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Research Letter

Cutaneous manifestations associated with COVID-19 in 24 cases from Fez, Morocco

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Sir,

Various cutaneous manifestations occurring during SARS- CoV-2 infection have been reported since March 2020. Their exact incidence remains to be estimated, their pathophysiological mechanisms are largely unknown, and the role of SARS-CoV-2 in their pathogenesis—direct or indirect—is still being debated.

This was a prospective study conducted since the beginning of the pandemic including 24 patients with cutaneous manifestations associated with COVID-19.

The diagnosis of COVID-19 was confirmed (by RT-PCR and/or positive serology) in 23 cases. One case was negative for COVID-19 by serology and RT-PCR. This included 11 women, 11 men, and 2 children, with an average age of 35 years (1 – 70 years). Only one patient had a skin biopsy revealing leukocytoclastic vasculitis. Among these patients, thirteen were treated as outpatients, nine were hospitalized in the COVID-19 unit, and two were admitted to the intensive care unit (ICU). The main skin manifestations were as follows: four maculo-papular eruptions (Fig. 1a), one case of maculo-vesicular eruption, seven patients with Chilblain-like lesions (Fig. 1b), four cases of urticaria, one case of Raynaud's phenomenon (Fig. 1c), two cases of erythema multiforme (Fig. 1d), two cases of Kawasaki-like syndrome (Fig. 1e), two cases of acral vasculitis, three cases of acral necrosis (Fig. 1f), and four cases of the reactivation of oral herpes in intensive-care patients (Fig. 2). Six patients had two concomitant skin manifestations.

Skin manifestations remain rare in SARS-CoV-2. Cases have been reported sporadically. The first data was collected by Recalcati et al. Among 88 patients who tested positive, 20.4% developed skin manifestations [1]. However, in our experience, it is difficult to determine a true incidence of infection and, thus, the incidence of skin manifestations as only patients with severe respiratory symptoms were screened at the beginning of the pandemic. Therefore, the observed incidence is underestimated.

The incidence of skin rashes appears to be low, with no more than six hundred reported cases of skin manifestations out of more than four million SARS-CoV-2 patients in a study by Paulo Ricardo Criado et al. This may be explained by the underreporting of skin manifestations due to their lesser severity.

The manifestations are varied and polymorphous: exanthema, urticaria, livedo, purpura, vasculitis, necrosis, erythema multiforme, Kawasaki-like disease, Sweet-like with a predominance of Chilblain-like lesions unusually frequent this season and of late appearance in young subjects often asymptomatic in PCR, mostly negative, thus some authors consider them a delayed reaction of COVID-19 infection [2,3]. One patient in our series presented with Chilblain-like lesions fifteen days after her stay in intensive care and only one case had negative RT-PCR.

A recent article concluded that infection with COVID-19 could be a risk factor for the reactivation of *Herpesviridae* in seriously ill patients [4], such as in the four of our cases. In erythema multiforme, a drug origin has often been discussed in view of the late appearance of post-infectious lesions and after negative PCR [5],

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Figure 1: (a) Generalized papular macular rash. (b) Chilblain-like lesions on the hands. (c) Raynaud's phenomenon. (d) Palmar blackouts and pseudo-blackouts. (e) Kawasaki-like syndrome in a child. (f) Vasculitis with acral skin necrosis.

Figure 2: Oral herpes lesion.

such as in the case of one of our patients. Children constituted only a small proportion of patients with COVID-19, which was reported in 1.7% [6]. In our series, two children presented Kawasaki-like syndrome with a favorable evolution.

Therefore, physicians must be vigilant and aware of these skin signs, which may constitute an early indication of the severity of infection as well as retrospectively correct its diagnosis.

Statement of Human and Animal Rights

All the procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the 2008 revision of the Declaration of Helsinki of 1975.

Statement of Informed Consent

Informed consent for participation in this study was obtained from all patients.

REFERENCES

1. Hedou M, Carsuzaa F, Chary E, Hainaut E, Cazenave-Roblot F, Masson Regnault M. Cutaneous manifestations in COVID-19: A first perspective by Recalcati S. J Eur Acad Dermatol Venereol. 2020:34:299-300.
2. Estébanez A, Pérez-Santiago L, Silva E, Guillen-Climent S, García-Vázquez A, Ramón MD. Cutaneous manifestations in COVID-19: A new contribution. J Eur Acad Dermatol Venereol. 2020;34:e250-1.
3. Sachdeva M, Gianotti R, Shah M, Bradanini L, Tosi D, Veraldi S, et al. Cutaneous manifestations of COVID-19: Report of three cases and a review of literature. J Dermatol Sci. 2020;98:75-81.
4. Genovese G, Moltrasio C, Berti E, Marzano AV. Skin manifestations associated with COVID-19: Current knowledge and future perspectives. Dermatology. 2021;237:1-12.
5. Jimenez-Cauhe J, Ortega-Quijano D, Carretero-Barrio I, Suarez-Valle A, Saceda-Corralo D, Moreno-Garcia Del Real C, et al. Erythema multiforme-like eruption in patients with COVID-19 infection: Clinical and histological findings. Clin Exp Dermatol. 2020;45:892-5.
6. CDC COVID-19 Response Team. Coronavirus disease 2019 in children. Morb Mortal Wkly Rep. 2020;69:422-6.

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