Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

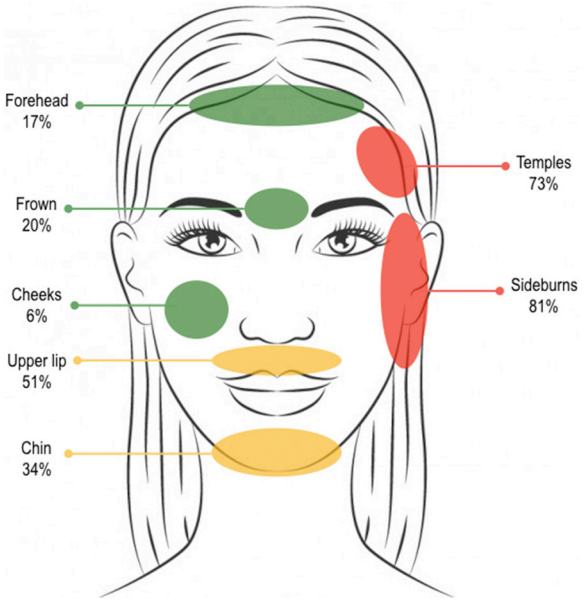

Fig 1. Proportion of patients who developed hypertrichosis in each facial area. Colors represent most (red), moderate (yellow), and less (green) frequently affected areas. Other affected areas were the arms (63% of the patients), dorsum of the hands (9%), legs (4%), anterior trunk (3%), and back (1%).

Hypertrichosis is the most frequent adverse effect and the main concern of LDOM treatment for hair loss, especially in women. However, it is usually well tolerated, and most patients are either not concerned or manage it with hair removal, without stopping or modifying the treatment. Higher doses of LDOM (2.5-5 mg in male patients and 0.5-1 mg in female patients) are suggested to be more effective[4] but are also more likely to produce hypertrichosis, ranging from 4% of the patients treated with 0.25 mg[2] to 93% treated with 5 mg.[5] We also found a higher degree of hypertrichosis in patients receiving higher doses, supporting that this adverse effect is dose dependent and represents the main limiting factor to the efficacy. We propose starting LDOM in female patients at a dose of 0.5 mg daily and considering up-titrating the dose every 3 months according to response and degree of hypertrichosis.

In conclusion, LDOM-induced hypertrichosis usually appears in the first 3 months of therapy and mostly affects the sideburns and temples. It is usually mild and can be easily managed with dose adjustment or hair removal, not requiring treatment discontinuation in most patients.

Figure 1 was designed using resources from Freepik.com.

Juan Jimenez-Caube, MD,[a] David Saceda-Corralo, MD, PhD,[a,b] Rita Rodrigues-Barata, MD,[a,b] Angela Hermosa-Gelbard, MD,[a,b] Oscar M. Moreno-Arrones, MD, PhD,[a,b] Rocio Gil-Redondo, MD,[b,c] Daniel Ortega-Quijano, MD,[a] Diego Fernandez-Nieto, MD,[a] Pedro Jaen-Olasolo, MD, PhD,[a,b] and Sergio Vaño-Galvan, MD, PhD[a,b]

From the Servicio de Dermatología, Hospital Universitario Ramón y Cajal, Departamento de Medicina, Facultad de Medicina, Universidad de Alcalá, IRYCIS[a]; Trichology Unit, Grupo de Dermatologia Pedro Jaen[b]; and Hospital Universitario La Paz, Madrid, Spain.[c]

Funding sources: None.

Conflicts of interest: None disclosed.

IRB approval status: Reviewed and approved by Comite de Etica en Investigacion Medica del Hospital Universitario Ramon y Cajal.

Correspondence to: Juan Jimenez-Caube, Dermatology Department, Ramon y Cajal University Hospital, Carretera Colmenar Viejo km 9.100, 28034 Madrid, Spain

E-mail: jjimenezc92@gmail.com

REFERENCES

1. *Loniten (minoxidil tablets USP) [package insert].* Kirkland, Quebec: Pharmacia & Upjohn Company LLC, Pfizer Canada Inc; 2013.
2. Sinclair RD. Female pattern hair loss: a pilot study investigating combination therapy with low-dose oral minoxidil and spironolactone. *Int J Dermatol.* 2018;57(1):104-109.
3. Jimenez-Cauhe J, Saceda-Corralo D, Rodrigues-Barata R, et al. Effectiveness and safety of low-dose oral minoxidil in male androgenetic alopecia. *J Am Acad Dermatol.* 2019;81(2):648-649.
4. Randolph M, Tosti A. Oral minoxidil treatment for hair loss: a review of efficacy and safety. *J Am Acad Dermatol.* 2020. https://doi.org/10.1016/j.jaad.2020.06.1009.
5. Lueangarun S, Panchaprateep R, Tempark T, Noppakun N. Efficacy and safety of oral minoxidil 5 mg daily during 24-week treatment in male androgenetic alopecia. *J Am Acad Dermatol.* 2015;72(5 Suppl 1):AB113.

https://doi.org/10.1016/j.jaad.2020.08.124

Occupational dermatoses among front-line health care workers during the COVID-19 pandemic: A cross-sectional survey

To the Editor: High rates of occupational dermatoses related to hand hygiene and personal protective equipment (PPE) have been reported during the COVID-19 pandemic in China and Germany.[1-4] Based on the increased need for PPE and hand

Table I. Occupational characteristics and participant responses

Characteristics	n (%)
Occupational characteristics	
Department	
Other	107 (27.4)
Emergency medicine	78 (20.0)
Pulmonary/critical care	59 (15.1)
Internal medicine	38 (9.7)
Surgery	33 (8.5)
Family medicine	20 (5.1)
Other specialty pulled to internal medicine/ICU	20 (5.1)
Medicine subspecialty (excluding pulmonary/critical care)	16 (4.1)
Anesthesia	8 (2.1)
Surgical subspecialty	5 (1.3)
Occupational setting	
Inpatient floor	132 (33.8)
Intensive care	98 (25.1)
Emergency department	83 (21.3)
Stepdown unit	21 (5.4)
Other	21 (5.4)
Outpatient	16 (4.1)
Operating room	10 (2.6)
Telemedicine	5 (1.3)
Urgent care	1 (0.3)
Occupation	
Nurse	247 (63.3)
Resident	28 (7.2)
Other	24 (6.2)
Attending	22 (5.6)
Nursing assistant	21 (5.4)
Respiratory therapist	10 (2.6)
Pharmacist	7 (1.8)
Physician assistant	7 (1.8)
Fellow	6 (1.5)
Intern	6 (1.5)
Case manager	3 (0.8)
CRNA	3 (0.8)
Medical assistant	3 (0.8)
Social worker	2 (0.5)
Worked with patients with confirmed or suspected COVID-19	351 (90.0)
Participant responses	
Missed work due to skin symptoms	2 (0.5)
Anxious, annoyed, or frustrated by skin symptoms	275 (70.5)
Skin symptoms interfered with sleep	63 (16.2)
Embarrassed, ashamed, or isolated by skin symptoms	101 (25.9)
New or worsening nail biting	63 (16.2)
New or worsening skin picking	140 (35.9)
Modification of PPE	254 (65.1)
Concerned modifications affected PPE efficacy	96 (24.6)
Purchased new skin care products	194 (49.7)
Interested in obtaining advice from a dermatologist	192 (49.2)

CRNA, Certified registered nurse anesthetist; *ICU*, intensive care unit; *PPE*, personal protective equipment.

hygiene, we suspected occupational dermatoses to be a common problem among US health care workers during the COVID-19 pandemic. Our aim was to better understand the burden and impact of occupational dermatoses among health care workers during the COVID-19 pandemic, including missed work, sleep disturbance, and modification of PPE due to related skin symptoms.

This study was reviewed and deemed exempt by the Boston Medical Center (BMC) Institutional Review Board. Cross-sectional data were obtained via a secure anonymous electronic questionnaire administered to health care workers at Boston Medical Center between May 2, 2020, and May 10, 2020. Participants included physicians, nurses, and other allied health professionals.

This survey assessed new and existing skin problems reported by participants. Table I summarizes participant characteristics and responses. Of the 390 participating health care workers, 341 were women (87.4%); the mean (standard deviation) age was 39.5 (12.1) years. The high proportion of female participants is similar to the majority proportion of women in the health care workforce in the United States.[5] Of the 235 participants who reported an existing skin condition before the start of the pandemic, 145 (61.7%) experienced worsening of their skin condition (Supplemental Fig 1; available via Mendeley at https://doi.org/10.17632/hk7hvzdn6j.1). Nearly all participants reported developing new skin symptoms since the start of the pandemic (372 [95.4%]) and new skin problems after the use of PPE (353 [90.5%]) (Fig 1 and Supplemental Fig 2; available via Mendeley at https://doi.org/10.17632/hk7hvzdn6j.1). The majority of participants reported modifying PPE to prevent or alleviate skin problems (254 [65.1%]), and many were concerned that the modifications may have interfered with PPE effectiveness (96 [24.6%]). Two (0.5%) participants reported missing work due to skin symptoms since the pandemic began. Many participants reported experiencing sleep disruption (63 [16.2%]); anxiety, annoyance, or frustration (275 [70.5%]); and embarrassment, shame, or isolation (101 [25.9%]) associated with their new or worsening skin problems. Some participants reported new or

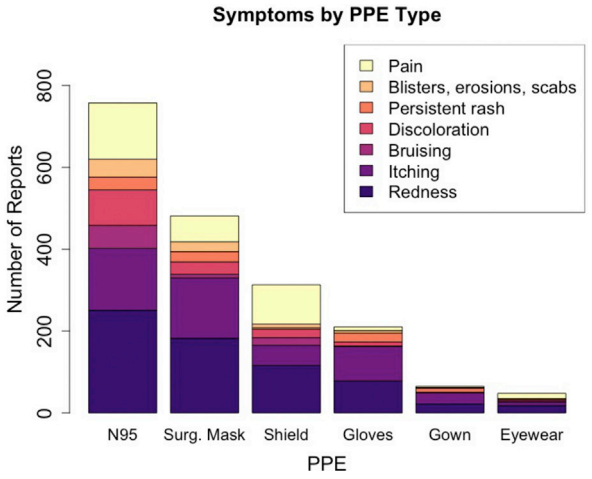

Fig 1. Skin symptoms aggregated by PPE. *PPE*, Personal protective equipment. *Surg.*, surgical.

worsening nail biting (63 [16.2%]), and some participants reported new or worsening skin picking (140 [35.9%]).

Our study has some limitations. It is likely that employees with skin complaints participated at higher rates, so our findings cannot be used to approximate the prevalence of any of the measures we reported. Additionally, this survey was conducted electronically and in English, excluding non−English speakers and those without access to internet-enabled devices. Despite these limitations, this study provides insight into the skin problems faced by health care workers in the setting of increased PPE use, increased hand hygiene, and the stress of working during the COVID-19 pandemic.

Our findings show that many front-line health care workers reported new or worsening skin problems since the start of the COVID-19 pandemic, that health care workers attributed skin problems to the use of PPE, and that health care workers modified PPE to alleviate skin problems. Further research is necessary to determine how users are modifying their PPE and whether these modifications compromise PPE efficacy.

Nicole Trepanowski, BS,[a] *Allison R. Larson, MD, MS,*[b] *and Rachel Evers-Meltzer, MD, MPH*[b]

From the Boston University School of Medicine, Boston, Massachusetts[a]*; and Department of Dermatology, Boston University School of Medicine, Boston, Massachusetts.*[b]

Funding sources: None.

Conflicts of interest: None disclosed.

IRB approval status: Reviewed and deemed exempt by the Boston Medical Center IRB (approval no. H-40186).

Reprints not available from the authors.

Correspondence to: Rachel Evers-Meltzer, MD, MPH, Department of Dermatology, Boston University School of Medicine, 609 Albany Street Boston, MA 02118

E-mail: Rachel.EversMeltzer@bmc.org

REFERENCES

1. Yan Y, Chen H, Chen L, et al. Consensus of Chinese experts on protection of skin and mucous membrane barrier for health-care workers fighting against coronavirus disease 2019. *Dermatol Ther*. 2020. https://doi.org/10.1111/dth.13310.
2. Pei S, Xue Y, Zhao S, et al. Occupational skin conditions on the frontline: a survey among 484 Chinese healthcare professionals caring for Covid-19 patients. *J Eur Acad Dermatol Venereol*. 2020;34:e354-e357.
3. Lan J, Song Z, Miao X, et al. Skin damage among health care workers managing coronavirus disease-2019. *J Am Acad Dermatol*. 2020;82(5):1215-1216.
4. Guertler A, Moellhoff N, Schenck TL, et al. Onset of occupational hand eczema among healthcare workers during the SARS-CoV -2 pandemic—comparing a single surgical site with a COVID -19 intensive care unit. *Contact Dermatitis*. 2020;83:108-114.
5. Cheeseman Day J, Christnacht C. *Your Health Care Is in Women's Hands*. U.S. Census Bureau; 2019.

https://doi.org/10.1016/j.jaad.2020.08.126

Postoperative bleeding complications associated with blood thinning agents during Mohs micrographic surgery: A retrospective cohort study

To the Editor: Mohs micrographic surgery (MMS) is a safe, office-based procedure with low complication rates, of which bleeding is among the most common.[1] Several new pharmacotherapies have been developed to decrease thrombotic events, with limited data on their risks during cutaneous surgery. Common antithrombotic agents include aspirin, clopidogrel, warfarin, direct thrombin inhibitors, factor Xa inhibitors, and dual antiplatelet therapy. Aspirin has not been associated with increased bleeding in cutaneous surgery,[1-5] whereas monotherapy with warfarin or clopidogrel has a low increased bleeding risk.[2-5] Most studies conclude that discontinuation of antiplatelet or anticoagulant therapy is not recommended.[1-5] A series of small studies did not show a significantly increased bleeding rate on factor Xa inhibitors or direct thrombin inhibitors during cutaneous