

# Ocular monkeypox virus infection – To worry or to not worry?



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Dear editor,

We had not yet recovered from coronavirus disease 2019 (COVID-19) and its consequences, which have affected all aspects of life, whether health or economic, before a new epidemic appeared in some countries called the monkeypox virus. This monkeypox virus belongs to the *Orthopoxvirus* genus. The first human monkeypox case was reported in 1971 in the Democratic Republic of the Congo.<sup>1</sup> West and Central Africa are considered endemic areas for the monkeypox virus.<sup>2</sup> On 07 May 2022, a monkeypox outbreak was reported in nonendemic areas such as Europe, the Americas and Australia.<sup>3</sup> Appearance of this outbreak in those countries may be because of the stoppage of smallpox vaccination, the migration of people from endemic areas to those countries or increased contact between people and monkeys after their migration into the forest.<sup>4</sup> Monkeypox is transmitted from animal to human through bites or scratches.<sup>5</sup> It then spreads from human to human through salivary or respiratory droplets or direct contact with the exudate of the skin lesion.<sup>6</sup> We suggest that monkeypox can spread to the eye through direct contact between the eyes and the infected hands or the respiratory droplets of the patients. Clinical manifestations of monkeypox include low-grade fever, sore throat, myalgia, lethargy, backache, headache, chills, skin rash and lymphadenopathy.<sup>7,8</sup> Lymphadenopathy is the commonest monkeypox sign and may appear before or within the rash.<sup>6</sup> The monkeypox rash is polymorphic, which may be macules, papules, vesicles, pustules and crusts. This rash has a centrifugal distribution and emerges 1–10 days after prodromal symptoms.<sup>9</sup> Ocular manifestations of monkeypox include conjunctivitis, blepharo-conjunctivitis and keratitis with corneal ulcerations.<sup>5,10</sup> Conjunctivitis in monkeypox patients may result in corneal scarring, which may lead to vision loss.<sup>11</sup> So ophthalmologists must be open-minded about monkeypox conjunctivitis, especially during the outbreak, to prevent its complications. Topical eye trifluridine is considered the best treatment for ocular infection with monkeypox, as it will relieve the symptoms and decrease complications. Antibiotics, whether oral or topical, may be used as a curative or prophylactic for secondary bacterial infection. However, topical steroids must not be used, as they help virus persistence and increase corneal complications.<sup>5</sup> As shown in Figure 1,

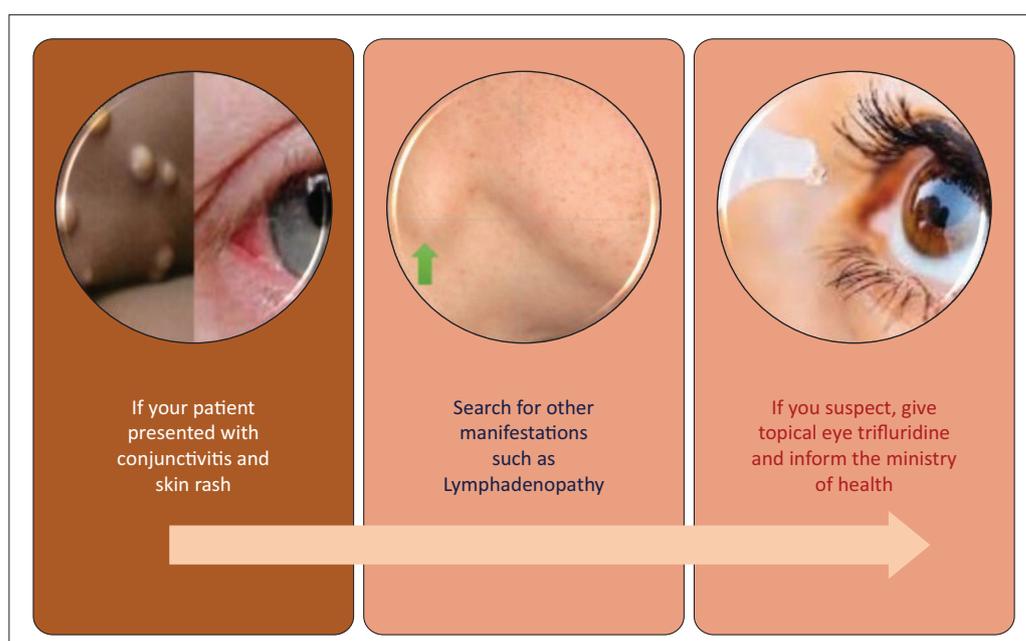


FIGURE 1: Home message for ophthalmologists about how to suspect and deal with a monkeypox case.

our message to ophthalmologists is that if any patient presents with conjunctivitis and skin rash, examine the patient for other monkeypox manifestations. If you suspect a monkeypox infection in this patient, you must inform the ministry of health of your country about the case after giving the topical eye trifluridine to the patient.

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The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

### Authors' contributions

A.F.E., W.S.A. and E.T. contributed equally to this work.

### Ethical considerations

This article followed all ethical standards for research without direct contact with human or animal subjects.

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## Disclaimer

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