

South Asian countries should be ready to combat monkeypox

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Monkeypox, first found in humans in 1970 in Congo is knocking at the doors of South Asian countries. This zoonotic viral disease is caused by orthopoxvirus. It is comparably less contagious causing less severe illness than smallpox (the disease caused by the same family of virus eradicated from the world in 1980). The virus is an enveloped double-stranded deoxyribonucleic acid (DNA) virus and uncertainty still remains about the natural history of the virus. The virus is transmitted to human beings who remain in close contact with an infected persons or animals such as rope squirrels, tree squirrels, Gambian pouched rats, dormice, or with material contaminated with the virus while human-to-human transmission occurs through close contact with skin lesions, body fluids, respiratory droplets and contaminated materials such as beddings.^{1,2}

It is mainly a self-limited illness. The incubation period is usually from six to 13 days (range five to 21 days). The symptoms last for two to four weeks. The patient usually presents with fever, headache, back pain, myalgia, asthenia, lymphadenopathy, and rash and may develop a range of medical complications. The rash is mostly concentrated on the face and limbs evolving from macules to papules, vesicles, pustules, and crusts varying from a few lesions to several thousands. Lymphadenopathy differentiates from chicken pox and smallpox during the initial phase. The current case fatality ratio is around 3-6%.^{1,3} The median age at the presentation as per the evidence in 2010 was four years, but it has been gradually increasing and as of 2019, it has been presented to be 21 years.⁴

The preferred laboratory test for the diagnosis of monkeypox is polymerase chain reaction (PCR). Biopsy of the skin lesion is another option. Supportive care with maintenance of adequate fluid and nutrition and treatment of secondary bacterial infections are therapeutic options besides tecovirimat an antiviral agent is now available.^{1,5} The two doses regimen of modified attenuated vaccinia virus has been approved for the prevention in 2019. People need to be educated about the preventive measures to reduce the risk of human-to-human transmission, zoonotic transmission, and restrictions on the animal trade.^{1,6}

The disease remains endemic in tropical rainforest areas of central and west Africa. The outbreaks have occurred from time to time in endemic countries, but the first outbreak occurred in a non-endemic country in 2003 in the United States of America. The appearance of the virus in different populations around the world, in places where it is not often seen, has concerned scientists and set them scrambling for explanations.⁷ The spread could be associated with transactions of trading materials to and from Africa, travel, and interactions with infected individuals and animals.⁴ In May 2022, multiple cases of monkeypox have been reported from several non-endemic countries but have yet not been reported from countries of South Asia. The confirmed cases are reported from 28 non-endemic countries as of June 8, 2022. In

Asia, confirmed cases have been reported in United Arab Emirates (UAE)⁸ but the risk of getting the infection is very high due to the frequent travel of South Asian people to other countries where there are outbreaks of monkeypox infection. The south Asian countries should develop surveillance mechanisms and get prepared to respond to the outbreak following World Health Organization (WHO) Guidelines.^{1,6,9}

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