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Table II. Frequency of and change in Systemic Lupus International Collaborating Clinics criteria in cutaneous to systemic lupus erythematosus patients at baseline visit and visit of systemic lupus erythematosus diagnosis

SLICC criteria*	Initial visit, no. (%)	Visit of SLE diagnosis, no. (%)	Increase between visits, no. (%)
Leukopenia	1 (10)	4 (40)	3 (30)
Thrombocytopenia	1 (10)	4 (40)	3 (30)
Synovitis	0	2 (20)	2 (20)
Chronic cutaneous lupus	8 (80)	10 (100)	2 (20)
Oral/nasal ulcers	2 (20)	3 (30)	1 (10)
Low complement	2 (20)	3 (30)	1 (10)
Antiphospholipid	0	1 (10)	1 (10)
Lymphopenia	1 (10)	2 (20)	1 (10)
Anti-dsDNA	1 (10)	2 (20)	1 (10)
ANA	8 (80)	9 (90)	1 (10)
Acute cutaneous lupus	3 (30)	3 (30)	0
Anti-Sm	1 (10)	1 (10)	0

ANA, Antinuclear antibody; *anti-Sm*, anti-Smith antibody; *dsDNA*, double-stranded DNA antibody; *SLE*, systemic lupus erythematosus; *SLICC*, Systemic Lupus International Collaborating Clinics classification criteria for systemic lupus erythematosus.

*Systemic Lupus International Collaborating Clinics criteria not listed were not present in patients who progressed from cutaneous to systemic lupus erythematosus.

affiliated academic and health care centers, the National Center for Research Resources, and the National Institutes of Health.

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Conflicts of interest

Dr Chong is an investigator for Daavlin Corporation, Biogen Incorporated, and Pfizer Incorporated. He is a consultant for Viela Bio, Beacon Bioscience, Bristol Meyers Squibb, and Principia Biopharma. Drs Walocko and Li and Author Black have no conflicts of interest to declare.

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Cutaneous manifestations of SARS-CoV-2: A 2-center, prospective, case-controlled study



To the Editor: A myriad of potential dermatologic manifestations of COVID-19, caused by SARS-CoV-2, has been reported.¹⁻⁵ However, some of these previous reports had considerable limitations, including the lack of laboratory-confirmed COVID-19

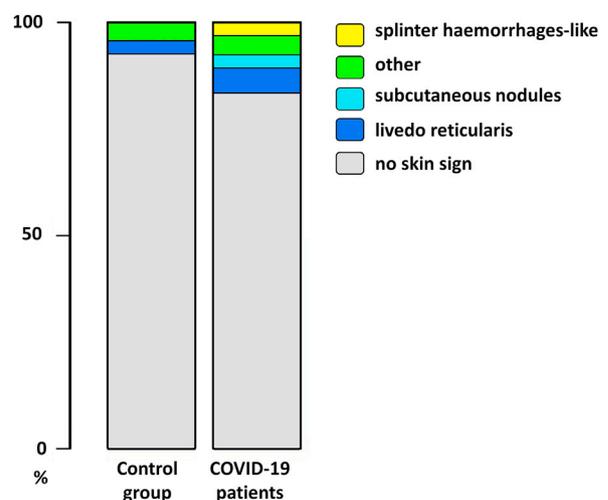


Fig 1. An overview of cutaneous manifestations in COVID-19 patients and the control group. Skin symptoms were examined in patients who tested positive (n = 102) and negative for SARS-CoV-2 (n = 41). We grouped the skin symptoms into 4 groups: livedo reticularis, splinter hemorrhage-like lesions, subcutaneous nodules, and others. We compared the number of cases in the COVID-19 patients and control group using the Fisher's exact test.

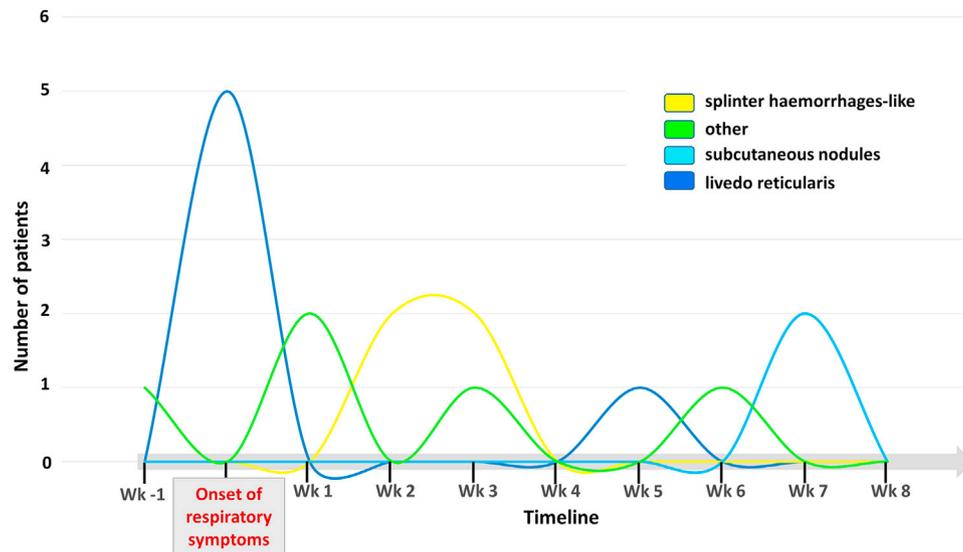


Fig 2. Appearance of cutaneous manifestation over time. Timeline of newly manifested skin symptoms in COVID-19 patients depicted as the number of patients with the respective skin symptom over 8 weeks measured from the onset of respiratory symptoms.

diagnosis, suboptimal study designs, or the absence of case controls.

Here, we report the results of a prospective and controlled cohort study with a 4-week follow-up period in which we investigated potential skin findings in 102 hospitalized SARS-CoV-2–positive patients and 41 age- and sex-matched SARS-CoV-2–negative controls with acute, nonprimary infectious diseases of the skin. In the control group, the most common infections were viral respiratory infections (26.8%), bacterial pneumonia (24.4%), and urinary tract infections (14.6%).

We observed newly occurring skin symptoms, concomitant with the infection in 17 (16.6%) COVID-19 patients. Three major groups of cutaneous manifestations were discerned: livedo reticularis ($n = 6$, 5.8%), splinter hemorrhage-like lesions ($n = 4$, 3.9%), and subcutaneous nodules ($n = 2$, 2%) (Fig 1). Five patients had various other skin symptoms (rashes containing macules and papules, papular exanthema, burning sensation of the oral cavity, and vitiligo). In the control group, 5 patients ($n = 5$, 12.2%) had an onset of skin symptoms, including livedo reticularis in 1 patient. Four patients had other skin manifestations (petechial enanthem, nail hemorrhage, as well as rashes containing macules and papules). In each group, 1 rash containing macules and papules was considered as drug-induced, whereas no other apparent cause was found in the rest of the patients. Statistical analyses did not reveal significant differences between COVID-19 patients and control group in terms of the occurrence of skin symptoms (Fisher’s exact test; P value = .6130) (Fig 1).

Livedo reticularis occurred within the first week and splinter hemorrhage-like lesions occurred within the third week after disease onset (Fig 2). Asymptomatic subcutaneous nodules without systemic symptoms occurred in 2 patients 7 weeks after the occurrence of respiratory symptoms (Fig 2). Both patients suffered from a severe course of the disease, including intensive care unit admission. Subcutaneous drug application as a possible cause was excluded. The histopathologic workup result was consistent with reactive septal panniculitis, and both patients were negative for SARS-CoV-2, as determined using a quantitative polymerase chain reaction test. Five months after study inclusion, the patients reported spontaneous partial regression of the nodules.

The relatively small sample size must be considered as a limitation of our study. Therefore, we might have missed less frequent cutaneous manifestations and could not achieve statistical significance regarding the present skin findings.

Although we observed skin symptoms in 16.6% of the patients, including signs of vasculopathy during the early course of the disease and subcutaneous nodules as a possible late manifestation, no statistically significant difference was detected when the COVID-19 patients were compared with the control group of patients with other acute infectious diseases. Therefore, our study suggests that skin manifestations in COVID-19 patients are less specific compared with those previously assumed and cannot be considered as reliable diagnostic tools. Physicians confronted with skin lesions in patients with confirmed or suspected COVID-19 need to

carefully evaluate possible differential diagnoses before attributing the symptoms to COVID-19. Larger and well-planned controlled studies are required to further elucidate skin manifestations in COVID-19 patients.

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Conflicts of interest

None disclosed.

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Utilization of Instagram by dermatology residency programs in the era of COVID-19



To the Editor: In response to the COVID-19 pandemic, the Association of American Medical Colleges has instituted protective measures, such as suspending away elective rotations that have limited student exposure to and interactions with residency training programs.^{1,2} To combat these limitations, programs have looked for alternative options such as social media. Although a 2019 assessment of social media usage by dermatology residency programs concluded that the usage is sparse,³ this has likely changed because of the aforementioned restrictions. Here, we assess the current utilization of social media, specifically Instagram, by dermatology residency programs.

A list of accredited programs was obtained from the Electronic Residency Application Service, consisting of 136 residencies. All data collected between January 21, 2021 and February 8, 2021 from residency websites, Google, and the Instagram application were used to identify programs on Instagram (yes/no). To quantify the number of accounts created during the 2020-2021 application cycle, existing accounts were assessed for the year of origination (2020/2021 or before, determined by the date of the first post). To characterize the content receiving the most engagement, each program's profile was searched for the most "liked" post. Posts were categorized into 1 of 7 groups relating to residents, faculty, research/conferences,