

developed purpura fulminans with areas of necrosis and superficial desquamation on the chest and axilla (case 13). Laboratory data were consistent with disseminated intravascular coagulation, and ultimately, the patient died.

Erythema multiforme–like lesions were observed in a woman in her 80s 1 week following discharge after treatment for COVID-19–associated pneumonia (case 15). She had no other risk factors for development of erythema multiforme–like lesions, including active herpes simplex virus infection, and received no new medications in the last 3 days of her hospitalization or on discharge.

No pseudo-chilblain (COVID toes) was observed in the hospitalized patients evaluated. Pseudo-chilblain may be more strongly associated with mild disease or present after acute illness has resolved.

In summary, cutaneous manifestations in hospitalized COVID-19 patients are varied and are an important part of this potentially life-threatening illness. Findings in critically ill patients may differ from those in outpatients with mild disease. Limitations of our study include that cases were limited to a single institution, there was a lack of histology on the majority of cases, and there was inability to establish the pathophysiologic role of severe acute respiratory syndrome coronavirus 2 in the reported skin diseases. Additionally, less severe skin findings may not have required dermatology consultation. Further large-scale cohort studies with classification of histology are necessary to better describe both the frequency and etiology of these findings.

Mark A. Strom, MD, Megan H. Trager, BA, Dmitriy Timerman, MD, Alexandra J. Coromilas, MD, Katy Burris, MD, Donald V. Belsito, MD, Ariel Eber, MD, Sophie Greenberg, MD, Sameera Husain, MD, Jesse M. Lewin, MD, Fludiona Naka, MD, Christina C. Patrone, MD, Aaron Coulon, MD, Chelsea Cooper, MD, Frederick B. Bartholomew, MD, Melissa Beck, MD, Margaret L. Dowd, MD, Courtney Ensslin, MD, Stephanie M. Gallitano, MD, Eric Loesch, MD, Dana M. Malajian, MD, Laura Melnick, MD, George W. Niedt, MD, Laura N. Uwakwe, MD, Ha Linh Vu, MD, Robert R. Walther, MD, Faramarz H. Samie, MD, PhD, and Larisa J. Geskin, MD

From the Department of Dermatology, Columbia University Irving Medical Center, New York, New York

Dr Strom and Author Trager contributed equally to this article.

Drs Samie and Geskin are co-senior authors.

Funding sources: None.

Conflicts of interest: None disclosed.

IRB approval status: Approved by Columbia University Irving Medical Center IRB AAAT2471.

Reprints not available from the authors.

Correspondence to: Larisa J. Geskin, MD, 161 Fort Washington Ave, New York, NY 10032

E-mail: ljj2145@cumc.columbia.edu

REFERENCES

1. Recalcati S. Cutaneous manifestations in COVID-19: a first perspective. *J Eur Acad Dermatol Venereol.* 2020;34(5):e212-e213.
2. Galván Casas C, Català A, Carretero Hernández G, et al. Classification of the cutaneous manifestations of COVID-19: a rapid prospective nationwide consensus study in Spain with 375 cases. *Br J Dermatol.* 2020;183(1):71-77.
3. de Masson A, Bouaziz JD, Sulimovic L, et al. Chilblains are a common cutaneous finding during the COVID-19 pandemic: a retrospective nationwide study from France. *J Am Acad Dermatol.* 2020;83(2):667-670.
4. Jia JL, Kamceva M, Rao SA, et al. Cutaneous manifestations of COVID-19: a preliminary review. *J Am Acad Dermatol.* 2020; 83(2):687-690.
5. Shulman ST. Pediatric coronavirus disease-2019–associated multisystem inflammatory syndrome. *J Pediatr Infect Dis Soc.* 2020;9(3):285-286.

<https://doi.org/10.1016/j.jaad.2020.10.014>

COVID-19 and health care disparities: Innovative ways to meet the dermatologic needs of patients experiencing homelessness



To the Editor: The coronavirus disease 2019 (COVID-19) pandemic has affected every aspect of global society. The homeless population in the United States, which included 568,000 Americans on any given day in 2019,¹ is disproportionately affected by this crisis and faces unique obstacles to combating the spread of disease.² People experiencing homelessness have limited access to resources necessary to prevent severe acute respiratory syndrome coronavirus 2. Guidelines to slow transmission, including social distancing and frequent handwashing, inherently present barriers to individuals who shelter in congregate settings and are often unable to procure face masks, soap, or hand sanitizer. Many people experiencing homelessness are also older adults from socially disadvantaged minority populations, who data suggest are at increased risk of COVID-19 mortality.^{1,3}

The medical community has taken multiple steps to increase access to care for this vulnerable



Fig 1. COVID-19 care kits consisting of soap, hand sanitizer, moisturizer, dental care products, puzzles, headphones, a COVID-19 informational pamphlet, and other personal hygiene items.

population, such as creating facilities that offer isolation and treatment for people experiencing homelessness who have COVID-19. We hypothesized that dermatologists can further aid this population by mobilizing critical supplies commonly found in their offices and using the generosity of local companies to create COVID-19 care kits, which contain items necessary to protect people experiencing homelessness from disease. Goals of distribution included not only increased access to basic hygienic products but also acknowledgment of our common humanity during a time of crisis.

Before supply collection, local shelters were contacted to identify the most useful items to patients. As dermatologists, we were especially well positioned to obtain products such as soap and hand sanitizer because of preexisting relationships with skin care companies. Local volunteers contributed face masks and donors provided additional funds for entertainment items, COVID-19 safety brochures, and packaging. The final kits contained soap, hand sanitizer, moisturizer, dental care products, puzzles, headphones, a COVID-19 informational pamphlet, and other personal hygiene items (Fig 1). To minimize the number of people in contact with patients, kits were delivered to a contact person at each shelter, who later distributed the kits.

The success of this endeavor was measured by the number of kits distributed to local shelters. Greater than 1000 kits were assembled between March and June. This program is sustainable through

the generosity of skin care companies, fund-raising efforts, and the incorporation of staff and trainees into the collection and assembly process. Limitations include distribution to a single geographic area and variation in supply of donated items.

Building on relationships we already have as dermatologists, we were able to create a COVID-19 kit donation program that provided people experiencing homelessness with necessary supplies to minimize the spread of disease. In the post-COVID-19 era, this effort will be expanded to involve the assembly of kits containing over-the-counter products to treat common skin conditions, including acne, atopic dermatitis, and xerosis. We propose a call to action for the dermatology community to create similar programs to aid this critically marginalized population. To identify a clinic or shelter with which to partner, the following resources may be useful: National Health Care for the Homeless Council Respite and Grantee directories (<http://www.nhchc.org>), <http://www.findahealthcenter.hrsa.gov>, and <http://www.homelessshelterdirectory.org>.

Samantha M. Guban, BA,^a Neera R. Nathan, MD, MSHS,^b Haya Raef, BA,^c Margaret Cavanaugh-Hussey, MD, MPH,^{d,f} and Jennifer K. Tan, MD^{e,f}

From Harvard Combined Dermatology Residency,^b Department of Dermatology, Brigham and Women's Hospital,^d and Department of Dermatology, Massachusetts General Hospital,^e Harvard Medical School,^a Boston; Tufts University School of Medicine, Boston, Massachusetts^c; and Boston Health Care for the Homeless Program, Massachusetts.^f

Funding sources: Supported by L'Oreal Active Cosmetics, Tom's of Maine, Fabrizia Spirits, The Tufts Medical Alumni Association CSL Funds, The Tufts CSL Community Response Mini-Grants, and private contributions.

Conflicts of interest: Dr Tan is a consultant for Purity Brands. Drs Nathan and Cavanaugh-Hussey and Authors Guban and Raef have no conflicts of interest to declare.

IRB approval status: Not applicable.

Reprints not available from the authors.

Correspondence to: Jennifer K. Tan, MD, Dermatology Department, Massachusetts General Hospital, 50 Staniford St, 2nd Floor, Boston, MA 02114

E-mail: jtan5@partners.org

REFERENCES

1. Henry M, Watt R, Mahathey A, Ouellette J, Sitler A, Abt Associates. The 2019 Annual Homeless Assessment Report (AHAR) to Congress. Available at: <https://www.huduser.gov/portal/sites/default/files/pdf/2019-AHAR-Part-1.pdf>. Accessed May 10, 2020.
2. Mosites E, Parker EM, Clarke KEN, et al. Assessment of SARS-CoV-2 infection prevalence in homeless shelters - four U.S. cities, March 27-April 15, 2020. *MMWR Morb Mortal Wkly Rep.* 2020;69:521-522.
3. Shah M, Sachdeva M, Dodiuk-Gad RP. COVID-19 and racial disparities. *J Am Acad Dermatol.* 2020;83(1):e35.

<https://doi.org/10.1016/j.jaad.2020.10.042>

Incidence of severe COVID-19 outcomes in psoriatic patients treated with systemic therapies during the pandemic: A Biobadaderm cohort analysis



To the Editor: The use of systemic treatments in psoriatic patients during the pandemic has been the subject of extensive debate. In March 2020, we performed a specific study within the cohort of Biobadaderm Registry, a previously described national, multicenter, prospective cohort.¹

Our primary objective was to analyze the incidence of COVID-19 infections and severe outcomes in a cohort of psoriatic patients treated with systemic therapies and to compare it with that of the general population.

We reviewed all Biobadaderm patient records and contacted the patients when needed. We collected information about current comorbidities related to COVID-19 and COVID-19 outcomes in all active patients of the registry. We used the latest data updated on July 6, 2020.

We estimated the age and sex standardized incidence ratio (SIR) defined as the ratio of the observed cases to the expected number of cases according to the Spanish population. The main analysis examined hospitalization, intensive care unit (ICU) admissions, and death in polymerase chain reaction (PCR)-confirmed patients included in Biobadaderm compared with PCR-confirmed cases published by the Spanish Ministry of Health.² Also 95% confidence intervals (CI) were calculated for each SIR to compare significance between the Spanish figures and those of Biobadaderm.

In our study, we found that of 2329 current active patients with systemic therapy, 73 patients (3.13%) had suffered from COVID-19, 13 patients (0.56%) required hospitalization, 1 patient (0.04%) needed ICU care, and 1 (0.04%) patient died. Patient characteristics are detailed in [Table I](#). The profile of COVID-19 cases was similar to that of the population

of origin (Biobadaderm) in age and sex,³ but with higher percentages of comorbidities like hypertension (27% vs 22%) or diabetes mellitus (16% vs 11%).

In our main analysis ([Table II](#)), the SIR for COVID-19 infection, hospitalization, ICU care, and death were slightly higher in psoriatic patients treated with systemic therapies compared with the general population of Spain, but this was not significant: 1.58 (0.98-2.41), 1.55 (0.67-3.06), 1.78 (0.05-9.93), 1.38 (0.03-7.66), respectively.

The results are consistent with the article published by Gisoni et al³ during the peak of the Italian pandemic that suggests that psoriatic patients receiving biologic treatments are not associated with worse outcomes.

Strengths of this study are that we analyzed a prospective cohort, we know the base population, and we can calculate the incidences. This study, therefore, avoids problems of other ongoing international registries based on case notifications, which do not have a well-defined base population and likely suffer from selection bias.⁴ Although the first data were reassuring at the start of the pandemic, some authors consider that it is necessary to confirm them using prospective studies of incidence with adequate denominators.⁵

The limitations of this study include the lack of serologic or molecular confirmations for the diagnosis of COVID-19 of all possible cases, which is because in cases of mild courses of the disease, testing was often not done during the period of the study.

The findings of this prospective cohort study suggest that classic systemic or biologic treatments increase neither the susceptibility nor the severity of COVID-19.

This work was conducted within the BIOBADADERM Study Group. The following members participated in acquisition of data and review of the manuscript: Esteban Daudén, Mar Llamas-Velasco, Cristina Santamaría (Hospital Universitario de la Princesa); Gregorio Carretero, Jaime Vilar-Alejo, Blanca Madrid Álvarez (Hospital Universitario de Gran Canaria Dr Negrín); Raquel Rivera, Carmen García-Donoso, M^a del Mar Onteniente Gomis, Diana Batista Cabrera (Hospital Universitario 12 de Octubre); Carlos Ferrándiz, José Manuel Carrascosa, Ferrán Ballescá (Hospital Universitari Germans Trias i Pujol); Pablo de la Cueva, Patricia Molina Mejías (Hospital Universitario Infanta Leonor); Isabel Belinchón, Carlos García Giner, Alfred Perez (Hospital General Universitario de Alicante); Fran J. Gómez-García (Hospital Universitario Reina Sofía); Enrique Herrera-Ceballos, Enrique Herrera-Acosta, Eliseo Martínez-García, Cristina Sánchez (Hospital Universitario Virgen de la Victoria); José Luis