# Urticarial exanthem as early diagnostic clue for COVID-19 infection



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## **INTRODUCTION**

During the coronavirus disease 2019 (COVID-19) epidemic, dermatologists and other physicians have been treating patients with cutaneous manifestations related to this infection. Because of the high risk of taking photographs of these patients, there are few clinical images reported in the literature.

## CASE REPORT

A 61-year-old Spanish physician came to the emergency department with a 4-day history of a progressive cutaneous rash. He had been treating patients with coronavirus infection for 3 weeks. On presentation, his temperature was 37.3°C. He did not complain of respiratory symptoms (such as cough or dyspnea), headache, malaise, sore throat, or nasal congestion. The patient also denied receiving any drugs during the last 2 months.

Physical examination showed an urticarial rash consisting of confluent, edematous, and erythematous papules on his thighs, arms, and forearms (Fig 1, *A* and *B*). Palms and soles were spared. Cutaneous lesions were mildly itchy. COVID-19 infection was suspected because of the current epidemiologic situation. A nasopharyngeal sample was obtained and reverse-transcription polymerase chain reaction confirmed the diagnosis of COVID-19 infection. Other common viral infections such as parvovirus B19, rubella, measles, Epstein-Barr, human herpes virus 6, and enterovirus that might cause fever and rash were ruled out by laboratory investigation. A

Abbreviation used: COVID-19: coronavirus disease 2019

chest radiograph did not reveal lung abnormalities. Because the patient had no risk factors, in accordance with Spanish guidelines he did not receive any specific treatment for the infection. He remained afebrile during the next week. Cutaneous rash resolved in 7 days. The patient received only oral antihistamine because of mild pruritus.

### DISCUSSION

Like other types of RNA viruses, COVID-19 infection can present with cutaneous findings. There are only 2 reports of cutaneous manifestations with COVID-19 disease.<sup>1-3</sup> However, neither of them reported clinical images because of the high risk of infection by introducing a photographic device in patients' rooms. COVID-19 infection can present with cutaneous findings. Some of these patients are afebrile and develop cutaneous manifestations at the onset, without any other symptoms.

The key aspect in this COVID-19 epidemic is to prevent transmission. This may pose a challenge in asymptomatic patients and in those with atypical symptoms. Professionals should recognize the possibility that a patient might have only a rash as a symptom of COVID-19 and think of this disease to promptly prevent transmission.

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Fig 1. A and B, Urticarial exanthem on the thighs.

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