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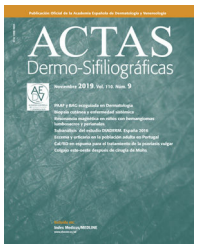

RESIDENT'S FORUM

[Translated article] RF – Monkeypox: Key Concepts

FR – Viruela símica: conceptos clave

E.L. Pinto-Pulido[a,*], **M. Fernández-Parrado**[b], **F.J. Rodríguez-Cuadrado**[c]

[a] *Servicio de Dermatología, Hospital Universitario Príncipe de Asturias, Universidad de Alcalá, Madrid, Spain*
[b] *Servicio de Dermatología, Hospital Universitario de Navarra, Pamplona, Spain*
[c] *Servicio de Dermatología, Hospital Universitario Puerta de Hierro, Madrid, Spain*

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The mpox (monkeypox) virus, like the smallpox virus, is a DNA virus belonging to the genus *Orthopoxvirus* of the Poxviridae family. Although the virus was first detected in 1958 in African monkeys, rodents are the main reservoir hosts. The virus was isolated in humans in 1970 in what is now the Democratic Republic of the Congo. Mpox became endemic there and in other countries of West and Central Africa. The first outbreak outside of Africa was reported in 2003, and subsequently there have been reports of cases in the United States, the United Kingdom, Israel, and Singapore imported from endemic countries.[1] In May of 2022, more than a hundred cases were reported in Europe (including Spain), North America, and Australia. Almost all of them had no connection to African countries, and the majority were in young men who have sex with men.[2]

Mpox can be transmitted through droplets or contact with skin lesions or fluids from an infected person or animal.[2] After an incubation period of 5–21 days, fever, headache, asthenia, myalgia, and lymphadenopathy begin to appear. The skin lesions appear between 1 and 5 days after the onset of fever, beginning on the face and then spreading to the trunk and the extremities. Lesions can involve the palms and soles as well as the oral, genital, and conjunctival mucosa.[3] In the cases recently reported among men who have sex with men, the lesions have a predilection for the genital area that was not described in previous outbreaks, suggesting infection through sexual contact.[2] Mpox lesions evolve sequentially from macules to papules, to vesicles, and finally to pustules that crust over approximately a week after they appear. In most cases the disease resolves after 3 or 4 weeks, although scars may remain.[3] Possible complications, which are more frequent in children and the immunocompromised, include bacterial superinfection of the skin lesions, keratitis, diarrhea and vomiting, bronchopneumonia, and

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* Corresponding author.
E-mail address: elucia.pinto95@gmail.com (E.L. Pinto-Pulido).

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encephalitis.[3] Mortality has been estimated to be 3.3% in cases from the West African clade (detected in Europe in 2022) and 10.6% in the Central African clade, although there have been no deaths outside of Africa according to 1 source.[1]

The diagnosis is confirmed through viral culture or molecular detection using polymerase chain reaction applied to samples from skin lesions or the pharyngeal exudate.[3] Treatment is symptomatic, although in 2022 the European Medicines Agency approved tecovirimat, an antiviral that inhibits the VP37 envelope wrapping protein.[4] When mpox is suspected, contact and droplet isolation precautions should be applied and public health authorities notified.[3]

The smallpox vaccine, which contains live vaccinia viruses, has been shown to protect against mpox and might provide a useful adjunct to other preventive measures.[5] After the eradication of smallpox in 1980, the use of this vaccine was suspended,[1] but a new third-generation vaccine with highly-attenuated vaccinia unable to replicate, and with an improved safety profile, has been developed in recent years.[5]

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