

Oral Manifestations in Monkeypox Infected Patients

Manifestaciones Orales en Pacientes Infectados con Viruela del Mono

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Dear Editor

Since May 2022, multiple cases of monkeypox outbreak were identified in several non-endemic countries and continent. Currently, a few studies are trying to understand the reasons for this new outbreak as well as the clinical symptoms, sources of infection and transmission mechanisms. Monkeypox (MPX) is a rare zoonotic infectious disease caused by the monkeypox virus (MPXV). MPXV belongs to the genus *Orthopoxvirus*, family *Poxviridae* and is characterized by smallpox-like signs and symptoms, therefore it is commonly known as “monkey smallpox” (Gong *et al.*, 2022).

Human MPX was described in 70's and through the years occasional outbreaks of MPXV infections have been reported among countries that have historically reported MPX, but also in countries where MPX had not previously been reported, although this latest outbreak seems to be by far the most severe. Generally, MPXV is transmitted from animals to humans, it is known that wild animals such as squirrels, dormice, Gambian rats and other primates are considered the natural hosts for this viral disease, however the natural reservoir of MPX infection has not yet been clearly identified (Patel *et al.*, 2022).

In order MPX infection to occur a zoonotic transmission has to take place from direct contact with blood, body fluids, cutaneous or mucosal lesions of MPX infected animals and eating inadequately cooked meat or products of MPX infected animals is a possible risk factor for viral infection. Human-to-human transmission occurs as a result of indirect, long-term, personal contact with respiratory secretions, cutaneous lesions of MPX infected individuals, virus-contaminated items, like

clothing. It also can occur via the placenta as congenital MPX during close contact during or after newborn's birth and in addition in recent outbreaks MPXV's sexual transmission, specially, among men engaging in sex with other men it has been reported that sexual transmission route is a possibly a risk factor for human-to-human transmission (Petersen *et al.*, 2019).

MPX clinical signs and symptoms are similar to smallpox, but with milder characteristics. In MPX infections patients commonly manifests are myalgia, fatigue, high fever, headache, lymphadenopathy and mucocutaneous lesions, such as rashes, herpes, papules, blisters, pustules and then scarring after scabs. Oral cavity is an extension of the skin and is consisted of a stratified squamous epithelium, which may or may not be keratinized and although it is not the most common clinical site for MPX lesions, oral manifestations are report as initial symptoms with a prevalence that can range between 4.6 % to 23 % according to the literature. The most common MPX oral manifestations included: Pharyngitis, odynophagia, epiglottitis, oral or tonsillar ulcers, periodontal and tonsillarabscess, oral swelling, dysphagia, trismus, pain and difficulty swallowing (Adler *et al.*, 2022; Thornhill *et al.*, 2022). Therefore, MPX diagnosis might occur through MPX oral manifestations and as classified as initial symptoms may help infected individuals to start treatment earlier.

Although oral manifestations during MPX infection are possible, this paper has some limitations as there is a lack of fully clinical data on the prevalence and incidence of specific oral lesions that might appear and the location where it may occur in the oral cavity.

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