Table 1 6-item questionnaire using a 0-10 scale (score 0-3: negative; 4-6: not bad not good; 7-10: positive): scores reported in 52 acne patients

Scores	1a		1b		1c		1d		1e		1f	
	% of patients	(number of patients)	% of patients	(number of patients)	% of patients	(number of patients)	% of patients	(number of patients)	% of patients	(number of patients)	% of patients	(number of patients)
0	0 ($n = 0$)	1.9 ($n = 1$)	0 ($n = 0$)	1.9 ($n = 1$)	1.9 ($n = 1$)	9.6 ($n = 5$)	1.9 ($n = 1$)	5.8 ($n = 3$)	0 ($n = 15$)	46.1 ($n = 24$)	0 ($n = 0$)	3.8 ($n = 2$)
1	0 ($n = 0$)		0 ($n = 0$)		3.8 ($n = 2$)		3.8 (n = 2)		7.7 ($n = 4$)		0 ($n = 0$)	
2	0 ($n = 0$)		0 ($n = 0$)		1.9 ($n = 1$)		0 ($n = 0$)		5.9 ($n = 3$)		1.9 ($n = 1$)	
3	1.9 ($n = 1$)		1.9 ($n = 1$)		1.9 ($n = 1$)		1.9 ($n = 1$)		3.8 ($n = 2$)		1.9 ($n = 1$)	
4	0 ($n = 0$)	5.8 ($n = 3$)	1.9 ($n = 1$)	11.5 ($n = 6$)	1.9 ($n = 1$)	19.2 ($n = 10$)	0 ($n = 0$)	5.8 ($n = 2$)	27 ($n = 14$)	46.1 ($n = 24$)	1.9 ($n = 1$)	5.8 ($n = 2$)
5	1.9 ($n = 1$)		1.9 ($n = 1$)		1.9 ($n = 1$)		0 ($n = 0$)		15.4 ($n = 8$)		1.9 ($n = 1$)	
6	3.8 ($n = 2$)		7.7 ($n = 4$)		15.3 ($n = 8$)		3.8 ($n = 2$)		3.8 ($n = 2$)		0 ($n = 0$)	
7	7.7 ($n = 4$)	92.3 ($n = 48$)	5.8 ($n = 3$)	92.3 ($n = 45$)	7.7 ($n = 4$)	71.1 ($n = 37$)	3.8 ($n = 2$)	80.7 ($n = 47$)	3.8 ($n = 2$)	92.3 ($n = 4$)	0 ($n = 0$)	92.3 ($n = 48$)
8	11.5 ($n = 6$)		3.8 ($n = 2$)		11.5 ($n = 6$)		1.9 ($n = 1$)		3.8 ($n = 2$)		11.5 ($n = 2$)	
9	19.2 ($n = 10$)		19.2 ($n = 10$)		13.5 ($n = 7$)		55.7 ($n = 29$)		1.9 ($n = 1$)		15.4 ($n = 8$)	
10	53.8 ($n = 28$)		57.7 ($n = 30$)		38.5 ($n = 20$)		28.8 ($n = 15$)		0 ($n = 0$)		73.1 ($n = 38$)	

(1a) How do you rate the attention paid by the doctor to your disease? (1b) How do you rate the time spent by the doctor with you? (1c) Are you satisfied about the treatment you are doing for acne? (1d) How do you rate your well-being after the treatment? (1f) Do side-effects represent an obstacle to continue the therapy? (1f) Do you think you will consult the same dermatologist?

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The red half-moon nail sign: a novel manifestation of coronavirus infection

Editor

The novel severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is the causative agent of the coronavirus disease 2019 (COVID-19). The pandemic condition was declared by the WHO on 11 March 2020.

The main clinical symptoms are fever, dry cough and dyspnoea, although new symptoms are emerging, such as diarrhoea, anosmia and ageusia. The virus enters cells, likely including

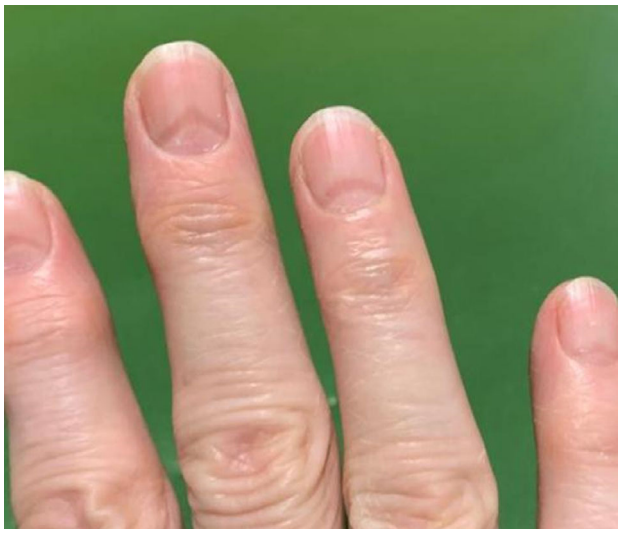

Figure 1 Distally convex half-moon-shaped red bands surrounding the distal margin of the lunula.

those lining blood vessels, by binding to angiotensin-converting enzyme 2 (ACE2) receptors on the cell surface. Infection can also promote blood clots, heart attacks and cardiac inflammation.[1]

In the literature, some dermatological manifestations have recently been reported, such as erythematous, vesiculous and urticarial rashes.[2,3,4] However, there are no data about nail signs occurring during COVID 19.

A 60-year-old otherwise healthy woman presented with a history of fever (>38°C) and cough.

Seven days after the onset of these symptoms the patient referred dyspnoea, associated with anosmia and ageusia. Although chest X-ray examination was normal, chest CT revealed ground-glass opacity, leading to a diagnosis of bilateral interstitial pneumonia. A positive RT-PCR nasopharyngeal swab confirmed SARS-CoV-2 infection.

The patient was hospitalized and underwent oxygen therapy together with administration of several drugs, including hydroxychloroquine, lopinavir/ritonavir, ceftriaxone and heparin. Complete remission of respiratory symptoms, associated with negative nasopharyngeal swab was seen 10 days after the treatment was started.

Two weeks after symptoms onset, a distally convex half-moon-shaped red band surrounding the distal margin of the lunula appeared on all fingernails (Fig. 1). The patient denied any associated symptoms, and no other skin manifestations were observed. Her dermatological medical history was unremarkable. After one month of follow-up, the bands are still present and wider (Fig. 2).

Polydactylous erythronychia differential diagnosis includes lichen planus, Darier's disease and the more rare primary amyloidosis and graft-versus-host disease. In all these conditions, however, erythronychia is arranged in longitudinal lines,[5] while in our case erythronychia has an half-moon shape margining the lunula.

Transversal red bands of the nail were reported for the first time by Lindsley[6] in four patients affected by Kawasaki disease. Unlike our case, however, in those patients the bands were localized in the distal part of the nail bed, in the so-called nail isthmus.

The pathogenesis of the half-moon-shaped transversal red bands seen in our patient after SARS-CoV-2 infection is unknown. A localized microvascular injury secondary to inflammatory immune response and a procoagulant state[7] might play a central role. Due to the localization, we hypothesized a damage of the capillary network of the distal subungual arcade.

To the best of our knowledge, this is the first case of nail involvement. This sign is peculiar and has not been previously described even in dermatological or systemic diseases. Further studies are needed to validate our finding and to assess whether red half-moon nail could represent a pathognomic sign of COVID19.

Acknowledgement

The patient in this manuscript has given written informed consent to the publication of her case details.

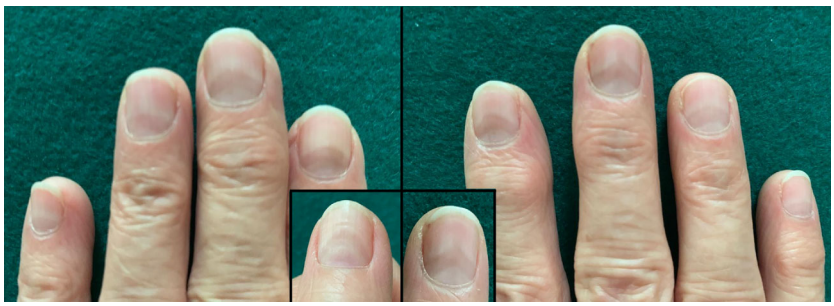

Figure 2 The half-moon-shaped red bands are still present after 1 month of follow-up on all fingernails and appear wider.

Conflict of interest

Dr. Neri, Dr. Guglielmo, Dr. Virdi, Dr. Gaspari, Dr. Starace and Dr. Piraccini have nothing to disclose.

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Introductory histopathological findings may shed light on COVID-19 paediatric hyperinflammatory shock syndrome

Editor

The full clinical spectrum of SARS-CoV-2 disease (COVID-19) is not fully known.

Numerous paediatric cases of hyperinflammatory shock syndrome (demonstrating features reminiscent of Kawasaki vasculitis) were recently associated with infection by COVID-19. Clinical presentation includes unrelenting fever, variable rash, conjunctivitis and abdominal pain, progressing to haemodynamic shock with severe myocardial involvement.[1] Recent report from Italy reported a 30-time increase in the rate of Kawasaki-like presentation during the COVID-19 pandemic among children. In many cases, the nasopharyngeal swabs taken from these children were negative for COVID-19, and the association with COVID-19 infection is unclear.[2]

We hereby present an adolescent who developed distinctive scalp cutaneous lesions as part of COVID-19 hyperinflammatory shock syndrome.

A 16-year-old boy with unremarkable medical history was admitted due to 3-day history of severe abdominal pain and fever. A migratory rash composed of mildly oedematous and erythematous plaques was noted on the trunk and extremities. Echocardiography demonstrated impaired left ventricular function with dilatation. Laboratory workup revealed significant lymphopenia (up to 200 cells/μL) with mild neutrophilia, elevated creatinine levels (up to 2.65 mg/dL), elevated levels of C-reactive protein (up to 33.5 mg/dL) and D-dimer (1.61 mg/dL). Ferritin, fibrinogen and triglycerides' levels were mildly elevated. Empiric antibiotic treatment was initiated with no improvement. Expeditiously, the patient developed multiorgan dysfunction including cardiac failure requiring mechanical ventilation and inotropic support. High-dose intravenous methylprednisolone therapy was initiated, and the patient regained normal cardiopulmonary and renal functions. Extensive investigations failed to disclose an inflammatory or infectious aetiology, including repeated RT-PCRs for SARS-CoV-2 of nasopharyngeal, stool and bronchoalveolar lavage specimens. However, two serologic tests were positive for SARS-CoV-2 IgG.

Soon after cardiopulmonary stabilization was attained, two painful dusky erythematous plaques were noted over the posterior scalp (Fig. 1). A 3-millimetre punch skin biopsy revealed findings consistent with leukocytoclastic vasculitis including necrosis of the epidermis and most of the dermis with extravasation of erythrocytes and fibrin thrombi in the capillaries, as well as infiltration of neutrophils with nuclear debris in vessels' walls (Fig. 2). Direct immunofluorescence demonstrated deposition

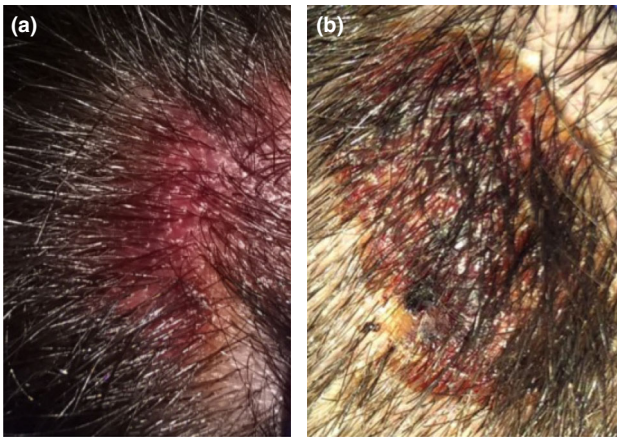

Figure 1 (a) Erythematous violaceous plaque over the posterior scalp, (b) hyperpigmented plaque with crusts over the posterior scalp, 5 days following the initial examination.