

Images in Infectious Diseases

Purpuric rash on the legs of a patient with coronavirus disease

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FIGURE 1: (A): Purpuric rashes on the anterior surface of the legs. (B): Characteristics of the lesions in the toes, resembling perniosis. (C): Clinical improvement after 2 weeks of expectant management.

A 30-year-old male health-care worker, who was regularly monitored at the dermatology clinic for ochre dermatitis on the medial side of the legs, reported a 15-day history of fever and diarrhea, followed by erythematous-purpuric macules and papules on the legs and feet 1 week before, involving some fingers (Figures 1A and B). He had no history of pain or itching. After 2 weeks, he returned to the clinic after testing for coronavirus disease (COVID-19) antibodies (IgM and IgG positive). The skin lesions showed considerable improvement during this period (Figure 1C) and the patient fully recovered at home.

The patient's clinical condition was considered a vascular skin manifestation associated with COVID-19 infection^{1,2}. Among the

specific dermatological findings of the disease, pernio-like lesions are highlighted². Perniosis is a vascular inflammatory response occurring in the extremities and is clinically characterized by erythematous-purpuric macules and papules. This skin condition can be induced by low temperatures or can be associated with autoimmune diseases, drugs, or infections. When associated to COVID-19, pernio-like lesions are predominantly manifest in young and healthy patients, which may represent a good prognosis of the infectious condition^{2,3}.

Severe acute respiratory syndrome coronavirus 2 infection can affect several organ systems, including the skin¹. As Brazil is one of the most affected countries, recognizing associated skin lesions is important for the early diagnosis of COVID-19.

AUTHORS' CONTRIBUTIONS

DHMS: Conception and design of the study, drafting the article, and acquisition of data; analysis and interpretation of data, and final approval of the version to be submitted; **ARO:** Acquisition

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CONFLICT OF INTEREST

The authors declare that they have no conflict of interest.

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