

LETTER

A dermatologist's perspective of the COVID-19 outbreak

Dear Editor,

Although our knowledge about the cutaneous manifestations of coronavirus disease (COVID-19) is evolving as the pandemic unfolds, there are many aspects of this global pandemic that we as dermatologists need to be well versed in.¹

The literature on the skin manifestations of the severe acute respiratory syndrome corona virus 2 (SARS-CoV-2) is constantly pouring in.^{2,3} From a study conducted in Italy on 88 COVID-19-positive patients, 20.4% had skin involvement, which did not correspond to disease severity.⁴ Of these, 9% developed skin manifestations at symptom onset and 11.3% after hospitalization. Erythematous rashes, widespread urticaria, and vesicles were found mostly on the trunk, which resolved spontaneously. Itching was absent or insignificant.⁴ Mildly itchy, pernio-like erythematous to violaceous skin papules and macules have been found to occur on the toes and fingers of children, similar to what has been reported with H1N1 virus infection. These cases show a familial clustering.⁵

Personal protective equipment (PPE) comes with its share of skin problems due to friction, contact, excessive hydration, or epidermal barrier breach, seen in up to 97% of healthcare workers wearing them. Maceration, contact dermatitis, erythema, scaling, and papules have been seen, with the nasal bridge as the most common site involved.⁶ Protective headgears can lead to scalp folliculitis and increased seborrheic dermatitis. As hand hygiene is one of the most important safety measures advocated, hand dermatitis due to hand-washes, hand-sanitizers, and use of gloves are on the rise. Using well-fitting PPE and moisturizers after hand washing and before wearing masks has been advocated. Treatment of various skin conditions with calamine lotion, topical steroids, and topical antibiotics has been advised.⁷

The major routes of entry of the virus are the nasal and ocular mucosae. There is a hypothesis that patients with skin diseases can have the virus enter through breached skin.⁸

Chronic paronychia and tinea unguium due to wet-work that has to be done in the absence of house help during lockdowns is a possibility.

Treatment of patients can also lead to cutaneous manifestations. We must be wary of the cutaneous manifestations of prophylactic treatments with zinc, azithromycin, and hydroxychloroquine that many are prescribed at this time.^{8,9}


Though as dermatologists we may not be the frontline defense against COVID-19, we are physicians first. We must be aware that as we witnessed in Italy and the United Kingdom, we can be called-in to help in COVID wards, and help out in ICUs as first-line COVID warriors. We need to restructure our work. Dermatologists

are mostly involved in triage, helping to send suspected patients visiting them for skin ailments to flu clinics. Our wards and clinics can serve as "covidaria" as in Bulgaria.⁴ In times of lockdown such as these, many countries have made teleconsultation legal and online dermatological consults have been allowed, albeit with certain conditions. Most academic meetings around the world have been canceled. Elective aesthetic dermatology procedures have been postponed. This will directly impact the financial aspect of dermatologists.


Thus, as dermatologists, we need a broader outlook of this pandemic. We need to be aware of any new or evolving skin manifestations due to the disease itself, because of medications used to prevent or treat the disease, and to perhaps change our scope and contribute productively and positively during this time of great need.

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REFERENCES

1. Sharma A, Fölster-Holst R, Kassir M, et al. The effect of quarantine and isolation for COVID-19 in general population and dermatologic treatments. *Dermatol Ther*. 2020;33(4):e13398. <https://doi.org/10.1111/dth.13398>.
2. Rudnicka L, Gupta M, Kassir M, et al. Priorities for global health community in COVID-19 pandemic. *Dermatol Ther*. 2020;33(4):e13361.
3. Arora G, Kroumpouzou G, Kassir M, et al. Solidarity and transparency against the COVID-19 pandemic. *Dermatol Ther*. 2020;33(4):e13359. <https://doi.org/10.1111/dth.13359>.
4. Recalcati S. Cutaneous manifestations in COVID-19: a first perspective. *J Eur Acad Dermatol Venereol*. 2020;34(5):e212–e213. <http://doi.wiley.com/10.1111/jdv.16387>. [Epub ahead of print].
5. Darlenski R, Tsankov N. Covid-19 pandemic and the skin—what should dermatologists know? *Clin Dermatol*. 2020;S0738081X20300493.
6. Richmond JM, Harris JE. Immunology and skin in health and disease. *Cold Spring Harb Perspect Med*. 2014;4:a015339–a015339.
7. Yan Y, Chen H, Chen L, et al. Consensus of Chinese experts on protection of skin and mucous membrane barrier for healthcare workers fighting against coronavirus disease 2019. *Dermatol Ther*. 2020;33(4):e13310. <https://onlinelibrary.wiley.com/doi/abs/10.1111/dth.13310>.
8. Gautret P, Lagier J-C, Parola P, et al. Hydroxychloroquine and azithromycin as a treatment of COVID-19: results of an open-label non-randomized clinical trial. *Int J Antimicrob Agents*. 2020;105949.
9. Ventricular Arrhythmia Risk Due to Hydroxychloroquine-Azithromycin Treatment for COVID-19—American College of Cardiology [Internet]. American College of Cardiology 2020. <https://www.acc.org/latest-in-cardiology/articles/2020/03/27/14/00/ventricular-arrhythmia-risk-due-to-hydroxychloroquine-azithromycin-treatment-for-covid-19>.