

CASE REPORT OLGU SUNUMU

DOI: 10.5336/dermato.2024-107944

An interesting case of Recurrent Herpes Genitalis Triggered by Irritant Contact Dermatitis

İrritan Kontakt Dermatit ile Tetiklenen Nadir Tekrar Eden Genital Herpes Vakası

^a Pankaj Kumar DAS^a, ^b Biju VASUDEVAN^a, ^c K Lekshmi PRIYA^a, ^d Prachi VERMA^a,
^e Nikunja Kumar DAS^b, ^f Sahjid MUKHIDA^c

^aArmed Forces Medical College&Pune, Department of Dermatology, Maharashtra, India

^bDriems University Institute of Health Sciences, Department of Microbiology, Cuttack, Odisha, India

^cDr. D. Y. Patil Medical College, Clinic of Microbiology, Maharashtra, India

ABSTRACT Herpes genitalis is one of the most common sexually transmitted diseases presenting in venereology clinics. It is a chronic disease characterized by recurrent episodes of painful grouped vesicles on the scrotum. It is known to be triggered by a myriad of factors like psychological stress, ultraviolet radiation (sun exposure), menses, fever, acute illnesses, physical trauma, therapeutic interventions like immunosuppression, fever therapy, and neurosurgical procedures on the dermatome are known to precipitate recurrence of herpes. We present a case of herpes genitalis triggered by irritant contact dermatitis (ICD) to a topical traditional medication, highlighting the importance of initiating c in these cases and not steroids for ICD, which may complicate herpes genitalis.

Keywords: Herpes genitalis; dermatitis; contact; medicine; traditional

ÖZET Genital herpes, veneroloji pratiğinde en sık karşılaşılan cinsel yolla bulaşan enfeksiyonlardan biridir. Skrotumda tekrar eden ağrılı, gruplanmış veziküler lezyonlarla karakterize kronik bir hastalıktır. Psikolojik stres, ultraviyole ışınlarına maruz kalma, adet dönemi, ateşli hastalıklar, akut sistemik hastalıklar, fiziksel travma ve immünosupresyon, ateş terapisi veya ilgili dermatoma yönelik beyin cerrahisi gibi bazı tedavi müdahaleleri dahil olmak üzere çeşitli iç ve dış etkenlerin nüksü tetiklediği bilinmektedir. Bu yazıda, geleneksel bir topikal tedaviye bağlı gelişen irritan kontakt dermatitin (İKD) tetiklediği nadir bir tekrar eden genital herpes vakası sunulmaktadır. Bu vaka, İKD tedavisinde topikal kortikosteroidler yerine nemlendirici tedavinin tercih edilmesinin önemini vurgulamakta, zira kortikosteroidler herpetik enfeksiyonları kötüleştirilebilmektedir.

Anahtar Kelimeler: Herpes genitalis; dermatit; kontakt; tıp; geleneksel tıp

Recent updates from the World Health Organization, approximately 64.2% of people under the age of 50 years have herpes simplex virus (HSV) Type 1 infection, and 13.3% of the 15-49 age group have HSV Type 2 infection, which, when transmitted, results in primary or asymptomatic herpes orolabialis or herpes genitalis.¹ Recurrent herpes simplex infections may be triggered by a variety of systemic/local factors like psychological stress, fever, systemic ill-

nesses, ultraviolet light, local irritation of the concerned dermatome, etc.² We present a case of genital herpes triggered by irritant contact dermatitis to a traditional Buddhist topical preparation.

CASE REPORT

A 22-year-old sexually active male, a resident of Ladakh (a cold desert in a high altitude area of India); a known case of tinea corporis et cruris presented

Correspondence: Sahjid MUKHIDA

Dr. D. Y. Patil Medical College, Clinic of Microbiology, Maharashtra, India

E-mail: drssmukhida@rediffmail.com

Peer review under responsibility of Türkiye Klinikleri Journal of Dermatology.

Received: 26 Dec 2024

Received in revised form: 04 Jun 2025

Accepted: 20 Jun 2025

Available online: 16 Jul 2025

2146-9016 / Copyright © 2025 by Türkiye Klinikleri. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).



with pain/burning sensation, redness, swelling, and oozing of erstwhile tinea lesions of a day duration after application of a “paste” on lesions at scrotum which was prescribed by an “Amchi” (Traditional Tibetan medicine-practitioner). He also complained of the appearance of multiple ulcers over the scrotum associated with pain and discharge. The patient was asymptomatic around 3 weeks ago when he started noticing the appearance of itchy ring-shaped lesions on his groin, followed by the appearance of similar lesions over his gluteal region, trunk, and parts of his extremities. He consulted a dermatologist and was diagnosed with a case of tinea corporis et cruris for which he was prescribed tablet fluconazole 150 mg once weekly and 1% clotrimazole cream to be applied locally. However, after 2 weeks of therapy, in the hope of faster recovery, he consulted a traditional Buddhist medicine practitioner who gave him a whitish-yellow powder to be mixed in water to form a paste, followed by application over the tinea lesions (Figure 1A). Within 5 hours of the application of the paste, he experienced pain/burning sensation, redness, swelling, and oozing of the areas where the paste was applied, followed by the appearance of multiple painful, shallow, oozy ulcers over the scrotum. There was no history of fever, urethral discharge, joint pains, redness of eyes, diarrhoea, pain abdomen or pelvic region, weight loss, jaundice, or blood transfusion. He gave 03 episodes of unprotected sexual intercourse with an acquaintance, the

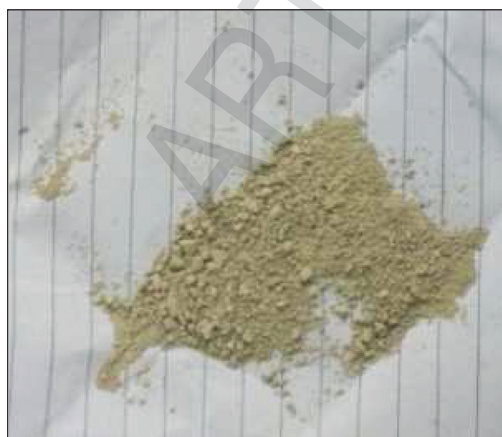


FIGURE 1A: The whitish-yellow powder prescribed by an Amchi (Traditional Tibetan medicine practitioner) to be mixed in water to form a paste, and be applied over the tinea lesions; contents of powder- not known

last being 7 months ago. He denied any other history of high-risk behaviour like men who have sex with men and intravenous drug abuse. On further history taking, he gave a history of 2 episodes of appearance of multiple, grouped, painful, fluid-filled lesions over the prepuce- spontaneously healing in 10-14 days in the last 2 years. His general physical and systemic examination was within normal limits. Dermato-venereological examination revealed: paste-smear tinea lesions over the extremities and trunk (Figure 1B). On cleaning the lesions with normal saline, the erstwhile tinea lesions showed features of eczematization (edema, erythema, oozing, and crusting (Figure 1C). The examination of the scrotum revealed multiple discrete to confluent, well-defined, round shallow ulcers, each approximately 0.3-0.5 cm in diameter,



FIGURE 1B: Paste-smear tinea lesions over the leg



FIGURE 1C: Erstwhile tinea lesions showed features of eczematization: edema, erythema, oozing, and crusting on cleaning with normal saline.

with oozy white necrotic floor (Figure 1D). They were tender on palpation; the base of the ulcers was free from the underlying tissues. There was bilaterally tender inguinal lymphadenopathy. There was no meatal erythema or urethral discharge. Rest of the genitalia- glans, coronal ridge, coronal sulcus, prepuce, shaft of the penis, spermatic cord, testes, perineum, and peri-anal region were normal. He was diagnosed with a case of recurrent herpes genitalis precipitated by irritant contact dermatitis in a known case of tinea cruris et corporis. Immunoglobulin G and immunoglobulin M for HSV were found to be positive and negative, respectively. The swab from the floor of the ulcers for Gram's staining revealed no organisms, and culture and sensitivity were also negative. Screening for sexually transmitted infections-Hepatitis B, C serology, venereal disease research laboratory, and Human Immunodeficiency Virus Enzyme-Linked Immunosorbent Assay were found to be negative. Tzanck Smear was not performed as the facilities are not available at the nearby laboratories. Smear from the site prepared and fixed for sending it to the higher centre. The slide was preserved and sent for microbiological evidence, which was later reported as positive for Herpes (Figure 1E). He was managed with tablet acyclovir 400 mg thrice

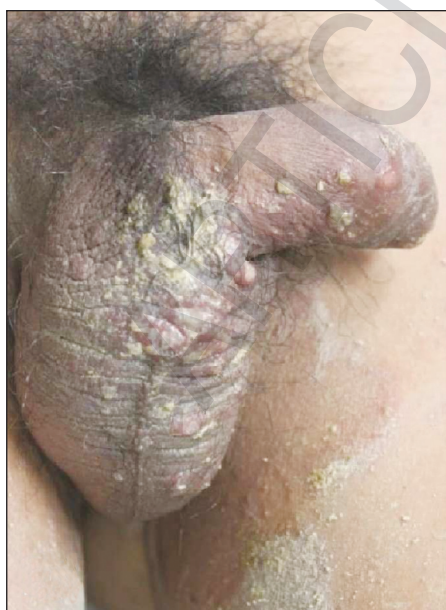


FIGURE 1D: Multiple, well-defined, discrete to confluent, round, shallow ulcers, each measuring 0.3-0.5 cm in diameter, with oozy, white necrotic floor present over the genitalia

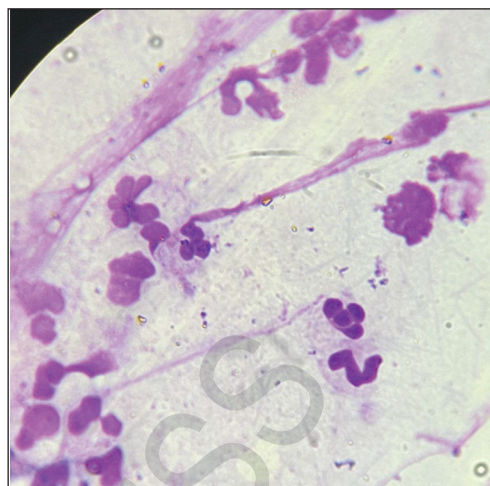


FIGURE 1E: Microscopic oil-immersion view of Tzanck smear prepared from lesion exudate shows the acantholytic multinucleated cells

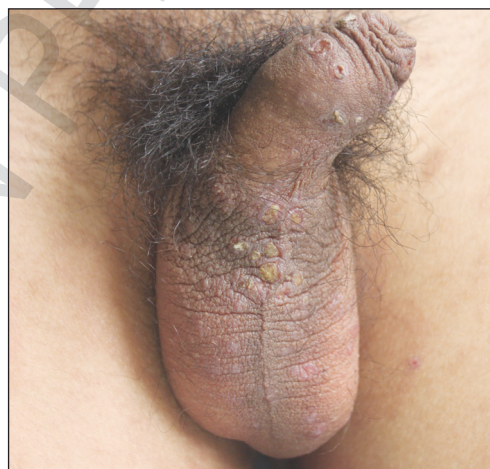


FIGURE 2: Complete healing of the ulcers with acyclovir and normal saline compresses

daily, oral medications for pain, and topical normal saline compresses with continuation of oral antifungal. He recovered completely in 02 weeks (Figure 2). He was advised not to apply any medications in the future without the consultation of a dermatologist. He was also instructed to follow safe sexual practices and get a sexual partner for dermato-venereological review and for a sexually transmitted infections screen.

The authors certify that they have obtained from person who participated in the study in standard patient consent forms. In the form the patient has given his consent for his images and other clinical information to be reported in the journal.

DISCUSSION

Herpes genitalis is the most common sexually transmitted infection presenting in the venereological outpatient clinic in India.³ Herpes genitalis can manifest as primary or recurrent episodes and is caused by herpes simplex virus Type 1 or Type 2. Transmission of the herpes simplex virus results in disease around the site of viral inoculation or may go unrecognized due to subclinical infection.² In addition to the local appearance of grouped vesicles leading to ulcers, the primary infection is usually associated with fever, malaise, and loco-regional lymphadenopathy. The symptoms associated with subsequent reactivation of the latent virus are generally milder.⁴ The lesions, many a time, are preceded by a prodrome which consists of tingling, burning, or itching sensations at the site where the herpetic lesions are likely to appear.⁵ Both systemic and local (dermatomal) factors are known to play a role in the reactivation of herpes. Triggers like psychological stress, ultraviolet radiation (sun exposure), menses, fever, acute illnesses, and physical trauma may trigger recurrent herpetic lesions.⁶ Direct insult to the ganglion and local cutaneous irritation to the dermatome in experimental animals have been shown to trigger HSV reactivation.⁷ In addition, therapeutic interventions like immunosuppression, fever therapy, and neurosurgical procedures on the trigeminal root are known to precipitate the recurrence of herpes.⁸ Primary or recurrent HSV infections may sometimes lead to complications like acute and recurrent aseptic meningitis, encephalitis, meningoencephalitis, radiculopathy, cranial neuropathy, ascending myelitis, acute retinal necrosis, disseminated herpes infections resulting in hepatitis, pneumonitis etc.^{9,10} Recent case report by Khedekar et al. showing the HSV infection on scotal region which

spared the penile area in immunocompetent individual who treated by Valacyclovir. Similar things noted in our case report.¹¹ Correct diagnosis and timely administering of acyclovir may prevent these complications.

CONCLUSION

This case highlights the importance of suspecting recurrent genital herpes triggered by irritant contact dermatitis which was treated with acyclovir resulting in complete recovery. On the contrary, if steroids were administered thinking only of irritant contact dermatitis, it could have led to complications as we see in herpes in the immuno-compromised.

Source of Finance

During this study, no financial or spiritual support was received neither from any pharmaceutical company that has a direct connection with the research subject, nor from a company that provides or produces medical instruments and materials which may negatively affect the evaluation process of this study.

Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

Idea/Concept: Pankaj Kumar Das; **Design:** Pankaj Kumar Das; **Control/Supervision:** Biju Vasudevan; **Data Collection and/or Processing:** Pankaj Kumar Das, Biju Vasudevan; **Analysis and/or Interpretation:** Pankaj Kumar Das, K Lekshmi Priya; **Literature Review:** K Lekshmi Priya; **Writing the Article:** Pankaj Kumar Das, Prachi Verma; **Critical Review:** Nikunja Kumar Das; **References and Fundings:** Sahjid Mukhida; **Materials:** Prachi Verma; **Other:** Sahjid Mukhida.

REFERENCES

1. World Health Organization [Internet]. Herpes simplex virus. © 2025 WHO [Cited: December 26, 2024]. Available from: <https://www.who.int/news-room/fact-sheets/detail/herpes-simplex-virus>
2. Gopinath D, Koe KH, Maharajan MK, Panda S. A comprehensive overview of epidemiology, pathogenesis and the management of herpes labialis. *Viruses*. 2023;15(1):225. PMID: 36680265; PMCID: PMC9867007.
3. Mathew R, Najeem B, Sobhanakumary K, Sunny B, Pinheiro C, Anukumar B. Herpes simplex virus 1 and 2 in herpes genitalis: a polymerase chain reaction-based study from Kerala. *Indian J Dermatol*. 2018;63(6):475-8. PMID: 30504975; PMCID: PMC6233037.
4. Johnston C, Magaret A, Selke S, Remington M, Corey L, Wald A. Herpes simplex virus viremia during primary genital infection. *J Infect Dis*. 2008;198(1):31-4. PMID: 18471083.
5. Bystrická M, Russ G. Immunity in latent Herpes simplex virus infection. *Acta Virol*. 2005;49(3):159-67. PMID: 16178513.
6. Hasanah NT, Hidayat W. Stress as trigger factor of HSV-1 reactivation causing recurrent intraoral herpes mimicking HAEM: a case report. *Int Med Case Rep J*. 2022;15:699-706. PMID: 36483161; PMCID: PMC9726214.
7. Kinchington PR, Leger AJ, Guedon JM, Hendricks RL. Herpes simplex virus and varicella zoster virus, the house guests who never leave. *Herpesviridae*. 2012;3(1):5. PMID: 22691604; PMCID: PMC3541251.
8. Bradshaw MJ, Venkatesan A. Herpes simplex virus-1 encephalitis in adults: pathophysiology, diagnosis, and management. *Neurotherapeutics*. 2016;13(3):493-508. PMID: 27106239; PMCID: PMC4965403.
9. Berger JR, Houff S. Neurological complications of herpes simplex virus type 2 infection. *Arch Neurol*. 2008;65(5):596-600. PMID: 18474734.
10. AK AK, Bhutta BS, Mendez MD. Herpes Simplex Encephalitis. [Updated 2024 Jan 19]. In: *StatPearls* [Internet]. Treasure Island (FL): StatPearls Publishing; 2025. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK557643/>
11. Bowman MS, Lang UE, Leslie KS, Amend G, Breyer BN. Herpes simplex virus-2 associated with a large fungating penile mass. *Urol Case Rep*. 2021;36:101594. PMID: 33604244; PMCID: PMC7872973.