

CASE REPORT

Monkeypox. Report of a case received in our center and brief review of the case.

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ABSTRACT

By the time in May 2022, the World Health Organization and the Center for Disease Control and Prevention (CDC) in June 2022, confirmed the existence of 1200 cases in 29 countries, the resurgence of monkeypox in the world was firmly established as a public health problem. In our country we are aware of the existence of some cases. We report the first case of the disease received in our center.

INTRODUCTION

Monkeypox is a zoonosis of viral etiology that presents with manifestations very similar to those seen in patients with smallpox. The picture is characterized by fever, lymphadenopathies and skin lesions, which are preferentially located on the face, palms and soles.¹

Monkeypox is a double-stranded DNA virus of the genus Orthopoxvirus and of the family Poxviridae, which is transmitted to humans through contact with infected animals or humans or through material contaminated with this virus. Penetration of the virus occurs through direct contact with blood, fluids and epidermal or mucosal lesions, droplets from the respiratory tract or intrauterine. The incubation period ranges from 6 to 13 days but can be up to 21 days, with nonspecific prodromes such as headache, muscle aches and lymphadenopathy. The outbreak of skin lesions occurs two to three days after the prodromes, in centrifugal form, on the face and extremities with palmo-plantar involvement and with a lesion number that varies from scarce to multiple, being observed as lesions ranging from maculo-papules to vesicopustules,

crusts and desquamation for several weeks, after which they are no longer considered contagious.²

In summary, the classic characteristics of this disease can be established as follows:³

- Prodromal symptoms (fever, headache, malaise, and lymphadenopathy) within 5 to 21 days of exposure
- Painful centrifugal rash 1–3 days after fever
- Preferential location on the face (95%), followed by hands/feet (75%), oral mucosa (70%), genitalia (30%) and conjunctiva (20%).
- Sequential lesional progression (macules, papules, vesicles, pustules, crusts) over the whole body and at the same stage of development

Currently, there are authors who consider that monkeypox could be a frequent but not exclusive sexually transmitted infection in homosexual men, establishing that perineal and genital lesions suggest transmission of the disease through sexual intercourse,⁴ which can easily be confused with herpes simplex, molluscum contagiosum or syphilis.⁵

Atypical presentations of the disease are currently being reported, alternating with cases of classical presentation. These forms are observed as follows:⁶

- Scarce or isolated minimally symptomatic (painful or itchy) skin lesions
- Anal pain and bleeding without skin lesions
- Anogenital lesions without additional body involvement
- Injuries at different stages of development (asynchronous)
- Absence of prodromal period or minimal constitutional symptoms

In these atypical cases the picture may debut with few or even a single skin lesion, which may precede, rather than follow, the usual prodromal symptoms.

Although this infection can cause periocular lesions (periorbital and palpebral), the cornea and conjunctiva can be equally affected, causing keratitis and other additional lesions such as iritis/iridocyclitis, retinitis/chorioretinitis, optoneuritis, ophthalmoplegia and dacryocystitis, whose relationship with the infection is not completely clear.⁷

Complications related to simian pox may include pneumonia, encephalitis, sepsis and permanent vision loss due to corneal scarring.

Isolation should be maintained for approximately 14 to 21 days and close contacts should be isolated for 14 days.⁸

The risk factors⁴ that facilitate contagion are detailed as follows:

1. Young male patient
2. Risky behavior such as sexual intercourse without condoms
3. Promiscuity
4. History of sexually transmitted infections

Cases have been reported with concomitant sexually transmitted diseases that should be ruled out.

Diagnosis is based on the clinical picture, laboratory confirmation of suspected clinical cases by RT-PCR,

which is currently the gold standard, since serology is limited by cross-reactivity with other poxviruses.⁹

Dermoscopy shows an intensely whitish hue and an absence of vascular structures that may be helpful in the differential diagnosis with umbilicated lesions such as molluscum contagiosum.⁹

Although most cases evolve with mild, self-limited symptoms, some may progress to severe disease and require appropriate drug treatment. Tecovirimat is an oral or IV antiviral drug initially used for the treatment of smallpox and recently approved for the treatment of monkeypox. This drug acts by blocking the VP37 membrane protein of the virus which in turn blocks the release of viral particles from the infected host cell and prevents spread to the neighboring cell. It has also been used in combination with immunoglobulin vaccination to control complications such as eczema vaccinatum arising as a result of smallpox vaccination. Two vaccines are currently available for disease prevention ACAM2000 approved in 2007 for smallpox and MVA-BN approved in 2019 for both smallpox and monkeypox.^{10,11}

CLINICAL CASE

A 38-year-old male patient with a history of long-standing psoriasis. The patient refers that approximately ten days before he presented symptoms with general malaise, fever, headache, muscle pain, accompanied by a rash that he refers as vesicular-pustular in the genital region, neck and trunk. The patient did not present lymphadenopathies. Likewise, he has no history of homosexuality.

On examination, non-abundant lesions located on the ear, neck, trunk, abdomen, perigenital area and leg at different times, umbilicated vesicles (Photos 1 and 2), pustules (Photos 3 and 4), eroded and crusted lesions (Photos 5-6 and 7).

The dermoscopic examination allows us to observe the existence of a target lesion with an erythematous peripheral zone, a whitish intermediate zone that at some point reminded us of the cumulus sign observed

in the dermoscopy of sebaceous hyperplasia,¹² a scaly ring surrounding the central zone of rounded shape, whitish erythematous with the presence of punctiform hemorrhages. The irregular and curvilinear vessels characteristic of molluscum contagiosum are not observed (Photos 8 and 9).

Routine examinations and tests for herpes virus, syphilis and human immunodeficiency were performed, all of which were negative. A test for monkeypox was requested and the DNA detection of the virus was positive by PCR for Monkeypox virus.



Photos 1 and 2. Vesicular and clearly umbilicated lesions on the ear and neck.



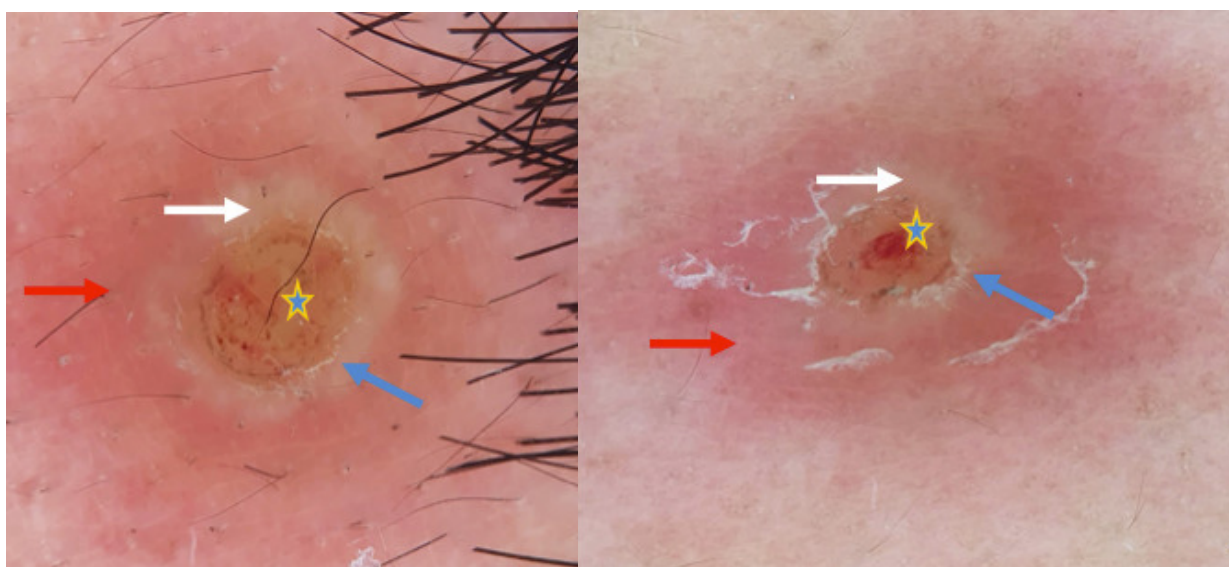
Photos 3 and 4. Pustular lesions.



Photos 5 and 6. Eroded and crusted lesions in the perigenital area.



Photo 7. Eroded and crusted lesions in the perigenital area.



Photos 8 and 9. Dermoscopy showing peripheral erythematous zone (red arrow), whitish zone resembling the cumulus sign (white arrow), scaly collarette (blue arrow), central pinkish-whitish zone with punctate hemorrhages (star).

The patient was followed for two weeks and was in clear remission at his last appointment, requiring no medication other than symptomatic.

CONCLUSION

This viral process has clinical characteristics that at a given moment can lend itself to diagnostic doubts, especially when it debuts with single or very few lesions. When a single lesion is located at genital level, it gives rise to confusion with a syphilitic chancre, and if they are umbilicated lesions could easily be taken for molluscum contagiosum and it is then when the clinical features of both simian pox and syphilis or molluscum

come into play to establish simple differences, such as the fact that molluscum contagiosum is not accompanied by the general manifestations of monkeypox.

However, when the presentation of this picture is pigeonholed in the atypical mode, as in our case, it can give rise to greater difficulty. That is why we thought it would be interesting to publish this case in order to establish basic concepts.

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