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Cutaneous manifestations in COVID-19: the experiences of Barcelona and Rome

Dear Editor,

In December 2019, a new virus called severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) causing coronavirus disease 2019 (COVID-19) emerged in Wuhan, Hubei Province, China.^{1–3} SARS-CoV-2 is transmitted through respiratory droplets and object infected with droplets containing the virus.^{1,2} The diagnosis is made employing quantitative reverse transcriptase-polymerase chain reaction to identify the viral nucleic acid in respiratory specimens or blood samples.² The symptoms that have been associated with COVID-19 are dry cough, fever, runny nose, dyspnoea, anorexia and even nausea and diarrhoea.^{1,2} In severe cases, the patients may develop coagulation dysfunction, acute respiratory distress syndrome (ARDS), arrhythmia and septic shock.^{1,2}

Since December 2019, the virus has spread in Europe and other regions of the world: Italy and Spain have been among the most affected countries.^{4,5}

As dermatologists, we tried to comprehend the cutaneous involvement in COVID-19 as there is not much information in this regard in the literature.^{6,7}

We identified and visited 130 patients affected by COVID-19 in Sant'Andrea Hospital in Rome, and 2 (1.5%) of them presented with isolated herpetiform lesions on their trunk that had appeared during their inpatient stay (Fig. 1). Such lesions were characterized by vesicles surrounded by erythematous halos and were accompanied by mild pruritus. In one of the patients, the vesicles had started to form crusts.

Furthermore, we visited COVID-19 patients in Vall d'Hebron Hospital in Barcelona and found one patient who presented with numerous vesicular isolated lesions on her back which appeared 8 days after she had been diagnosed with COVID-19 (Fig. 2).

The lesions that we found in both hospitals are suggestive and typical of the infections caused by the members of the Herpesviridae family. We could speculate that they could be caused by either human herpes virus 1 (HHV-1), human herpes virus 2 (HHV-2) or varicella-zoster virus (VZV, HHV-3).

To date, there is only one report that investigates the prevalence and nature of dermatological manifestations associated

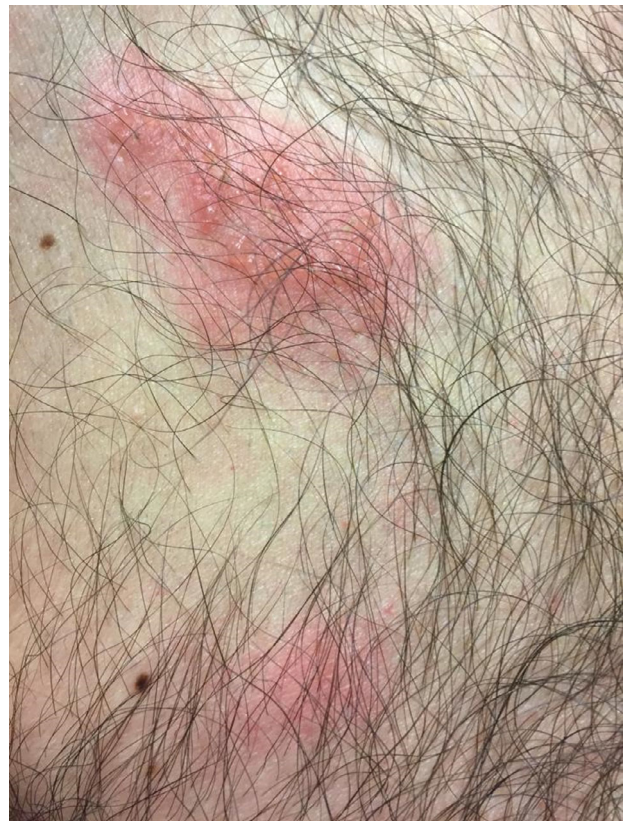


Figure 1 Vesicular lesions surrounded by erythema on the trunk of a patient.








Figure 2 Vesicular lesions on the back of a patient.

with the disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).⁶ A total of 148 COVID-19 patients were visited Lecco Hospital, Lombardy, Italy, and 88 were found eligible for data collection: 20.4% of them were found to have remarkable cutaneous manifestations that were mainly localized on the trunk.⁶ The manifestations reported were erythematous rash (15.9%), generalized urticaria (3.41%) and chickenpox-like lesions (1.14%).⁶ Unfortunately, no pictures of such lesions could be provided.⁶

The findings of the report from Lecco Hospital are in line with the ones that we found. However, more studies should be performed to investigate the nature of the relation between the appearance of skin lesions, in particular, chickenpox-like manifestations, and COVID-19.

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Cutaneous manifestation of COVID-19 in images: a case report

Editor

In December 2019, China reported the first group of pneumonia cases associated with a new coronavirus, 2019-SARS-CoV-2.¹ Currently, the novel coronavirus infection has become a pandemic.² Significant research efforts are taking place around the world to better understand the transmission dynamics, the spectrum of clinical disease, possible treatment options and prevention measures. Despite this, there are hardly any data or images in the current literature on the cutaneous manifestations produced by COVID-19 infection. In a series of 1099 patients with confirmed COVID-19 infection, Guan *et al* found that only 0.2% of them developed a cutaneous rash.³

We present the case of a 32-year-old female health professional with no significant past medical history whose presenting symptoms were fever, myalgia and asthenia. The following days, she developed cough and diarrhoea. Given the high suspicion of COVID-19, due to her symptoms and close contact with infected patients, a SARS-CoV-2-PCR of pharyngeal exudate was obtained, which resulted positive. At the moment, the subject remains in home isolation with symptomatic treatment with acetaminophen.

On the sixth day after the onset of symptoms, without a history of taking previous drugs, she presented with a generalized, pruritic morbilliform rash, with a sudden onset, with cephalocaudal progress, associated with low-grade fever and without accompanying respiratory distress. The cutaneous lesions observed are petechial and maculopapular on an erythematous base (Fig. 1). The distribution of the rash included face, neck, thorax, abdomen, buttocks, extremities, including folds and