#### **LETTER**



# The fear of COVID-19 infection is the main cause of the new diagnoses of hand eczema: Report from the frontline in Milan

Dear Editor,

The Center for Disease Control and prevention (CDC) asserted that hand washing and surface decontamination are primary measures to reduce COVID-19 propagation.<sup>1</sup> In parallel, recent studies revealed an increased incidence of hand eczema (HE) in health care workers,<sup>2</sup> as well as among general population.<sup>3</sup>

During the period corresponding to Italian lockdown, from 9 March to 4 May 2020, 24 new cases of HE were diagnosed (the equivalence of 11.8%-24/203-of all urgent and not deferred consultations provided by our Dermatologic Unit).4 Women exceed male (17 vs 7) and the median age was 51 (range 16-63). The diagnosis was made on history and clinical observation: irritant contact dermatitis (ICD) prevailed on allergic contact dermatitis (ACD) that was suspected in five people. Thirteen patients (54.1%) complained occasionally itching. None of the patients was a health care worker. Detailed anamnesis revealed that all of them washed hands more than ten times a day and used often alcohol gel sanitizing. We asked patients to describe their hygiene routine and emerged some repetitive and obsessive actions not required by proper procedures. For example, more than one reported to use gel sanitizing after hand washing with soap. Others believed that hot water or harsh soap is the strategy more effective for virus inactivation. More than two-thirds used cleaners without gloves. Moreover, 15 patients (62.5%) asserted during the visit to be particularly anxious about possible contagious of relatives. In regard of suspicious cases of ACD we reported some common aspects: fragrance and/or quaternary ammonium-presenting sanitizers, long term or additional layers latex gloves used. This group of patients is waiting to perform patch tests. Fourteen patients received 1-week treatment with 0.1% betamethasone plus 2% fusidic acid bid. The remaining 10 patients were suggested two or three daily applications of reparative hand cream mainly composed by shea butter, stearic acid, ceramide 3, and cholesterol (Figure 1). After 3 weeks, most of them showed an improvement. Above all, we focused our attention on giving information about rational of hand hygiene and preventing clinical relapses with daily application of moisturizers in association with barrier creams.<sup>5</sup>

On 4 May, a new government decree came into force replacing the strict lockdown rules and giving people back more liberties. Our Dermatological Unit hypothesizes a rising incidence of cutaneous adverse effects related to hygiene measures. Because it has been demonstrated that a damaged skin barrier could be a gateway for COVID-19,6 to preserve a high compliance in CDC actions recommended for the prevention of person-to-person viral transmission, dermatologists have the role to educate people to maintain "healthy hands".





**FIGURE 1** Hand eczema in 16-year-old woman before, A, and after, B, two weeks of reparative hand cream application twice daily and interruption of excessive washing

# **CONFLICT OF INTEREST**

None.

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