



among the risk factors for a range of conditions including depressive episodes, panic disorder and adjustment disorders,<sup>4</sup> (ii) severe symptoms caused by COVID-19 infection may represent a life-threatening condition potentially contributing to the development of PTSD or related disturbances, and (iii) psychological stress, PTSD, depressive and anxious disorders have been associated with the onset or worsening of several dermatologic disturbances, this being partially mediated by complex neuroendocrine modulations of inflammatory and related systems.<sup>5–10</sup>

Increased psychosocial stress, in fact, may have an impact on the course of many common ‘stress-responsive’ skin conditions, such as psoriasis, atopic eczema, urticaria and chronic pruritus, as well as on healthy skin, as suggested by previous studies and by common dermatological wisdom. Stressful events have been long considered relevant triggers for the onset or recurrence of psoriasis, and stress can play a role in itch perception and in chronic pruritic conditions.<sup>6–10</sup> Inflammatory skin conditions have been associated with PTSD, and cutaneous symptoms have been reported to be predictors of the severity of such condition.<sup>5</sup> The importance of the brain–skin axis has been consistently underlined.<sup>9,10</sup>

Such evidence raises the possibility that the sustained psychosocial stress induced by the current pandemic can potentially lead to exacerbations or onset of common inflammatory skin conditions (e.g. psoriasis, atopic eczema, urticaria and pruritic conditions) at the population level, both in the short term and after the resolution of the pandemic. National health-care systems are currently undergoing major efforts to face the COVID-19 outbreak, thus possibly resulting in a reduction of routine dermatological care for chronic conditions in the upcoming months. Increased use of teledermatology programs and of patient empowerment strategies should be encouraged to support the care of individuals with chronic inflammatory skin conditions.

As clinicians, we will soon have to deal with short-term and long-term psychosocial effects related to the COVID-19 pandemic on patients with dermatological disorders. We support an ‘holistic’ management of skin diseases, and we encourage a comprehensive study of the complex implications of this pandemic for such patients.

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## Covid-19: countermeasure for N95 mask-induced pressure sore

To the editor

As known to all, World Health Organization has declared on March 11th, 2020 that Coronavirus (Covid-19) epidemic could be characterized as a pandemic, which proposed a big challenge for healthcare works worldwide, especially doctors and nurses. The strong infectiousness of SARS-CoV-2 forces medical personnel to do good and needful safeguard against virus. The N95 Health Care Particulate Respirator and Surgical Mask (Fig. 1a) is the commonly used and effective protective equipment for preventing respiratory virus infection while working in isolation ward. However, in actual course of use, we found N95 mask would bring besetment to users, sometimes inevitably.

The upward side of N95 mask has a metal strip on outer side and decompressing banding on inner side. The metal strip needs to be extruded to cling to nose bridge to reach good respiratory protection; however, pressure sore on nose bridge is liable to occur while working for long time, generally more than 4–6 h, although decompressing banding exists (Fig. 1b). The pressure sore could bring intense discomfort to user, and continuous working and wearing mask would further make sore more serious and even sick leave which would bring adverse impact on medical service system of various countries presently.



**Figure 1** (a) N95 health care particulate respirator and surgical mask. (b) Pressure sore on nose bridge. (c) Application of benzalkonium chloride patch on nose bridge.


Hydrocolloid dressing is often used to prevent and cure pressure sore, which is pasted to nose bridge before wearing mask, but we found the strong stickiness of dressing would likely aggravate existent pressure sore when taking off the mask and ripping away the dressing. If pressure sore does occur, the result of wearing N95 mask and using hydrocolloid dressing every day or other day would be from bad to worse.

An improved method involving double protection that pasting benzalkonium chloride patch to the pressure sore on nose bridge firstly and using hydrocolloid dressing secondly before wearing mask (Fig. 1c). The high stickiness of both sides of benzalkonium chloride patch can keep the patch fastened to nose bridge, while the central part can protect the existent pressure sore due to decompressing effect and infection prevention and the low stickiness of central part would not make pressure sore more serious when ripping away the patch.

However, above-mentioned method is only an expedient measure, improving protective mask is a permanent solution. Although Covid-19 will eventually be controlled and even eliminated worldwide, there are liable to face new epidemic situation in the future, and any improvement on protective equipment would be meaningful and benefit global health.

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## Should SARS-CoV-2 influence immunosuppressive therapy for autoimmune blistering diseases?

Editor

In this dramatic period where the whole world is affected by the outbreak of coronavirus disease 19 (COVID-19), scientific data relating to the causative virus SARS-CoV-2 as well as the subsequent therapeutic repercussions on the management of other diseases should be divulged in order to share as much information as possible among experts in a timely manner.

Regarding autoimmune blistering diseases, it is already widely acknowledged that physicians should search for triggers in all newly identified patients before starting any therapy, including infectious agents. But what about patients already in immunosuppressive therapy for these potentially life-threatening disorders?

Given the current lack of scientific evidence on the basis of which official recommendations with a high degree of reliability are possible, some indications have been proposed by the International Pemphigus and Pemphigoid Foundation, as the result of expertise and clinical common sense, inspired by a principle of prudence.<sup>1</sup> However, no clear and comprehensive data have been provided on the management of ongoing immunosuppressive therapies in these patients.

Regarding other inflammatory diseases, the indications of the major scientific Societies of Dermatologists, Rheumatologists and Gastroenterologists in Italy,<sup>2-4</sup> but also the American Academy of Dermatology Association,<sup>5</sup> suggest that if the patient is stable or in good health, the stop of the ongoing biologic therapy is not reasonable/indicated, as the risk of reactivation of the underlying pathology could add an additional risk factor to infections, including COVID-19.