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# Enfermedades Infecciosas y Microbiología Clínica

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Scientific letter

## Acute paronychia: An atypical presentation of Monkeypox infection

### *Paroniquia aguda: una presentación atípica de la infección por Monkeypox*

Monkeypox is a rare disease caused by monkeypox virus (MPX). MPX belongs to Orthopoxvirus genus in the Poxviridae family, commonly found in central and west Africa. It's a viral zoonotic disease, whose host it's unknown, but African rodents and non-human primates can harbor the virus. The incubation period ranges from 4 to 21 days. The transmission occurs from direct contact with infected skin lesions and/or with contagious materials, by droplet exposure via exhaled large droplets or through the placenta. Until May

of 2022, few cases were reported in people from central/western African countries or with some link to that region.<sup>1,2</sup>

We describe a case of a 30-year-old, male, previously healthy, who came to our emergency room with painful tongue and left-hand lesions, odynophagia, and malaise for one week. The patient reported unprotected oral sexual contact with a man from Netherlands, asymptomatic to his knowledge, and the first lesion appeared four days after sexual contact. He denied other symptoms.

On observation, the patient had two painful superficial ulcers, 1 cm each, located on the dorsum and border of the tongue, with irregular whitish borders and violaceous center (Fig. 1a and b). He also presented tenderness, erythema, and edema of the distal phalanx of left middle finger, associated with two painful violaceous subungual ulcers, 2 mm each, in the distal portion of the nail bed,



**Fig. 1.** Monkeypox skin manifestations: two superficial ulcers located to the dorsum (A) and border of the tongue (B); acute paronychia and subungual ulcers of left middle finger (C); umbilicated whitish papule on left palm (D).

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distal onycholysis and a subungual abscess (Fig. 1c). An umbilicated whitish papule on left palm was also noticed (Fig. 1d). Bilateral cervical lymphadenopathies were present. No other skin, oral, genital, or anal lesions were present at that time.

The patient was submitted to an incision of hyponychium nail fold, resulting in middle purulent drainage, whose cultural examination was negative. Serology for Human Immunodeficiency Virus 1/2, hepatitis B, and hepatitis C was negative, and for syphilis was compatible with previously treated infection. Screening for *Neisseria gonorrhoeae*, *Chlamydia trachomatis*, and Herpes Simplex Virus 1/2 were negative; PCR in real time for Orthopoxvirus genus gene rpo18 followed by Sanger sequencing was positive for MPX in oropharyngeal and skin lesions.

Monkeypox was diagnosed associated with acute paronychia and cellulitis of left middle finger. The patient was treated with oral amoxicillin-clavulanate 875/125 mg and fusidic acid cream for finger lesions, combined with supportive care (oral analgesics, lidocaine gel, nystatin oral solution). He was reevaluated one month later, and total lesion regression was noticed with no associated scars.

The recent outbreak of monkeypox was declared a Public Health Emergency of International Concern. Until 28 July 2022, 16,016 laboratory confirmed cases have been reported from 75 territories, including 588 cases in Portugal.<sup>3</sup>

Monkeypox is often a self-limiting infection, with symptoms lasting between 2 and 4 weeks. In this outbreak, the most reported clinical features are skin lesions, mainly seen in the anogenital areas, which progress simultaneously through macular, papular, vesicular, pustular, and crusted stages, and are commonly accompanied by systemic symptoms such as fever, myalgias, headache, and lymphadenopathy.<sup>1,4</sup> Some complications such as pneumonitis, encephalitis, keratitis, and secondary bacterial infections have been reported,<sup>4</sup> but to our knowledge, no reports of subungual ulcers or acute paronychia have been published so far. We hypothesize that it occurred by autoinoculation (direct contact with self-oral ulcers) or direct contact with infected skin lesions from other individuals. In literature, viral paronychia is a well-defined entity, usually associated with Human papilloma virus or Herpes simplex virus. The most common complication is bacterial superinfection, most often caused by *Staphylococcus aureus* or *Streptococcus pyogenes*, which should be managed with local antiseptics, oral and/or topical antibiotics, and abscess drainage when present.<sup>5</sup>

In this case report, the monkeypox diagnosis was challenging due to the atypical clinical presentation.

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## Conflict of interest

None.

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The patient in this manuscript has given written informed consent to the publication of his case details.

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