



## **Dermatology staff participate in fight against Covid-19 in China**

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### **Dear editor:**

In December, 2019, a series of pneumonia cases in Wuhan, China, was caused by a novel coronavirus (Covid-19) [1-2], has become a global health concern [3]. At present the epidemic in China has been well controlled, but Covid-19 are currently spreading in many other countries all over the world. Dermatologists in China have participated in the fight against Covid-19. In this paper we share our experiences in dealing with skin diseases in this special period and hope to provide some references for international colleagues in the epidemic situation.

Fever can occur either in novel coronavirus pneumonia patients or in infectious dermatosis patients, such as varicella, measles and erysipelas etc. For patients with fever and skin lesions, we should distinguish whether it is caused by pneumonia or by skin diseases. Respiratory symptoms and inquiry of and epidemiological history is important for clinical differentiation. We also met a patient of Covid-19 combined with other communicable diseases such as Dengue fever which was noted for low platelet counts in her peripheral blood when screening pneumonia.

At present, there is still no specific drugs for novel coronavirus pneumonia treatment. Self-use or prescription-use This article has been accepted for publication and undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the [Version of Record](#). Please cite this article as [doi: 10.1111/jdv.16390](https://doi.org/10.1111/jdv.16390)

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of drugs including OTC, antibiotics, health care products and a variety of Chinese herbals and plant extracts were more than usual. This leads to the rising incidence of drug eruptions both in Covid-19 patients and healthy persons. Novel coronavirus pneumonia patients presented acute urticaria, urticaria vasculitis and other pruritus lesions after accepting anti-Covid-19 medicines. The possibility of allergic reactions caused by drugs should be considered by dermatologists.

Aggravation of previous skin diseases, such as rosacea, eczema, atopic dermatitis and neurodermatitis was also observed in some Covid-19 patients. For emotional tension during the outbreak might aggravate these diseases, we should attach importance to the psychological counseling for these patients. Facial acne and rosacea occurred or aggravated due to prolonged use of masks during the epidemic. Frequent use of skin disinfectants increased the incidence of contact dermatitis, not only in Covid-19 patients but also in healthy persons and medical workers. Many dermatologists open free online consultation to offer help to these persons in China.

Different treatment strategies for some skin diseases should be considered during the epidemic. People with several skin diseases such as psoriasis are at greater risk of developing cardiovascular disease, depression and other health conditions which might increase the incidence of severe cases and death after COVID-19 infection. Skin barrier damages induced by disease activity as well as the depression and anxiety for the novel coronavirus pneumonia could increase the COVID-19 susceptibility. Escalation therapy for atopic dermatitis and psoriasis patients, such as topical treatment-narrow UVB-immuno-suppressants/acitretin-biological agents for psoriasis patients, needed to be adjusted because it is not convenient to go to the hospital for photo-therapy treatment in the epidemic situation. Some traditional treatment methods work slowly and might increase the risk of COVID-19 infection by inhibiting the immune system defense functions. Therapeutic drugs, such as IL-17 inhibitor, that quickly function to control the skin lesions and have lower effects on personal immune functions compared to traditional immunosuppressants could be considered as first-line treatment this special period. This is also based on some statements that some biological agents might be effective in the treatment of novel coronavirus pneumonia, although it is still in the clinical research stages to prove the therapeutic effect of biological agents in both skin diseases and novel coronavirus pneumonia. Drugs that inhibit human immunity such as traditional immunosuppressants, MTX and Cyclosporine, should be avoided. Whether some TNF inhibitors which increase the susceptibility of mycobacterium tuberculosis and hepatitis B virus could increase the risk of covid-19 infection still needs further clinical and researching evidences.

Although many skin diseases may not be directly caused by Covid-19 infection, Covid-19 could induce systemic

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inflammatory responses [4] which might affect integumentary system to induce dermatitis or change the skin disease course. The relations between Covid-19 infection and skin diseases still need further investigation and more clinical evidences.

The Third Affiliated Hospital of Sun-Yat sen University, Guangzhou, China, as a national designated hospital for diagnosing, receiving and treating Covid-19 patients, our dermatology staff never stop to help the patients during the period of Covid-19. In order to prevent the epidemic expansion and the medical staff's infection while helping the patients, our department established a set of procedures which included subarea administration, cautionary symbol and periodic disinfection in clinic working area, dermatology staff's training and protection, patient reception procedures, skin surgery and skin laser treatment process and equipment disinfection. From February 3 to February 18, 1756 patients were received in our dermatology out-patient department. 44 dermatology staff participate in the clinical work. The Covid-19 infection rate of 0% was achieved until today in our department.

We hope our experiences could propose some references for carrying out clinical works reasonably and safely in dermatology departments during the period of novel coronavirus pneumonia epidemiology.

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