

LETTER TO EDITOR

Monkeypox Outbreak in Non-Endemic Areas: Will it Cause a New Pandemic? a Letter to Editor

Mostafa Alavi-Moghaddam^{1*}

1. Emergency Medicine Department, Imam Hossein Hospital, Faculty of Medicine, Shahid Beheshti university of Medical Sciences, Tehran, Iran.

Received: June 2022; Accepted: June 2022; Published online: 25 July 2022

Cite this article as: Alavi-Moghaddam M. Monkeypox Outbreak in Non-Endemic Areas: Will it Cause a New Pandemic? a Letter to Editor. Arch Acad Emerg Med. 2022; 10(1): e60. <https://doi.org/10.22037/aaem.v10i1.1706>.

Dear Editor;

Monkeypox (MP) is a rare endemic infection found in tropical rainforest areas of west or central Africa. The recent world health organization (WHO) reports of confirmed MP cases from non-endemic areas have raised global concern over the risk of a new pandemic. Monkeypox is a misnomer, as the first confirmed case of MP was diagnosed in a monkey in 1958; however, MP virus is a viral zoonosis that belongs to Orthopoxvirus genus of the Poxviridae family and in addition to old and new world monkeys and apes, it can infect rats, mice, squirrels, prairie dogs, and rabbits (1). MP virus can be transmitted through touching blood, body fluids, spots, blisters or scabs of infected animals or infected persons. MP virus is also spread through touching the clothing, bedding, or towels of infected persons. Face to face exposure to infected persons and eating raw or under-cooked meat from infected animals are other sources of infection (2). According to the report of European Center for Disease Prevention and Control (ECDC) on 15 June 2022, confirmed non-endemic cases of MP have increased to 1158 cases in 22 EU/EEA countries and 724 cases in 13 non-EU/EEA countries. Most of those cases have been found in young men and almost all of the patients are men who have had sex with men (1).

Monkeypox is usually a mild and self-limiting disease. The symptoms usually present within 2 weeks of exposure to the sources of infection and typically include fever, headache, sore throat, swollen lymph nodes, and rash evolving from macules to vesicles and eventually becoming pustules. The symptoms last from 2-4 weeks. Mild MP cases only need to be isolated at home to prevent transmission of disease to the healthy people. In special hosts (immunocompromised in-

dividuals, pregnant women, infants, and young children) the severity of MP symptoms is higher and the outcome may be poor. The severe cases of MP may need antiviral treatment (i.e. tecovirimat), which is not globally affordable yet (3).

The health care workers (HCWs) who examine or practice with a suspected case of MP should appropriately use infection prevention and control measures including personal protective equipment (PPE) (medical mask, gloves, Gown, eye protection by goggle or face shield) and hand hygiene. PPE should be disposed prior to leaving the isolation area, where the patient is admitted. HCWs must use a respirator (FFP2 or N95) if the patient needs urgent aerosol generating procedures (i.e. aspiration or open suctioning of respiratory tract specimen, bronchoscopy, intubation, cardiopulmonary resuscitation).

Those who have unprotected exposures to patients with monkeypox do not need to leave work duty if asymptomatic, but should undergo close examination for symptoms, which includes measurement of temperatures at least twice daily for 21 days following the exposure. Each day, these HCWs should be checked regarding evidence of any relevant signs/symptoms as mentioned above. Post-exposure MP vaccination (ideally within 4 days of exposure) may be considered in immunocompromised or pregnant HCWs.

Prompt isolation of suspected or confirmed cases in a single room with adequate ventilation, dedicated bathroom, and staff using appropriate protection gear is recommended. Grouping (confirmed with confirmed, suspected with suspected) can be implemented if single rooms are not available, ensuring minimum of 1-meter distance between patients. Isolation and transmission-based precautions should be continued until resolution of symptoms.

In the current epidemiologic context of MP, clinicians should immediately report suspected cases of MP to the national or local public health authorities and probable and confirmed cases should immediately be reported to WHO by national health authorities.

*Corresponding Author: Mostafa Alavi-Moghaddam; Emergency Medicine Department, Imam Hossein Hospital, Shahid Madani Ave., Tehran, Iran. Email: mosalavi@sbm.ac.ir, Tel: 00989122967248, ORCID: <https://orcid.org/0000-0002-7176-023X>.



Monkeypox does not spread easily between people without close contact and that is why the MP threat is potentially low (4); thus, at this time, WHO does not recommend any international travel-related measures for incoming or outgoing travelers. However, WHO and ECDC have recently published a joint technical report and guidance on navigating monkeypox during the summer season for national health authorities (5).

1. Declarations

1.1. Acknowledgments

None.

1.2. Funding and supports

None to declare.

1.3. Conflict of Interest

None to declare.

References

1. ECDC. Monkeypox multi-country outbreak 15 June 2022 [Available from: <https://www.ecdc.europa.eu>].
2. UK NHS. Monkeypox 2022 [Available from: <https://www.nhs.uk/conditions/monkeypox/>].
3. Beusekom Mv. Antiviral drug may limit monkeypox symptom duration, infectiousness. CIDRAP News [Internet]. 2022. Available from: <https://www.cidrap.umn.edu/news-perspective/2022/05/antiviral-drug-may-limit-monkeypox-symptom-duration-infectiousness#:text=A%20study%20on%20the%20use,of%20monkeypox%20outside%20of%20Africa>.
4. CDC. Monkeypox 2022 [Available from: <https://www.cdc.gov/poxvirus/monkeypox/index.html>].
5. WHO. Multi-country monkeypox outbreak in non-endemic countries 2022 [21 May 2022:[Available from: <https://www.who.int/emergencies/disease-outbreak-news/item/2022-DON385>].

