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Review

Monkeypox: An Emerging Global Public Health Emergency

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Abstract: The virus causing monkeypox, a rare zoonotic viral disease, belongs to the Poxviridae family and the Orthopoxvirus genus. On 23 July 2022, the World Health Organization (WHO) declared the monkeypox outbreak as a Public Health Emergency of International Concern (PHEIC). From May to July 2022, a multi-country outbreak of monkeypox was reported in both endemic and non-endemic regions. Major goals of managing monkeypox are to identify the suspected cases, detect generic orthopoxvirus DNA at a state or commercial laboratory, and establish the Centers for Disease Control and Prevention real-time polymerase chain reaction testing. Currently, there are no approved treatments for monkeypox virus infection. However, a variety of antiviral medications originally designed for the treatment of smallpox and other viral infections could be considered. Pre-exposure prophylaxis for laboratory and health care employees and post-exposure prophylaxis for individuals with high-risk or intermediate-risk exposures are to be considered. The CDC Emergency Operations Center is available for advice on the appropriate use of medical countermeasures, and can help in obtaining antiviral drugs and vaccines from the National Strategic Stockpile. This review gives an overview of the global scenario, clinical presentation, and management of monkeypox in the light of a global public health emergency.

Keywords: monkeypox; orthopoxvirus; public health emergency; World Health Organization