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Comment on “Characterization of acute acro-ischemic lesions in non-hospitalized patients: A case series of 132 patients during the COVID-19 outbreak”



To the Editor: We thank Dr. Ruggiero and colleagues¹ for their interest in our article.

We read their study of erythema pernio-like lesions in the Italian pediatric population during the coronavirus disease 2019 (COVID-19) outbreak. They described findings regarding the distribution and duration of skin lesions that were similar to those of our Spanish cohort, and also described a low rate for systemic symptoms or positive severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) polymerase chain reaction test results.

They also reported the use of a wide variety of treatments in 74 of 100 cases (74%), including topical steroids, antibiotics, and heparin. There were no consistent differences between the improvement rates at day 12, although physicians' choice for treatment may have been biased by the severity of the disease.

We are struggling with uncertainty in these challenging times. On one hand, there are severely ill COVID-19 patients who may present with ischemic acral lesions that may progress to gangrene² because of COVID-19–induced coagulopathy and thrombotic microangiopathy. On the other hand, there are asymptomatic young patients with subtle ecchymotic and vesicular acral lesions, which have been associated with viral hypersensitivity reactions, microthrombi, overexpression of interferon 1, and immune vasculitis.^{3,4} The latter are not usually associated with COVID-19 pneumonia or thromboembolic events. However, overlapping features may coexist. In fact, both groups of patients may represent the mild and severe ends of the spectrum of COVID-associated coagulopathy.⁵

We must take into account that a causal relation between acral skin lesions and SARS-CoV-2 has not been fully established yet. These lesions have been increasingly reported in several countries coincident with the COVID-19 pandemic spread. However, most studies report a low positive test-result rate for SARS-CoV-2 polymerase chain reaction, with little access to diagnostic tests. We believe that these skin manifestations are delayed COVID-19 manifestations; hence, the negative results. Serologic studies will be needed to elucidate this point.

What should we do with these patients? Because the epidemic curve is slowly declining worldwide, confinement measures are being relaxed. These skin manifestations could be of great value in identifying primary cases, permitting the health care system to implement control and prevention measures and thus avoiding the spread of the virus. Until we have more information about the risk of SARS-CoV-2 transmission in these patients, we should recommend maintenance of isolation measures, especially if diagnostic tests are unavailable.

Diego Fernandez-Nieto, MD, Juan Jimenez-Cauhe, MD, Ana Suarez-Valle, MD, Oscar M. Moreno-Arrones, MD, PhD, David Saceda-Corralo, MD, PhD, Arantxa Arana-Raja, MD, and Daniel Ortega-Quijano, MD

From the Dermatology Department, Ramon y Cajal University Hospital, Alcala University, Instituto Ramón y Cajal de Investigación Sanitaria (IRYCIS), Madrid, Spain.

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Correspondence to: Diego Fernandez-Nieto, MD, Dermatology Department, Ramon y Cajal University Hospital, Carretera Colmenar Viejo km 9.100, 28034 Madrid, Spain

E-mail: fnietodiego@gmail.com

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