

LETTERS TO THE EDITOR

Cutaneous long COVID

To the Editor,

Researchers have defined the term “long COVID” as the inability to recover from the symptoms associated with COVID-19 even after months from the peak of the disease.¹ Fatigue, myalgia, chest pain, shortness of breath, cardiac problems, like post-viral myocarditis, and diarrhea have been reported.¹

Recently, Huang et al² have described the long-term outcomes of the SARS-CoV-2 infection in patients who were previously hospitalized because of COVID-19: The majority of them presented with myasthenia, fatigue, and pulmonary diffusion abnormalities.

In a scenario that is evolving very quickly, there is the need to elucidate the manifestations of COVID-19 and “long COVID” involving the integumentary system.

Emerging evidence supports the idea of a cutaneous “long COVID”: As a matter of fact, a paper published by Mehta et al³ observed the persistence of chilblain lesions during post-COVID follow-up visits.

Moreover, there is international evidence describing persistence of pernio, papulosquamous eruptions, and livedo reticularis in patients weeks after the peak of the disease.⁴ Notably, one patient presented with livedo reticularis and pernio for more than 5 months after the initial coronavirus infection.⁴

In our clinic, we have observed a group of adult patients who had COVID-19 who referred to us because of persisting cutaneous lesions, which had appeared during the disease peak. Of note, these patients were both individuals who had been hospitalized because of a severe symptomatology and people who had been followed up at home because of mild complaints. The lesions that we observed

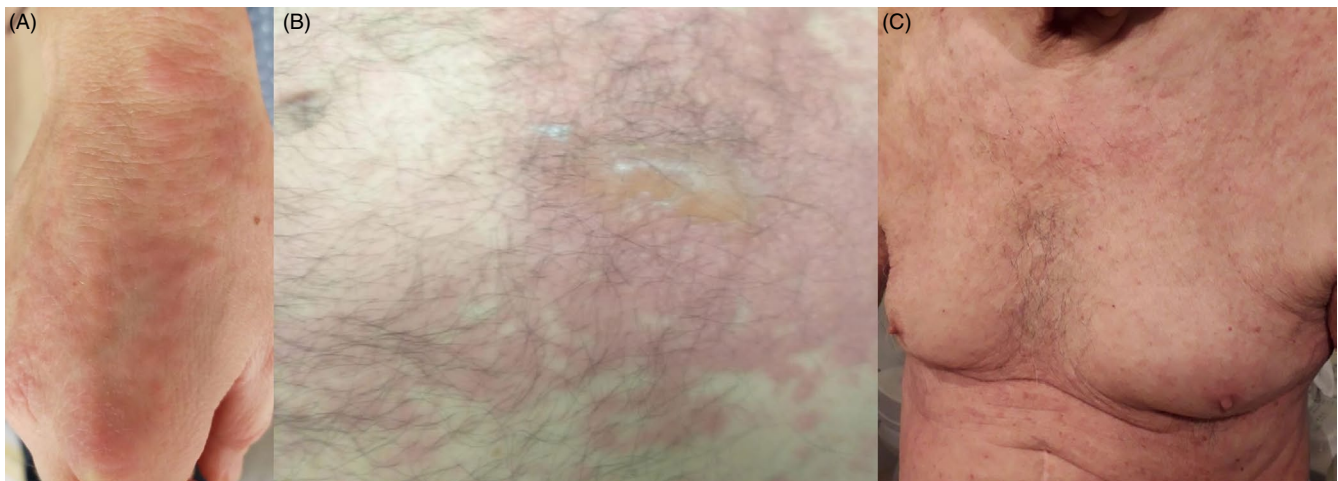


FIGURE 1 Cutaneous long COVID in the form of A, erythematous rash on the dorsal surface of the hand, B, erythematous rash associated with a liquid containing bulla, and C, pruritic papular rash on the torso

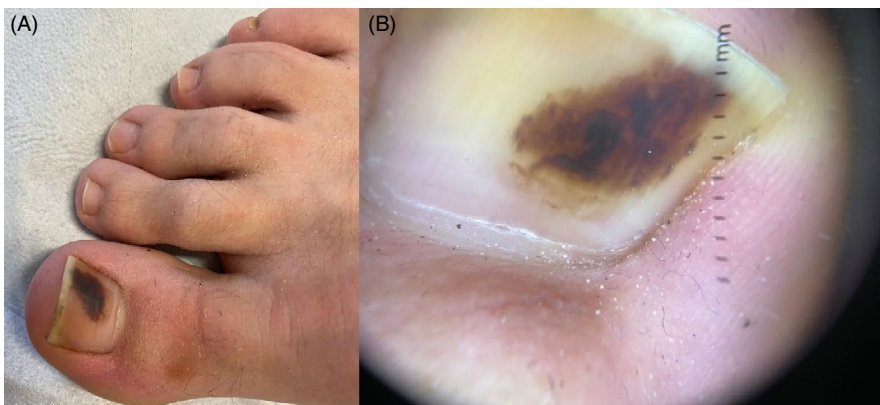


FIGURE 2 Dermatological long COVID on the toenail of a patient. The macroscopic appearance A, and its characteristics on dermoscopy B, are presented. B, A brown discoloration of the fingernail. There is the possibility that this nail change may have been caused by an accidental trauma

included rashes and unguis lesions, which lasted, on average, for more than 6 months after the disease (Figures 1-2).

Interestingly, Becker⁵ proposed a classification according to which the sequelae of COVID-19 may be subdivided into five categories according to their timing and initial disease severity.

Published evidence suggests that "long COVID" patients may have a persistent inflammatory reaction even after having recovered from the acute phase of COVID-19⁶: As a matter of fact, their stress and inflammation biomarkers continue to be elevated even after a month from the infection.

This prolonged inflammatory response may be coupled by viral reactivation and/or loss of a competent immune response preventing the resolution of the cutaneous manifestations.⁷

It is plausible to say that psychological stress may be implicated in the pathogenesis of "long COVID" lesions.

The spectrum of "long COVID" has yet to be outlined in its entirety. In particular, further studies following the clinical course of COVID-19-related cutaneous manifestations are needed. In addition, the evaluation of the effects of "long COVID" on the skin is warranted as, so far, efforts to determine its characteristics are mainly focused on other body apparatuses.

FUNDING INFORMATION

None.

CONFLICT OF INTEREST

None.

ETHICAL APPROVAL

The authors confirm that the ethical policies of the journal, as noted on the journal's author guidelines page, have been adhered to. No ethical approval was required.

DATA AVAILABILITY STATEMENT

Data sharing not applicable to this article as no datasets were generated or analysed during the current study.

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