

Monkeypox virus: A potential concern for Pakistan?

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Madam, the sudden emergence of the monkeypox virus occurred in 1970, after which it firmly anchored its roots in 11 countries in the African region. The virus belongs to the same genus as the variola and cowpox virus, the Orthopoxvirus.¹ Monkeypox is not as virulent as smallpox and usually clears up on its own without treatment, with symptoms occurring over 2-4 weeks. The disease ensues following viral entry via pharyngeal and intradermal routes, after which it spreads from the site of entry to local lymph nodes.² The infective period is classified into an invasive period which is typified by swelling of lymph nodes, severe anaesthesia, and headache lasting for 5 days; and the second period marked by dermatitis lasting for three days. However, monkeypox does not spread easily from person to person. Wearing clothes worn by someone else, sexual contact with an infected person, inhalation of contaminated droplets, and close contact with open wounds can eventually transmit the virus from one person to another.¹

Currently, there has been an outbreak of the monkeypox virus with nearly 200 cases being reported in more than 20 countries, the majority of which are non-African with Europe being the epicenter of this outbreak. The fact that monkeypox is detected in people with no apparent connection to one another and that a significant number of cases are being reported in homosexual men has been alarming.³ Although no case of monkeypox is reported yet in Pakistan, NIH has placed Pakistan on high alert against the virus in light of cases being reported in non-endemic countries. Pakistan lacks facilities for diagnostic tests for the virus. However, efforts are being made to forestall an outbreak with arrangements made to screen the inbound passengers and declare a patient "suspected" based on their symptoms until proper diagnostic kits arrive in the country.⁴

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DOI: <https://doi.org/10.47391/JPMA.7173>

Vaccina vaccine, which proved to be the cornerstone in eradicating the smallpox virus, offered a coincidental immunity against monkeypox too.

However, smallpox was termed eradicated in 1980 and the subsequent cessation of the smallpox vaccine means the supply of these vaccines is scarce. Current treatment for monkeypox include the use of antivirals such as Tecovirimat and Brincidofovir;⁵ and the use of FDA approved attenuated live virus vaccine, the JYNNEOSTM.¹

The need of the hour deems it imperative that we as a community work in unison to prevent an outbreak in Pakistan. The situation should be tackled by raising awareness through social media platforms, encouraging the practice of good hand hygiene, screening the inbound passengers for the virus together with keeping a check on their travel history, and quarantining those who are infected.

Disclosure: None.

Funding Sources: None.

Conflict of Interest: None.

References

1. World Health Organization (WHO). Monkeypox. [Online] 2022 [Cited 2022 May 29]. Available from URL: <https://www.who.int/news-room/fact-sheets/detail/monkeypox>
2. Moore MJ, Rathish B, Zahra F. Monkeypox. In: StatPearls. Treasure Island, FL: StatPearls Publishing LLC; 2022. [Online] 2022 [Cited 2022 May 29]. Available from URL: <https://www.ncbi.nlm.nih.gov/books/NBK574519/>
3. Kozlov M. News in focus: Monkeypox goes global: why scientists are on alert. *Nature* 2022;606:15-6. doi: 10.1038/d41586-022-01421-8.
4. Gurmani N. Testing kits ordered for monkeypox detection, will arrive soon: health minister. News release. The Dawn Media Center. [Online] 2022 [Cited 2022 May 29]. Available from URL: <https://www.dawn.com/news/amp/1691743>
5. Vitale G. Will smallpox antivirals be effective against monkeypox? News release. The Chemical and Engineering News Media Center. [Online] 2022 [Cited 2022 May 29]. Available from URL: <https://cen.acs.org/pharmaceuticals/rare-disease/smallpox-antivirals-effective-against-monkeypox/100/i19>