

Editorial

Pruritic Eruptions as the Presenting Symptoms of COVID-19

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EDITORIAL

The coronavirus disease 2019 (COVID-19), pandemic, caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), infection, is a constantly evolving condition with new symptoms and manifestations. Common symptoms of COVID-19 include fever, cough, weakness, and dyspnea and the less frequent symptoms include anorexia, diarrhea, abdominal pain, dizziness, headache, fatigue, arthralgia, rhinorrhea, sneezing, myalgia, vomiting, facial pain and fullness, otalgia, olfactory dysfunction, unilateral facial palsy, and vertigo [1-4]. The dermatologic manifestations of COVID-19 remains largely elusive. Preliminary reports have described a wide spectrum of dermatologic findings associated with COVID-19, such as viral exanthems, chilblain-like acral lesions, livedo reticularis, urticaria, petechial, and vesicular rashes [5]. To help raise awareness of cutaneous manifestations of COVID-19, we herein report four COVID-19 patients (based on reverse transcription polymerase chain reaction [RT-PCR] for SARS-CoV-2 infection), in different age categories without remarkable past medical history of allergy or skin disease, who presented with various pruritic skin eruptions, including discrete erythematous plaques, papular rash, urticaria, and eczema-like lesions (Figure 1). Patient characteristics, laboratory results, and outcomes are summarized in Table 1. The patients were managed conservatively with hydroxyzine without antiviral therapy, and followed for two weeks to evaluate the disease progression. None of the patients experienced fever, cough, or dyspnea throughout the clinical course. Vital signs and physical examinations were normal through the end of the follow-up, and all patients completely recovered without any complications.

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Retested RT-PCR for COVID-19 was negative after two weeks in all four patients. Extending the previous observations, our report indicates that pruritic eruptions could be the initial presenting symptoms of COVID-19 patients. During the COVID-19 pandemic, physicians should stay vigilant when approaching individuals with unexplained dermatologic manifestations who are at high risk or have a recent contact history of COVID-19. Early



Figure 1 Panel 1: Discrete erythematous plaques on patient's axilla and abdomen.

Panel 2: Papular rash on patient's abdomen

Panel 3: Urticarial eruption on patient's arm and forearm

Panel 4: Eczema-like rash on patient's knee and elbow.

Table 1: Patient characteristics, laboratory results, and outcomes of patients.

Cases	Age and sex	Past medical history	Clinical manifestations	Laboratory tests	Follow up at two weeks
1	5-year-old boy	Exposed to a COVID-19 patient	<ul style="list-style-type: none"> • Sudden onset of itching discrete erythematous plaques on his body especially on his abdomen and axilla • Mild diarrhea 	Normal blood test, stool exam, and chest CT scan	Recovery of rash and diarrhea after 3 and 5 days, respectively
2	21-year-old man	Nothing	<ul style="list-style-type: none"> • Sudden onset of itching papular rash on his abdomen 3 days before admission 	Normal blood test, and chest CT scan	Recovery of rash after 7 days
3	33-year-old woman	Exposed to a COVID-19 patient	<ul style="list-style-type: none"> • Sudden onset of itching urticarial eruption on her arm and forearm 	Normal blood test, and chest CT scan	Recovery of rash after 2 days
4	46-year-old man	Diabetes, Hypertension	<ul style="list-style-type: none"> • Extremely itching eczema-like rash on his knee and elbow 6 days before admission • Weakness 10 days before admission 	Normal blood test, and chest CT scan	Recovery of rash after 7 days

recognition of dermatologic manifestations may facilitate timely diagnosis and management of COVID-19.

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