Correspondence

Eruptive pseudoangiomatosis and SARS-CoV-2 (COVID-19) infection

Dear Editor,

A 53-year-old woman presented with an abrupt onset of a lower limb rash. It was asymptomatic and had appeared during the first week of hospital admission for confirmed COVID-19 pneumonia. At the same time, she was receiving treatment with corticosteroids and ceftriaxone. She was discharged 2 weeks later without any sequela, but the skin lesions remained.

Physical examination revealed multiple blanchable erythematous papules ranging from 2 to 4 mm, surrounded by a pale perilesional halo (Fig. 1a,b).

Dermoscopy revealed the presence of multiple red dots surrounded by reddish structureless areas (Fig. 2).

Laboratory test results, including hemogram, liver function, renal function, and hemostasis, were normal.

Considering the particular clinical characteristics of this entity, the diagnosis of eruptive pseudoangiomatosis was made, and no skin biopsy was performed. Because of the benign nature of disease and the absence of symptoms, no treatment was given. The patient evolved with spontaneous remission after 2 weeks of follow-up.

Eruptive pseudoangiomatosis (EP) is a rare disease characterized by acute onset of erythematous blanchable papules resembling angiomas surrounded by a pale halo, on exposed sites (face, trunk, extremities).¹⁻³ A prodrome of constitutional symptoms such as mild to high fever, upper respiratory infection, diarrhea, headache, and malaise heralds cutaneous eruptions. These have been described more frequently in pediatric age.¹⁻³ The prodrome can also be asymptomatic.³

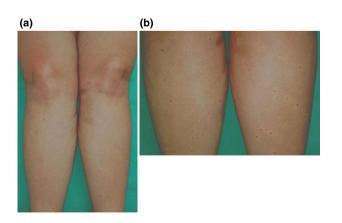


Figure 1 (a,b) Clinical images showing erythematous papules surrounded by a pale halo, on the limbs

EP was first described by Cherry *et al.* in 1969 in four children, with acute echovirus infection.¹⁻³ In 2000, Navarro et al. reported the first adult case in a 37-year-old woman with clinical evidence of EBV infection.^{2,3}

Several other etiological agents were later also identified consistently in patients, such as adenovirus, CMV, arthropod bites, and immunocompromised states (iatrogenic, elderly individuals).^{1,2} A paraviral etiology has also been suggested.^{1,4}

The duration of the clinical signs is variable, ranging from 2 days to 3 months. A review with 32 patients reported a mean duration of 1.64 months. Besides, recurrences can occur.³

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is the causative pathogen of coronavirus disease 2019 (COVID-19), a new infectious pathogen identified in Wuhan, China, in December 2019.⁵

Although this virus primarily causes respiratory symptoms, an increasing number of cutaneous manifestations associated with this disease have been reported by different authors, grouped together into categories using common descriptive terminology and photographic evidence.⁵



Figure 2 Polarized dermoscopy of the lesions showing multiple red dots at the center with reddish structureless areas in surrounding (DermliteDL3 Dermoscope at $\times 10$ magnification)

SARS-CoV-2 can induce both a classic viral eruption and a paraviral eruption.⁴ In this particular case, we consider that EP developed as a paraviral manifestation of COVID-19. We are aware that EP could have also been triggered by medication (corticosteroid-induced immunosuppression), but we propose that a paraviral cause cannot be excluded because the rash had developed before a state of iatrogenic immunosuppression would be reached, and it also persisted beyond the suspension of the drug.

In conclusion, in this correspondence we aimed to report dermatologic findings in a woman with a confirmed case of COVID-19, with clinical diagnosis of eruptive pseudoangiomatosis. We expect that by sharing this case, physicians can be aware of the growing spectrum of skin diseases related to COVID-19.

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