Chinese Experts Consensus on Pre-examination and Triage in Dermatology Clinics during the COVID-19 Outbreak#

Abstract
The SARS-CoV-2 infection has brought a great challenge in prevention and control of the national epidemic of coronavirus disease 2019 (COVID-19) in China. During the COVID-19 epidemic, properly carrying out pre-examination and triage for patients with skin lesions and fever has become a practical problem encountered in hospitals for skin diseases and dermatology clinics in general hospitals. Some of the carriers of the SARS-CoV-2 and patients with COVID-19 in the early stage may not present with any symptoms of COVID-19, while certain other skin diseases can also cause fever. Therefore, to properly deal with the patients presenting at dermatology clinics, the Chinese Society of
Introduction

The SARS-CoV-2 has caused extensive concern as the viral infection is spreading world widely. In the past two decades, there have been more than 10,000 cumulative cases of infection with other Coronaviridae family viruses, including severe acute respiratory syndrome coronavirus\(^1\) and Middle East respiratory syndrome coronavirus.\(^2\)

Health care workers and the public are facing an unprecedented challenge regarding the prevention of these viral infections and cross infections. As the most common symptom of coronavirus disease 2019 (COVID-19) is fever, and many kinds of skin diseases are also accompanied by fever, the proper pre-examination and triage for patients with skin lesions and fever has become a practical problem in hospitals for skin diseases and dermatology clinics in general hospitals. In order to handle this problem, the Chinese Society of Dermatology organized experts to formulate principles and procedures for the pre-examination and triage of patients in dermatology clinics during the COVID-19 outbreak. These principles and procedures are detailed below.

Pre-examination setup and personnel protective measures of workers carrying out pre-examination and triage

A separate pre-examination area should be set up for visitors to dermatology clinics in hospitals for skin diseases and general hospitals with large numbers of patients. A dermatologist should be involved in the pre-examination of patients presenting with skin lesions and fever. The protective measures for personnel carrying out such a pre-examination area include a disposable hat, work clothes, medical surgical mask or particulate protective mask, goggles, barrier gowns, and gloves.

Pre-examination

Each patient should be allowed at most one accompanying person when entering the clinic, and masks are mandatory required for both the patient and accompanying person. All patients and accompanying persons should be tested for body temperature and questioned regarding the presence of the following items: (1) symptoms of fever, cough, and dyspnea in the past 2 weeks; (2) a history of close contact with patients confirmed or suspected to be infected with SARS-CoV-2 or a suspected environmental exposure within 14 days before the visit; (3) a clustering onset of similar symptoms around the patient. All patients and accompanying persons should sign a letter of commitment to honesty and must be informed that they may bear legal consequences if they provide false information or conceal any medical history, exposure history, and/or other required information.

Triage

All patients with any positive history of close contact and/or exposure to patients with confirmed or suspected COVID-19 should be immediately directed to the fever clinic before visiting the dermatology clinics. For patients who have no history of exposure to COVID-19 patients, but have symptoms of fever (body temperature higher than 37.3°C), a dermatologist should perform triage based on the following categorization of skin diseases accompanied by fever.

Skin diseases almost always accompanied by fever

This type of diseases includes: (1) viral infectious diseases, such as measles, rubella, exanthem subitum, hand-foot-mouth disease, infectious mononucleosis, chicken pox, and Kaposi varicelliform eruption; (2) bacterial infectious diseases, such as scarlet fever, staphylococcal scalded skin syndrome, erysipelas, cellulitis, and other serious infections of the skin and soft tissues; (3) noninfectious diseases of the skin, such as severe drug eruption: acute generalized exanthematous pustulosis, Stevens-Johnson syndrome, toxic epidermal necrolysis and drug-induced hypersensitivity syndrome, generalized pustule psoriasis and erythrodermic psoriasis, Sweet disease, adult Still disease, Kawasaki disease, and febrile ulceronecrotic pityriasis lichenoides et varioliformis acuta.

Patients with fever, who are suspected to have the above mentioned diseases should be allowed in dermatology clinic, but only if they have no history of exposure to COVID-19. Considering the possibility of drug eruptions in patients infected with SARS-CoV-2, a more detailed history should be screened including the reasons of taking drugs, the symptoms before taking the medicine and the process of diagnosis and treatment.

Skin diseases possibly accompanied by fever

This type of diseases includes erythema infectiosum, mild to moderate drug eruption, erythema multiforme, erythrodermic atopic dermatitis, severe contact dermatitis, secondary bacterial infection in pemphigus and bullous pemphigoid, connective tissue diseases, such as systemic lupus erythematosus and dermatomyositis, Behcet disease, panniculitis, and vasculitis.
Patients with fever who are suspected to have the above mentioned diseases should be allowed in dermatology clinic under extensive monitoring, but only if they have no history of exposure to COVID-19. Considering the possibility of drug eruptions in patients infected with SARS-CoV-2, a more detailed history should be screened including the reason for drug intake, the symptoms before the drug intake and the process of diagnosis and treatment, besides the history of exposure to SARS-CoV-2.

**Skin diseases rarely accompanied by fever**

This type of diseases includes primary herpes simplex, herpes zoster, and some subtypes of urticaria such as serum sickness-like reaction.

Patients with fever who are suspected to have the above mentioned diseases should be allowed in the dermatology clinic, but only if they have no history of exposure to SARS-CoV-2. Otherwise, they should be sent to a fever clinic.

Previous research has shown that the common symptoms of COVID-19 include fever (98%), cough (76%), dyspnea (55%), and myalgia or fatigue (44%); less common symptoms include sputum production (28%), headache (8%), hemoptysis (5%), and diarrhoea (3%).4–6 There has never been a reported case of skin lesions of symptoms related to COVID-19 in the published literature.4–6 However, SARS-CoV-2 infection was diagnosed in one patient who presented with fever and urticaria (unpublished communication). Therefore, clinicians must pay close attention to the rashes related to SARS-CoV-2 infection.

As some patients with COVID-19 may have an uncertain or negative history of exposure to an epidemic area or confirmed/suspected cases,7 all dermatologists should recheck patient’s body temperature and make a thorough inquiry into their history of exposure to SARS-CoV-2 infection. Furthermore, all medical staff should always be vigilant in preventing SARS-CoV-2 infection during the processes of pre-examination, triage, and medication administration.

**References**

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