

Ulcerating vulvar lesions revealing a rare female case of monkeypox in Switzerland



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The human monkeypox virus is a zoonotic orthopoxvirus initially discovered in Africa that causes a disease similar to smallpox with less severe symptoms. Since May 2022, the virus is being transmitted from human to human at an increasing rate outside of Africa. Although monkeypox infection was endemic in Africa, it had sporadic surges in recent years. This has led the World Health Organization to declare its highest alert level on July 25, 2022. In Switzerland only, 456 individuals have been diagnosed with monkeypox infection from May 19, 2022, to August 29, 2022. To date, >99% of patients with monkeypox infection are men, in particular those who have sex with other men. Clinical cases of women with monkeypox infection are still very rare but will more likely be seen. With this case, we have highlighted the fact that this zoonosis is also starting to spread among women. We have presented the case of a female patient living in Switzerland who presented to our gynecologic emergency department for painful vulvar lesions after an episode of upper respiratory tract infection. The monkeypox infection was confirmed with a real-time polymerase chain reaction analysis at the University Hospital of Geneva, a center of reference for monkeypox in Switzerland. Shortly after, the patient developed generalized and typical lesions on the whole body.

Key words: gynecology, infectiology, monkeypox

The monkeypox virus is an enveloped double-stranded DNA virus belonging to the orthopoxvirus (*Poxviridae* family). It is closely related to the smallpox virus but causes a less severe disease.¹ The first case of monkeypox infection was discovered in 1970 in the Democratic Republic of Congo. There has been a resurgence of cases of monkeypox infection since May 2022, with more than 6900 cases reported worldwide.²

In Switzerland, the Federal Office of Public Health reported 456 cases of monkeypox infection on August 29, 2022, with most cases affecting men (99.4%). A study published in the *New England Journal of Medicine* showed no female infected with the monkeypox virus among 528 patients.³ Another

study in the United Kingdom reported that the first 197 patients managed within a high consequence infectious diseases center in south London were all men.¹ Finally, a study conducted in the United States showed that among 1195 persons infected with the monkeypox virus since July 22, 2022, 99% of cases were men.⁴ The clinical symptoms are characterized by influenzalike symptoms, such as fever, lymphadenopathy, and rash.⁵ The most common sites of skin lesions are on the face, palms, and soles, and genital lesions are seen in 68% of cases.⁶ Most of the time, monkeypox infection is a short-term illness with symptoms lasting 2 to 4 weeks. The incubation time is generally 6 to 13 days, but it can vary from 5 to 21 days.⁷

It was earlier reported that patients who were vaccinated again with the smallpox vaccine developed a less severe illness.^{8,9} The complications of monkeypox infection are very rare but can include pneumonitis, encephalitis, sight-threatening keratitis, and secondary bacterial infections. Currently, there is no licensed treatment for the human disease, but 2 oral drugs (brincidofovir and tecovirimat) have demonstrated efficacy against monkeypox in animals and are promising for human treatment.¹⁰

A 31-year-old woman presented to the emergency department at our Swiss hospital on August 22, 2022, for severe vulvar itching. Clinical examination revealed no vulvar lesion and potential signs of mycosis for which she was prescribed econazole treatment.

On August 25, 2022, she came back to the emergency department in the middle of the night with an intense burning sensation and genital lesions that appeared shortly after the first consultation.

Clinical examination revealed vesicular lesions with inguinal adenopathy (Figure, A). A sample from the lesions was taken to investigate genital herpes (HSV1 and HSV2). The patient had a new partner for 2 months, currently living in France, with whom she had 2 episodes of unprotected sex approximately 2 weeks and 1 week before her first consultation. According to the patient, her partner never had any symptoms. Furthermore, she had not recently traveled outside of Europe. Hence, she was prescribed valaciclovir 1 g 2 times a day and painkillers.

Unfortunately, the patient returned to the emergency department the following night with severe pain. At that time, she had dysuria as a new symptom and mentioned that the valaciclovir treatment did not improve her

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The authors report no conflict of interest.

Although there is a complete absence of personal information and details, the patient gave oral consent.

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2666-5778/\$36.00

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FIGURE
Clinical manifestations of monkeypox



(A) Genital atypical vesicular lesions covered with econazole cream for suspicion of mycotic infection. (B) Atypical, ulcerated lesions with necrotic center and swollen outer left lip. Pustular lesions on the knee (C and E) and right hand (D) 7 days after the initial appearance of the genital lesions.

Ezzat. Rare female case of monkeypox in Switzerland. *Am J Obstet Gynecol Glob Rep* 2022.

symptoms at all. Clinical examination showed worsening of the lesions, swelling of the left lip without a formed abscess, and presence of confluent and ulcerated lesions in the center (Figure, B). Complete blood tests, including tests for HIV and syphilis, were performed. As there was no improvement with Valaciclovir we suspected chancroid and performed a smear test to detect *Haemophilus ducreyi* and also monkeypox. The patient was prescribed a single dose of ceftriaxone 250 mg intramuscularly for the suspected chancroid. She went home with opiate-derived painkillers.

After 4 days, results returned confirming monkeypox infection through real-time polymerase chain reaction. The patient was called to be informed and isolated. We expanded the medical history and learned that 9 days before the first genital symptoms, she presented severe flulike symptoms for which a COVID test was performed that returned negative. She mentioned that her partner also had flulike symptoms for a week at the same period. The patient now had lesions all over her body (Figure, C, D, and E).

The patient was instructed to remain isolated at home until all skin lesions

healed. All tests to detect sexually transmitted infections (STIs) returned negative, and the patient will be followed up to repeat the serology in 6 weeks.

This case report highlighted the potential spread of monkeypox as an STI among women.

A vaccine that provides effective protection is not yet allowed in Switzerland. However, vaccination is recommended in other countries (Europe and the United) as a preventive measure only for men who have sex with other men and for exposed medical professionals. We think it would be wise to recommend the vaccine to women at risk of

STIs (sex workers, multiple partners, etc.).

It is also known that people who did not receive the smallpox vaccine are more likely to be infected or to have a more severe disease than people who received the vaccine.⁸

For the time being, the treatment for monkeypox is only for symptoms, and complications of the disease are rare. As can be expected, valaciclovir, which was prescribed for suspicion of herpetic lesions, was not effective. For the most severe cases, it is possible in Switzerland and some other countries to use tecovirimat after reviewing the case with infectious disease specialists.

In our case, monkeypox infection resulted in genital, perianal, and global skin lesions. Therefore, we suggest that primary care physicians working with

female patients should consider monkeypox infection in their differential diagnosis when encountering genital lesions in their female patients. ■

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