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risk of both COVID-19 and poor outcomes is minimally affected by dermatologic immunomodulatory medications. However, many patients were successfully isolating to a large degree, and the low infectious rates appear to be due, at least in part, to enhanced social distancing efforts. As has been proposed previously, our findings suggest that when combined with patient education and encouragement to minimize exposure risks, systemic immunomodulatory therapies for dermatologic indications can be safely continued during the COVID-19 pandemic.

Limitations include the unknown number of asymptomatic infections, lack of available confirmatory COVID-19 testing in some cases, and the effect of social distancing as a confounding factor on infection rates. Also, our practice consists of only adult patients. Despite these limitations, we did not observe evidence of increased infectious risk, and we hope that these data will inform treatment decisions for patients who need these medications despite the ongoing COVID-19 pandemic.

Zachary E. Holcomb, MD, Monica Rosales Santillan, MD, Peyton C. Morss-Walton, BA, b.c Prerna Salian, MPH, Min Ji Her, PharmD, Nicole M. Giannotti, b.e Alexa B. Kimball, MD, MPH, and Martina L. Porter, MD<sup>b,f</sup>

From the Harvard Combined Dermatology Residency Program, Department of Dermatology, Massachusetts General Hospital, Boston<sup>a</sup>; Clinical Laboratory for Epidemiology and Applied Research in Skin (CLEARS), Department of Dermatology, <sup>b</sup> and Department of Pharmacy, <sup>d</sup> Beth Israel Deaconess Medical Center, Boston, Massachusetts; University of Massachusetts Medical School, Worcester<sup>c</sup>; Northeastern University, Boston, Massachusetts<sup>e</sup>; and Department of Dermatology, Harvard Medical School, Boston, Massachusetts.<sup>f</sup>

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investigator for UCB, Pfizer, Eli Lilly, and Novartis and an investigator for AbbVie, Janssen, and Bristol Meyers Squibb. Dr Holcomb and Authors Morss-Walton, Salian, and Giannotti bave no conflicts of interest to declare.

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Correspondence to: Martina L. Porter, MD, Clinical Laboratory for Epidemiology and Applied Research in Skin (CLEARS), Beth Israel Deaconess Medical Center, 330 Brookline Ave, Boston, MA 02215

E-mail: clears@bidmc.barvard.edu

## REFERENCES

- 1. Lebwohl M, Rivera-Oyola R, Murrell DF. Should biologics for psoriasis be interrupted in the era of COVID-19? *J Am Acad Dermatol*. 2020;82(5):1217-1218.
- Gisondi P, Zaza G, Del Giglio M, Rossi M, Iacono V, Girolomoni G. Risk of hospitalization and death from COVID-19 infection in patients with chronic plaque psoriasis receiving a biological treatment and renal transplanted recipients in maintenance immunosuppressive treatment. *J Am Acad Dermatol*. 2020;83(1):285-287.
- Shi Y, Wang Y, Shao C, et al. COVID-19 infection: the perspectives on immune responses. *Cell Death Differ*. 2020; 27(5):1451-1454.
- Massachusetts Department of Public Health. Information on the outbreak of coronavirus disease 2019 (COVID-19). https:// www.mass.gov/resource/information-on-the-outbreak-of-coro navirus-disease-2019-covid-19; 2020. Accessed May 8, 2020.
- Schett G, Sticherling M, Neurath MF. COVID-19: risk for cytokine targeting in chronic inflammatory diseases? Nat Rev Immunol. 2020;20(5):271-272.

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## The presence and distribution of novel coronavirus in a medical environment



To the Editor: Coronavirus disease 2019 (COVID-19) has constituted a global pandemic, <sup>1</sup> and infections of medical staff with severe acute respiratory syndrome-coronavirus-2 (SARS-Cov-2) are a major concern because the number of infected medical staff in Spain has exceeded 10,000. <sup>2</sup> A significant undertaking is to explore possible routes of infection for medical staff to strengthen their protection, reduce the infection rate, and effectively control the epidemic. <sup>3</sup>

Because of daily disinfection and cleaning, the presence and distribution of SARS-COV-2 in a medical environment may differ from that in other environments. To detect COVID-19 in a medical environment, samples from surfaces of personal protective equipment, medical facilities, and the belongings of patients with confirmed disease

Table I. Nucleic acid testing on the surface of personal protective equipment, medical facilities, and the belongings of patients

Location	No. of tests	No. of positive results
Face shields	30	0
Protective goggles	30	0
Nurse rolling carts	15	0
Nurse station tables	5	0
Patients' water cups	10	0
Patients' mobile telephones	20	1

were collected in Hankou Hospital, Wuhan. All samples were sent to the Wuhan Dean medical laboratory center for COVID-19 nucleic acid detection, which adopted real-time polymerase chain reaction technology to detect nucleic acid sequences at 3 targets, with a sensitivity of greater than 90%.

After the medical staff removed their protective face shields and goggles and left the isolation ward, test swabs were daubed on the outer surfaces of the equipment 3 times. A total of 30 face shields and 30 sets of protective goggles were tested for SARS-Cov-2. In addition, the surfaces of a total of 20 nurse rolling carts and station tables were tested with the swabs in the same way. Surfaces of the belongings of 20 patients with confirmed disease, such as water cups and screens of mobile telephones, were also tested with swabs, and 30 samples were sent to the laboratory for nucleic acid testing for COVID-19 (Table I).

All surfaces of the face shields and protective goggles were devoid of SARS-Cov-2. Additionally, the surface test results for nurse stations and rolling carts and the water cups were negative, except for 1 positive result from the surface of a mobile telephone of a patient with COVID-19 (Table I).

It is well known that COVID-19 can be transmitted by an airborne route<sup>4</sup>; however, it was not clear whether the virus could float on surfaces in a medical environment and cause contact infection of medical staff. This study revealed that the probability that COVID-19 on surfaces can cause contact transmission is low; instead, more attention should be paid to personal isolation and protection from air transmisson. However, fomites such as patient belongings are a potential route of transmission, and therefore it is essential for hand washing and disinfection after contact with such items.<sup>5</sup>

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Qianli Jiang, MD, Yinghua Chen, PhD, Yingchun Dai, PhD, <sup>c</sup> Shaoxi Cai, MD, <sup>d</sup> and Guodong  $Hu, MD^d$ 

From the Department of Hematology<sup>a</sup> and Department of Respiratory and Critical Care Medicine, d Nanfang Hospital, the Guangdong Provincial Key Laboratory of Construction and Detection in Tissue Engineering, Department of Histology and Embryology, School of Basic Medical Sciences, b and the Department of Epidemiology, School of Public Health,<sup>c</sup> Southern Medical University, Guangzbou, Guangdong, China.

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Correspondence to: Guodong Hu, MD, Department of Respiratory and Critical Care Medicine, Nanfang Hospital, Southern Medical University, 1838, Guangzhou North Ave, Guangzhou, Guangdong 510515, China

E-mail: huguodong123123@126.com

## REFERENCES

- 1. Bedford J, Enria D, Giesecke J, et al. COVID-19: towards controlling of a pandemic. Lancet. 2020;395(10229):1015-1018.
- 2. Anelli F, Leoni G, Monaco R, et al. Italian doctors call for protecting healthcare workers and boosting community surveillance during COVID-19 outbreak. BMJ. 2020;368:m1254.
- 3. The Lancet. COVID-19: protecting health-care workers. Lancet. 2020;395(10228):922.
- 4. Guan L, Zhou L, Zhang J, Peng W, Chen R. More awareness is needed for severe acute respiratory syndrome coronavirus 2019 transmission through exhaled air during non-invasive respiratory support: experience from China. Eur Respir J. 2020; 55(3):2000352.
- 5. Lotfinejad N, Peters A, Pittet D. Hand hygiene and the novel coronavirus pandemic: the role of healthcare workers. J Hosp Infect. 2020. https://doi.org/10.1016/j.jhin.2020.03.017.

https://doi.org/10.1016/j.jaad.2020.05.150

## New insights in COVID-19-associated chilblains: A comparative study with chilblain lupus erythematosus



To the Editor: An unexpected outbreak of chilblains has been reported in association with COVID-19.1 Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection has been shown in a few documented cases of chilblains. Chilblains may also be observed in acquired lupus and rarely as a manifestation of a familial disorder related to