

LETTER

Performing dermoscopy in the COVID-19 pandemic

Dear Editor,

A novel coronavirus severe acute respiratory syndrome coronavirus 2 that has recently emerged from China in late 2019 has become a global pandemic. Research has revealed that human coronaviruses can remain infectious on inanimate surfaces at room temperature for up to 9 days. Recent data have suggested that SARS-CoV-2 can remain viable in aerosols for multiple hours. On stainless steel and plastic, the virus has shown a median half-life of 5.6 and 6.8 hours respectively.¹ Dermoscopy is a very useful diagnostic tool in the daily practice of a dermatologist. However, cross-infection is a significant concern with contact dermoscopy especially during a viral pandemic. Previous studies conducted by Quadros et al established that *Staphylococcus epidermidis*, microcococcus species, and corynebacterium species were frequently identified on dermatoscope lenses and smartphone adaptors.² Presence of human papilloma virus DNA has also been reported in a study on dermoscopic lenses. The aerosol particle sizes of COVID-19 range from 3 to 100 nm and using an filtering face piece 3 respirator offers a filtration rate of 99% for all particles measuring up to 0.6 μm .³

Maintaining high level of clinical suspicion and taking a careful history before initiation of the visit are important preprocedure safety measures for dermatologists during pandemics. In case of suspicious symptoms, clinical and dermoscopic examinations should be postponed for a minimum period of 14 days.

Precautions while performing dermoscopy:

1. Patients

Patients in the waiting area should be spaced at least 2 m apart, encouraged to disinfect hands with 60% to 70% isopropyl alcohol, provide verbal consents, and wear surgical masks before entering procedure rooms.

Dermatologists

Dermatologists must wash hands with soap and water or alcohol-based hand rubs before and after procedure. In addition, all health care workers should avoid touching of their own eyes, mouth, and nose. It is preferred to use a polarized noncontact dermatoscope or even a digital dermoscopic device with image evaluation on screen instead of handheld dermatoscopes. Alternative approaches like the use of a disposable polyethylene lens cover, polyvinyl chloride film with mineral oil and glass slide in front of the dermoscopic lens, might also be applied to prevent cross contamination. Alcohol containing solutions may be used as an interface medium. It is advisable to wear adequate eye protection (goggles or visor) considering that exposed mucous membranes

and unprotected eyes can increase the risk of SARS-CoV-2 transmission.⁴ Mucous membrane dermoscopy should only be performed when the examination has fundamental significance for therapeutic decisions. Preprocedural mouth rinse with 0.2% povidone-iodine or 0.5% to 1% hydrogen peroxide has been studied to reduce coronavirus in saliva.⁵ Trichoscopy should be performed when it is expected to have fundamental significance for therapeutic decisions, as there are currently no data on the possible presence of the virus on hair shafts. Dermoscopy-guided operative procedures like biopsy or radiofrequency ablation should be avoided during the pandemic.

Environment

For large surfaces, the recently published data with coronaviruses suggest that it is appropriate to use a dilution 1:50 of standard bleach for disinfection.¹ For small surfaces, including dermatoscopes, ethanol (62%-71%) for at least 1 minute can be used as a disinfecting agent. Therefore, the dermatoscope should be carefully disinfected in this way after every single examination.

Although some report on the incidence of nosocomial infections (predominantly gram-positive cocci) while handling dermatoscopes, others did not find such risk. There are limited data to support the fomite contamination of dermatoscopes with human coronaviruses. Consequently, there is neither robust evidence nor guidelines for doing dermoscopy during global pandemics, and all the suggestion provided in this article reflect the personal opinion of the authors. Medical professionals should perform dermoscopy with caution, keeping in mind the possibility of the dermatoscope acting as a vector for transmissible diseases.

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We confirm that the manuscript has been read and approved by all the authors, that the requirements for authorship as stated earlier in this document have been met, and that each author believes that the manuscript represents honest work.

CONFLICT OF INTEREST

The authors declare no potential conflict of interest.

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