

## Comment on ‘Cutaneous manifestations in COVID-19: a first perspective’ by Recalcati S

Dear Editor,

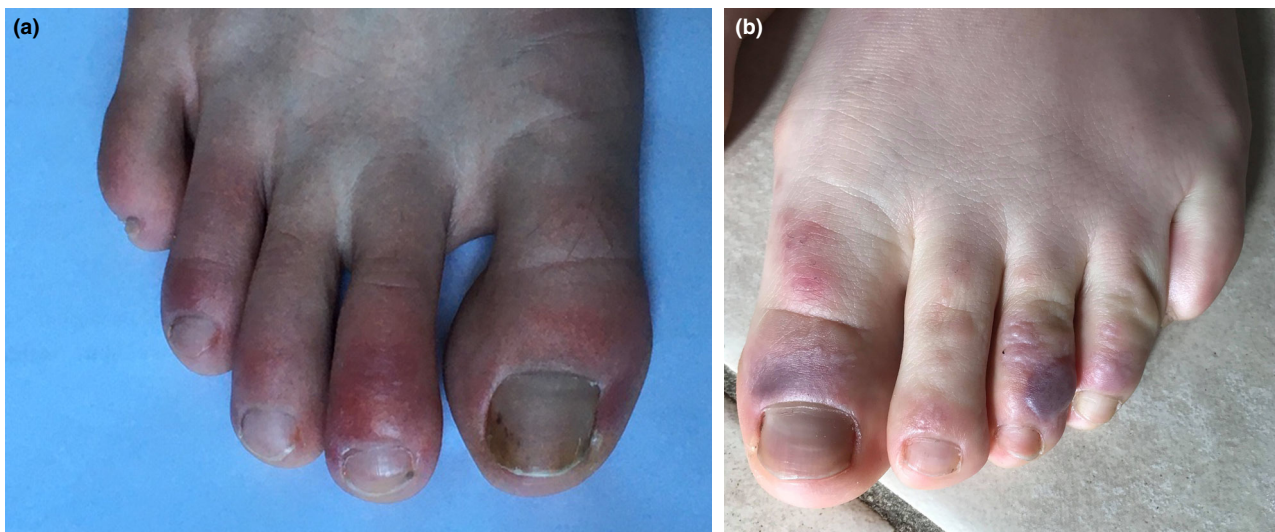
Since the coronavirus disease 2019 (COVID-19) outbreak was first reported in the Chinese city of Wuhan on 31 December 2019, it has stricken more than 1 000 000 persons worldwide, of whom over 50 000 have died.<sup>1</sup> Having been infected by severe acute respiratory syndrome coronavirus 2 (SARS-COV-2), patients with COVID-19 mainly present with fever and respiratory symptoms.<sup>2</sup> Isolated sudden onset anosmia has also frequently been reported.<sup>3</sup> Less frequently, rhinorrhea, diarrhoea and dysgeusia may be associated. While only a few reports have evoked cutaneous manifestations,<sup>4</sup> we read with interest an initial study on the topic entitled ‘Cutaneous manifestations in COVID-19: a first perspective’ by Recalcati S.<sup>5</sup> This Italian study including 88 patients with COVID-19 reported 20.4% of cutaneous manifestations such as erythematous rash, widespread urticaria and chickenpox-like vesicles. In France, while social networking has facilitated communication and exchanges between French doctors, we have not noticed as many skin manifestations.

We have constructed a prospective study to analyse the incidence and the types of cutaneous manifestations associated with COVID-19 infections in France. We included patients confirmed as infected by COVID-19 by nasopharyngeal PCR and recorded (i) the presence of cutaneous manifestations, whether they appeared during prodromal, illness or decline periods, (ii) the type and location of the lesions and (iii) the symptoms associated with the lesions (itching, burning).

One hundred and three patients were included in the study between 15 March 2020 and 2 April 2020. There were 71 women and 32 men with a mean age of 47 years (range 20–88). Among them, 76 were treated at home, 23 were admitted in conventional hospitalization and four were admitted to intensive care. None of these patients died. Only 5 (4.9%) presented with cutaneous manifestations. There were instances of erythematous rash ( $n = 2$ ) and urticaria ( $n = 2$ ), mainly located on the face and the upper body. We also observed an oral herpes simplex virus type 1 (HSV-1) reactivation in an intubated patient in intensive care. Four of these skin lesions appeared during the illness and one urticaria during the prodromal phase. All rashes were associated with itching. These cutaneous manifestations disappeared with median time of 48 h (from 24 h to 6 days).

In our country, only patients with respiratory illness or requiring hospitalization are screened. As a result, it is quite difficult to accurately determine the actual prevalence of COVID-19 infection and the cutaneous manifestations associated with this viral disease. These factors could explain the lower prevalence of the cutaneous manifestations we found compared to Recalcati S.

By social networking, doctors can inform their colleagues about atypical rash cases they have observed over recent weeks. Some possible specific cases should be highlighted. While of livedoid eruption due to small blood vessel occlusion was previously reported,<sup>6</sup> we teleconsulted three patients (aged from 14 to 22 years) for purplish or red maculopapular +/- vesiculous lesions of the digits of both feet with pain and burning, including chill burns (Fig. 1a,b). They reported no other symptoms and no exposure to cold temperature. Unfortunately, due to a limited number of daily test kits we could not screen these patients. Similar cases have also been reported in social networks with proof of COVID-19 infection and skin biopsy





**Figure 1** Purplish maculopapular and vesiculobullous lesions of the digits of the feet with the aspect of chill burns in a 14-years-old boy (a) and a 22-years-old woman (b).

confirming vasculitis. This particular form of the disease seems to affect mostly young people and is apparently not associated with respiratory symptoms.

With this study, we have observed that cutaneous manifestations are not usual and that in cases of COVID-19, they are mainly aspecific. However, highlighted clinical features such as chill burns could be a sign of virus carriers or previous infection. Further studies are needed to confirm and better characterize skin reaction in COVID-19.

### Acknowledgements

The patients in this manuscript have given written informed consent to the publication of their case details. The authors also wish to thank Jeffrey Arsham (an American medical translator working at CHU Poitiers, Poitiers, France) for reviewing and editing the original English language manuscript.

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DOI: 10.1111/jdv.16519

## Acute urticaria with pyrexia as the first manifestations of a COVID-19 infection

Dear Editor

The coronavirus disease 2019 (COVID-19) affects principally the respiratory tract but recent studies described that COVID-19

could present a broader clinical spectrum from the absence of any symptoms to heart,<sup>1</sup> digestive<sup>2</sup> or Ear-Nose-Throat (including anosmia and ageusia)<sup>3</sup> manifestations. Here, we report two cases of peculiar skin manifestation.

A 71-year-old man was admitted to the hospital for general weakness, pyrexia and a cutaneous rash, all appearing the day before with strictly no other complaints. A dermatologist diagnosed a very extensive acute urticaria. There was no change in the patient's treatment or habits during the previous few weeks. He was allergic to iodine but no contrast agent had been injected before the eruption. His comorbidities included obesity (BMI 32), insulin-dependent diabetes mellitus, hypercholesterolaemia, obstructive sleep apnoea-hypopnoea syndrome, high blood pressure, stroke 18 months ago without further sequelae and kidney failure on dialysis three times a week. All his parameters, physical examination, two pairs of blood cultures, a PCR research of Influenza A and B on a nasopharyngeal smear and an electrocardiogram were normal. Blood test revealed a mild lymphopenia (1120/mm<sup>3</sup>), a slightly elevated CRP (13.2 mg/L > 5 mg/L) and increased liver enzymes (GOT, GPT, LDH, GGT doubled). Chest X-ray and abdominal CT-scan also failed to identify any infectious site. A few days after admission, the patient presented clinical deterioration with increased temperature and CRP, hypoxaemia, unilateral ankle pain, constipation, chest pain, atrial fibrillation and tachycardia. A nasopharyngeal smear test revealed a COVID-19 infection. Urticaria improved gradually with bilastine. Unfortunately, he died 14 days after admission of end-stage respiratory failure following COVID-19 infection. Alongside that, some nephrologists, caregivers and dialysis patients were tested positive. The pandemic hit Belgium in early February 2020, and the first case of COVID-19 was confirmed in our hospital on 9 March, when the patient's first symptoms started. Hygienic protective measures were not yet in place.

A 39-year-old nurse, who works in a rest home, went to the doctor for a generalized, pruritic urticarial rash (Fig. 1a,b) that had started 2 days ago on her forearms. Concomitantly, pyrexia (38.3°C) with chills, myalgia and headache had appeared. She also suffered from rhinorrhoea, mild dry cough and dyspnoea but had no digestive or urinary complaints. There was no change in her daily habits or drugs. She had been skiing 3 weeks earlier in Haute-Savoie, close to one of the cores of this pandemic. Bilastine gradually improved her rash. Anosmia and ageusia occurred 5 days after and lasted a week. Her nasopharyngeal smear was positive for SARS-CoV-2. Thereafter, her 8-year-old son developed an urticaria and her husband presented a radiologically confirmed COVID-19 infection.

Very few data are available concerning the association between urticaria and COVID-19. A medical team of Wuhan<sup>4</sup> has studied 140 patients infected with SARS-CoV-2, among whom they noticed two patients with chronic urticaria but did not mention any acute urticaria. More recently, an Italian report showed that, among 88 patients with confirmed diagnosis of COVID-19 who