

Monkeypox and genital skin diseases: New challenges from a dermatological perspective

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Monkeypox is a rare zoonotic viral illness that was originally identified in 1958 in the Democratic Republic of the Congo in monkeys. As a member of the Orthopoxvirus genus, monkeypox virus is closely linked to variola virus, which causes smallpox.¹ The transmission speed makes the disease a global health emergency, and epidemiological cases and deaths as of April 2023 are presented in **Figure 1**. Primarily, monkeypox is transmitted to people through contact with diseased animals, such as rodents or primates, or through direct contact with infected humans' bodily fluids. In humans, symptoms of monkeypox include fever, headache, muscle aches, and a rash that begins on the face and spreads to the rest of the body and the genital area.^{3,4}

From a dermatological perspective, monkeypox lesions can present as papules, vesicles, pustules, or nodules, similar to other viral exanthems, such as chickenpox and smallpox.⁵ Other dermatological manifestations of monkeypox can include the development of pustules, particularly in individuals with weakened immune systems (immunocompromise includes HIV/AIDS and infection with sexually transmitted diseases).⁶ The pustules can become

secondarily infected with bacteria, leading to cellulitis or abscess formation complications. Crusty pustules will fall out after a few weeks.

There is no specific monkeypox treatment, and monkeypox management is primarily supportive.⁷ Prevention involves avoiding contact with infected animals and humans. This makes it a concern for all parties, including dermatologists who treat people with skin and venereal diseases. Recently, there have been many reports of the severe development of monkeypox, a skin disease caused by sexually transmitted diseases that have not been treated intensively. Reports are available of hypertrophic verrucous lesions in the penis and on the left cheek of men who have sex with unprotected men;⁸ mucocutaneous lesions of the genital and perianal areas with whitish color and necrotic centers (pseudo pustules) in homosexual patients who had unprotected anal sex two weeks before infection.⁴ Research by Ciccarese also reported 14 patients infected with monkeypox and three people reporting being positive for HIV and monkeypox. His observations revealed that patients with dermatological symptoms had skin eruptions or mucosa consisting of papules, vesicles, or erythematous pustules that tended to crust and ulcerate in the anogenital region. Some have found the presence of gonococcal or nongonococcal proctitis.⁶ Similar to the findings in New York, one woman had vulvar and intravaginal lesions together with labia majora

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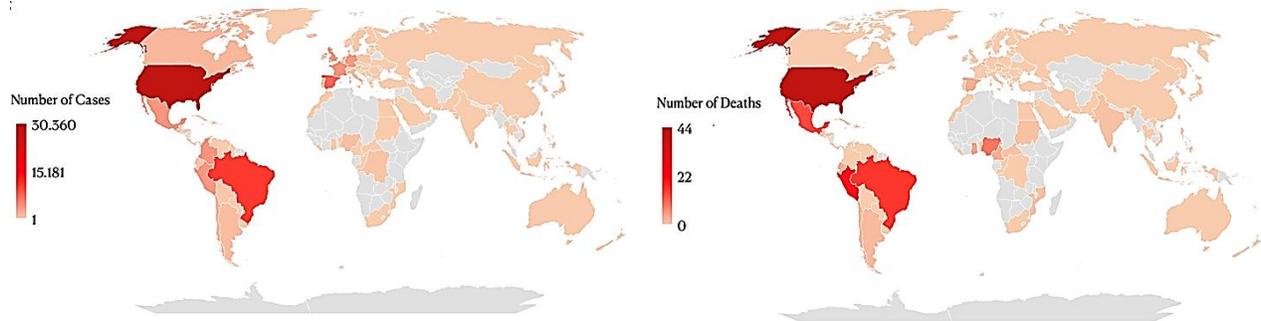


Figure 1 Epidemiology of cases and deaths from Monkeypox as of April 2023.

ulceration and a positive diagnosis of monkeypox.⁹ Genital lesions have also been reported in Spain in HIV-positive men after having unprotected sex.³ All these findings prove that monkeypox has a new history of finding routes for spreading sexually transmitted diseases and skin and genital infections worldwide that may become pandemics if not treated early.

Monkeypox and genital skin disease are two different dermatological conditions that present new challenges from a dermatological perspective in diagnosing the disease early and differentiating it from other skin diseases with similar symptoms. Since the symptoms of monkeypox can mimic those of other skin diseases, such as genital herpes, syphilis, and molluscum contagiosum, performing a physical exam, reviewing the patient's medical history, and conducting laboratory tests to confirm the diagnosis is very important. Dermatologists must be skilled in accurately diagnosing this condition and managing the emotional impact it may have. Then, a supportive treatment focusing on reducing symptoms to maintain the patient's emotions, implementing strict infection control measures, infection prevention and control education, and follow-up with patients becomes a new challenge in disease control and eradication from a dermatological perspective. In the future, cross-field collaboration is needed to minimize the occurrence of a monkeypox pandemic with genital skin diseases.

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