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Impacts of the COVID-19 Pandemic to the Skin and to Professionals Caring for the Skin

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Editorial

This is a brief review on the impact of Coronavirus disease 2019 (COVID-19) pandemic on the skin and the practice of dermatology.

There are many skin manifestations of COVID-19. The most characteristic one would be multiple acraly-located erythematous perniois-like swellings occurring in babies and small children [1-4]. These lesions are usually late in presentation. Vesicular eruptions appear early in the phase of the disease [1]. These two types of lesions are the most specific patterns [1].

Non-pitting oedema on the hands and feet can sometimes be seen. Less commonly, lesions are seen on the face, trunk and ears [4]. They are mainly seen in the European countries and Middle East. To the best knowledge of the Editor, no such lesion has yet been reported in infants and young children in Asia, including South-East Asia. Other skin manifestations include a petechial rash on the trunk, non-specific exanthem and acute urticaria [5-8].

The impacts of COVID-19 are beyond cutaneous manifestations for the infected patients. As an example, for children with severe skin diseases, unrelated to COVID-19 and on immunosuppressant therapies, most pediatric dermatologists have paused or reduced the frequency of laboratory monitoring for adverse effects of the medications [9].

The Editor has previously reported on the close interactions of the cutis and the psyche [10].

During the pandemic, people are experiencing fear, distress and helplessness [11]. These can precipitate or perpetuate cutaneous diseases. The use of protective gears can lead to irritant and allergic contact dermatitis, intertrigo, and lichen simplex. People are afraid to attend surgeries and hospitals. Their thresholds for seeking proper medical attention are raised. In the surgery of the Editor, some long-term or new patients are attending with severe psoriasis, nodulocystic acne, generalised dermatophytoses and other severe skin conditions which could have been well controlled if they seek earlier help.

In some countries, the economic impacts of COVID-19 can affect the availability of people with skin diseases to consult dermatologists and the affordability to acquire necessary but expensive medications and skin-related utilities.

Owing to the early uncertainties on the infectivity of SARS-CoV-2, special arrangements have to be in place in dermatology out-patient clinics and in hospitals to protect the patients and the medical professionals [12-14]. National and international conferences are either cancelled or moved to be online ones [15].

What lessons have we learned so far? The first lesson regarding dermatology would be that cutaneous manifestations are highly common in infectious diseases – one needs to look for them, preferably in the early stages of the disease so as to guide diagnoses for the subsequent waves of patients. Other than exanthems, we should look for enanthems.

Secondly, for many diseases, there are distinctive skin manifestations which would help in diagnoses. If these skin manifestations only occur in one viral infection, they would be categorised as genuine viral exanthems. However, if any of such can occur in other viral infections, it would depend on whether they are clinically distinctive or not. In the case of the former, they should be categorised as paraviral exanthems, like pityriasis rosea, Gianotti-Crosti syndrome (papular acrodermatitis of childhood), asymmetrical periflexural exanthem (unilateral laterothoracic exanthem), unilateral mediot thoracic exanthem, papular-purpuric gloves and socks syndrome, eruptive pseudoangiomatosis and eruptive hypomelanosis [16-20]. In the case of the latter, they should be classified as non-specific viral exanthems or enanthems. These rashes are of less assistance in making diagnoses.

Thirdly, our infrastructure of healthcare for the skin can be brittle. Preparations should be made now and after the current pandemic. When another serious infectious disease or pandemic occurs, we should be ready for innovative alterations in offering dermatological care in the surgeries, hospitals and in the communities

Lastly, for infections mainly transmitted via the respiratory route, masks are more often useful than not. In Hong Kong, once we had the first COVID-19 patient diagnosed on 22 January 2020, 99% of our citizens have been wearing masks once outside their homes, despite the aforementioned adverse effects of protective gears on the skin. On the day the Editor is writing

this editorial (1 May 2020), we have only 1040 confirmed infections and five deaths, with the denominator being a crowded 7.4 million [21,22]. Of course, Hong Kong has its own historical (such as having fought SARS in 2003) and human geographic peculiarities (such as crowded transportations). Such might not be applicable to other countries or indeed districts, cities and communities.

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