



Monkeypox: Is It a Sexually Transmitted Infection?

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Dear Editor,

Monkeypox is a zoonotic viral infection caused by an orthopox DNA virus. Historically, this virus has been endemic in Africa, with isolated outbreaks due to contact with animals. New monkeypox cases are occurring worldwide (1).

As of Aug 8, 2022, CDC has reported 28220 confirmed monkeypox cases, most of whom are seen in countries with no reported history of this disease (2).

New clinical manifestations and epidemiological trends have been observed during the recent outbreak. In several studies, preliminary data suggest that a majority of these rising cases are men who have sex with men (MSM).

A study of 54 confirmed monkeypox cases reported that all the cases were identified as MSM, and 13% had HIV. All the patients had skin lesions, of whom 51 (94%) were anogenital, four (7%) patients had oropharyngeal lesions, and 37 (89%) patients had lesions in multiple areas of their body. It is noteworthy that almost 25% of the patients had co-existing STIs (3).

According to a study published by the New England Journal of Medicine, out of 528 confirmed monkeypox patients from 16 countries, 98% were homosexual or bisexual men. Also, 41% of the patients were living with HIV. However, a great majority of the patients were taking ART and/or had an HIV viral load of fewer than 50 copies per milliliter, concluding that the infection was well controlled in most of the patients. In this study, 73% of the cases had anogenital lesions, and 41% had mucosal lesions. Systemic symptoms following rashes included fever, lethargy, and myalgia. Moreover, concomitant STIs were seen in 109 (29%) out of 377 patients tested earlier (1).

Many monkeypox patients identified as MSM display different clinical manifestations compared to the classical monkeypox infection. For instance, skin lesions are frequently found on the genital and perianal areas. Skin le-

sions do not necessarily transmit from macule to papule, vesicle, or pustule, as traditionally expected. Pustules can appear as the first symptom prior to systemic symptoms. Additionally, unique presentations such as penile edema, rectal pain, and secondary bacterial infection have been observed (4).

As demonstrated, there is still inadequate evidence that monkeypox is an STI. However, studies have demonstrated an unusual transmission of the monkeypox virus among gays, bisexuals, and MSMs, which supports the hypothesis that monkeypox can be sexually transmitted.

Monkeypox can become a health threat in MSMs. Immunodeficiency resulting from uncontrolled HIV infection can cause more severe clinical manifestations. The existence of concomitant STIs can mislead clinicians in diagnosis, considering the similarities in skin presentations of monkeypox and some STI rashes.

The World Health Organization has recently created a monkeypox case reporting form to gather information about the characteristics of monkeypox in different cases (5). Hopefully, this surveillance system reduces misdiagnosis and expands the knowledge surrounding this disease.

In conclusion, it is recommended to consider the diagnosis of monkeypox in MSMs with typical clinical manifestations and a history of risky sexual behavior. MSMs with monkeypox presentation should be tested for other STIs, especially HIV. Also, antiretroviral therapy and viral load monitoring should be prioritized for MSMs with uncontrolled HIV.

It is crucial to note that, although the ongoing monkeypox outbreaks mainly involve MSMs, as learned from the HIV epidemic, stigmatization against a particular population group must be avoided.

Footnotes

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References

1. Thornhill JP, Barkati S, Walmsley S, Rockstroh J, Antinori A, Harrison LB, et al. Monkeypox Virus Infection in Humans across 16 Countries - April-June 2022. *N Engl J Med*. 2022. doi: [10.1056/NEJMoa2207323](https://doi.org/10.1056/NEJMoa2207323). [PubMed: [35866746](https://pubmed.ncbi.nlm.nih.gov/35866746/)].
2. *CDC Monkeypox 2022 Global Map*. CDC; 2022. Available from: <https://www.cdc.gov/poxvirus/monkeypox/response/2022/world-map.html>.
3. Girometti N, Byrne R, Bracchi M, Heskin J, McOwan A, Tittle V, et al. Demographic and clinical characteristics of confirmed human monkeypox virus cases in individuals attending a sexual health centre in London, UK: an observational analysis. *Lancet Infect Dis*. 2022. doi: [10.1016/S1473-3099\(22\)00411-X](https://doi.org/10.1016/S1473-3099(22)00411-X). [PubMed: [35785793](https://pubmed.ncbi.nlm.nih.gov/35785793/)].
4. Patel A, Bilinska J, Tam JCH, Da Silva Fontoura D, Mason CY, Daunt A, et al. Clinical features and novel presentations of human monkeypox in a central London centre during the 2022 outbreak: descriptive case series. *BMJ*. 2022; **378**. e072410. doi: [10.1136/bmj-2022-072410](https://doi.org/10.1136/bmj-2022-072410). [PubMed: [35902115](https://pubmed.ncbi.nlm.nih.gov/35902115/)]. [PubMed Central: [PMC9331915](https://pubmed.ncbi.nlm.nih.gov/PMC9331915/)].
5. *Monkeypox Case investigation form (CIF) and minimum dataset Case reporting form (CRF)*. World Health Organization; 2022. Available from: [https://www.who.int/publications/m/item/monkeypox-minimum-dataset-case-reporting-form-\(crf\)](https://www.who.int/publications/m/item/monkeypox-minimum-dataset-case-reporting-form-(crf)).