Figure 2: Genital warts.

Molluscum contagiosum

They are caused by Poxvirus. They appear as single or multiple umblicated pearly white papules. They spread by direct contact, fomites or sexual contact. The lesions may arrange linearly along the line of trauma and may be found in immunocompromised persons. On piercing the lesion, a cheesy white material can be extracted. These lesions are self-limiting. However, chemical cautery with 100% trichloroacetic acid or 10% potassium hydroxide can be done. Bipolar radiofrequency cautery gives instant result (Figure 3).[6-8]

Figure 3: Molluscum contagiosum.

Herpes genitalis

This is caused by herpes simplex virus, commonly occur in sexually active females and may spread from oro-genital contact. They appear as intact or ruptured vesicular lesions on erythematous base. The patient present with painful lesions, burning sensation accompanied with fever and

headache. Preventive measures include safe sex and condoms. Treatment includes use of antiviral drugs (acyclovir/famciclovir/valacyclovir) with antiviral creams and antibiotics to cover secondary infections (Figure 4).[6-8]

Figure 4: Herpes genitalis.

Bacterial infections

Bacterial infections may present in the form of mild to severe folliculitis and may follow waxing at genital area or clearing of pubic hair by razor. Folliculitis is commonly caused by staphylococci bacteria. These infections present as red small painful boils/bumps at and around hair follicles. Treatment includes oral and topical antibiotic creams and pain killers (Figure 5).[4-6]

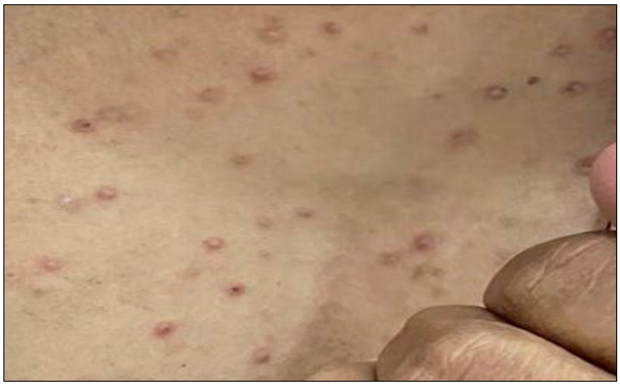

Figure 5: Bacterial infections.

Skin tags

These are called fibroepithelial polyps. Their etiology is unknown but may present as familial or associated with obesity. They are seen as soft, skin colored or pigmented pedunculated painless papules. Treatment includes radiofrequency/electrocautery ablation or cryotherapy (Figure 6).[1,6]

Other uncommon diseases

Vitiligo/leukoderma and psoriasis are autoimmune diseases aggravated by trauma. Treatment includes psoralens for leukoderma and immunosuppressant tablets like methoxtrate or cyclosporine for psoriasis given after checking complete blood count, liver function and kidney function tests. Tofacitinib ointment and tablets are newer upcoming drugs for autoimmune disorders. Lichen planus, lichen sclerosus and lymphangiectasia are rare disorders found at vulvar area. Treatment is symptomatic with oral mild to mid potency corticosteroids creams or surgery in case of lymphagiectasia (Figure 7).[2,7,8]

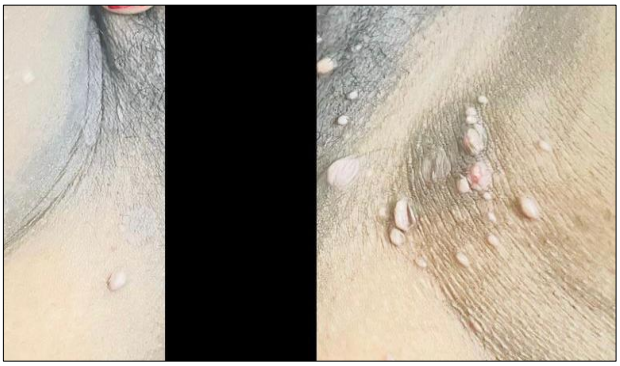

Figure 6: Skin tags.

Figure 7: Vitiligo/leukoderma.

CONCLUSION

Skin infections either fungal, viral or bacterial at vulvar area is as common as at any other site. However, due to no comfortability/shyness of the patient, the disease may be diagnosed at late stage aggravating the problem. So, whenever a general practitioner or a gynecologist finds some lesion on female genitalia skin accidentally during examination for any other cause, the same should be diagnosed and treated accordingly or referred to dermatology department for quick management of the lesion.

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