

LETTER

Dermatologic treatments in the era of COVID-19 pandemic—Data and Hypothesis

Dear Editor,

Health practices and management have undergone a paradigm change since the onset of new corona virus disease 2019 (COVID-19). The infection has posed a challenge to all physicians worldwide.^{1–3} Dermatologists had to make changes in their routine outpatient and inpatient practices to address the increased risk of COVID-19 transmission to their practice. There have been a report of COVID-19 case with cutaneous manifestation.⁴ Additionally, due to excessive use of personal hygiene products (sanitizer, soap, and hand rub) and prolonged use of personal protective equipment (PPE), various cutaneous conditions have emerged. Apart from the routine prevention, we will be focusing on the role of dermatologist and the changes made during this pandemic era to limit the disease transmission.

1. *Outpatient department (OPD)*: 41.3% of patients in a case series from Wuhan acquired the COVID-19 infection from the hospital environment.⁵ Outpatient dermatology clinics, being a high-volume patient setting, increase the risk of exposure of health care professionals, staff, and patients to asymptomatic carriers of COVID-19. Patient load in dermatology OPD should be strictly appointment-based to maintain social distancing. Initial screening with a questionnaire asking about history of travel, fever, cough, and dyspnea should be implemented. Teledermatology can accommodate non-urgent cases, and particularly patients at higher risk of infection, elderly, and those with many comorbidities. Fomites, for example, magazines and newspapers, should be removed from the rooms. In addition to appropriate sanitary mask, goggles should be used to prevent conjunctival contamination. Alcohol based hand sanitizers along with educational posters should be displayed. A range of disinfectants can be employed, varying from hot water bath at 56°C for 30 minutes to 75% ethanol, chlorine, peracetic acid, and ultraviolet light (UV) disinfection.⁶
2. *Surgical procedures*: Patient's risk of acquiring the infection from an infected physician or staff member is substantial. Non-emergent surgical procedures should be deferred as any skin breach and the presence of skin lesions in the patient may make them more vulnerable to acquire COVID-19 through indirect contact.⁷ OPD complex including OT room should be well ventilated with at least 12 to 15 air exchanges per hour. Use of air-conditioning is best avoided because it recirculates the cold air. Ultraviolet radiation can be employed.
3. *Management of cutaneous conditions pertaining to the use of PPE and personal hygiene products*: Prolonged friction, epidermal barrier disruption, excessive sweating, and hydration are effects of PPE that can

aggravate existing skin disease. Burning, itching, and stinging along with erythema, papules, scaling, maceration, erosions, pressure urticaria, contact dermatitis, flare of acne and seborrheic dermatitis, and folliculitis are encountered with prolonged PPE use.^{6,8} Excessive hand washing and use of sanitizer and alcohol disrupts the normal lipid barrier of skin leading to hand dermatitis. Frequent application of emollients and barrier creams, including after each hand washing and before applying PPE, should be promoted to health care workers.⁸

4. *Management of acute cutaneous conditions and use of immunosuppressants and biologics*: In a confirmed COVID-19 infection, treatment of a skin condition with an immunosuppressant agent should be postponed and biologic therapy stopped. A decision to continue such treatments should be guided by the severity of skin disease, comorbidities, and age of patient. At present, evidence for or against use of these agents is not very strong, but definite recommendations will be established as more data accumulate.

In conclusion, this pandemic has taught us that patient safety is of utmost importance and we should strive to achieve this goal. Dermatologists should recognize and educate health care workers about the skin manifestations of COVID-19 and the prevention of development of skin and mucous membrane manifestations due to excessive use of personal hygiene measures. Instead of keeping our dermatology OPDs closed to the patient, we should endeavor to take the present challenges with full preparedness.

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