




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



Figure 1 Rash onset.

scalp, respecting the palmo-plantar region and mucosa. Over the following days, the lesions became itchier, while the erythema intensity decreased (Fig. 2).

A scaly reaction occurred on the fourth day after the rash started and disappeared without leaving visible lesions. As the only therapeutic measure, an intravenous dose of corticosteroid and antihistamines was administered.

In order to accurately define the cause for the rash, it is important to collect as much information as possible about the episode, chronology and characteristics of the injuries.⁴ For this purpose, a comprehensive anamnesis, physical examination and, in this case, due to the high suspicion of COVID-19, a confirmatory RT-PCR test are necessary for the diagnosis.

Keeping COVID-19 in the differential diagnosis of a rash is the key because patients may be misdiagnosed by another entity.



Figure 2 Rash evolution, third day.

Joob reports the case of a COVID-19 positive patient who presented petechial rash, being initially misdiagnosed as dengue, delaying the definitive diagnosis.⁵

Recalcati reports in its series a total of 88 COVID-19 patients, 18 of whom developed skin manifestations (20.4%): erythematous rash, generalized urticaria and varicelliform rash. All of them pruritic in mild intensity, resolving within a few days. There was apparently no correlation with disease severity.⁶

It will also be important to determine whether the injuries are caused by COVID-19, if they are secondary to the use of drugs to treat it and even if they are the consequence of worsening of previous dermatological injuries, either due to emotional stress or by frequent use of disinfectants, hand washing or permanent use of masks.⁷ In our case, the patient did not have previous medication intake, nor was she exposed to any disinfectant; therefore, other potential diagnosis was excluded.



Based on our findings and review of current literature, we could consider that cutaneous manifestations, although in a low percentage, are present in COVID19 positive patients without being associated with a worse prognosis. We report the first images of cutaneous manifestation of COVID-19. The presence of other symptoms, the epidemiological history and the PCR test will be important to establish the diagnosis and to be able to establish early preventive measures. More studies are needed confirm and better understand how COVID-19 affects the skin.

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Pitfalls of possible reporting of same patients with COVID-19 in dermatology journals

Dear Editor,

The Editor in chief and Deputy Editors of the *JAMA* recently shared their concern regarding possible reporting of patients in more than one manuscript, while this has not been clearly indicated in the submission.¹ Although the unprecedented context of the COVID-19 outbreak justifies efforts for rapid dissemination of knowledge, such practice may be responsible for inaccurate interpretation and overestimation of published data.¹ Similar concern applies to dermatology. In Spain, the national COVID Piel study has reported 372 patients with skin manifestations related to COVID-19, including 71 patients with pseudo-chilblains, from April 3 to April 16.² One of the co-authors published in the meantime a series of 132 patients with chilblains from March 5 to April 15.³ The question of a possible overlap of cases is open to discussion. A French group published on one hand a retrospective nationwide study of 277 patients with skin

lesions related to COVID-19 from March 18 to April 9,⁴ and on the other hand 14 patients from a retrospective nationwide study from 18 March to 6 April 2020.⁵ They also published a letter about the analysis of 285 cases submitted on a WhatsApp® group from 14 March till 10 April 2020.⁶ None of the articles mentions the others. Corresponding authors acknowledged that most of the cases reported in Ref. [5] have been also included in Ref. [4]. The French Society of Dermatology has just finished collecting cases of patients with acral lesions for the COVID-SKIN study (inclusion from March 30 to May 4), but the study is still on going for other lesions.⁷ It will be important to know whether dermatologists that took part in the previous studies^{4–6} have also included the same patients in the forthcoming study. The same question applies to French colleagues who have already published or will publish case report/cases series on their own. We found also manuscripts mentioning multiple reports of the same patient. In Italy, among a series of 22 patients with COVID-19-related varicella-like lesions,⁸ an 8-year-old girl has been also published independently,⁹ but the authors mentioned the previous series⁸ in the article.⁹ Some cases need also better clarification. Joob & Wiwanitkit submitted on the same day two seemingly looking-like case reports in two different journals (doi: 10.1016/j.jaad.2020.03.036, doi: 10.1007/s00296-020-04561-0). However, the corresponding author kindly confirmed that both cases were different patients.

With the very high number of publications on COVID-19, authors need to remain transparent for the reader about multiple reports of same patients to avoid misinterpretation of the data.¹

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Disclaimer

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