

Morbilliform exanthem associated with COVID-19



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INTRODUCTION

Coronavirus disease 2019 (COVID-19) is causing a rapidly expanding pandemic. The Centers for Disease Control and Prevention's website describes fever, cough, and shortness of breath as the primary symptoms of the disease, but it does not describe cutaneous manifestations of the illness. Understanding how COVID-19 might present on the skin may help practitioners and patients recognize and manage the disease more effectively.

CASE REPORT

A 58-year-old Hispanic man presented on March 23, 2020, for a widespread dermatitis that arose on March 21. Affected areas were pruritic, expanding, and worsening in severity at presentation. He had called his primary care physician on March 20 to report a new cough and pain in his legs and hands. The physician did not see the patient but called in a prescription for azithromycin and benzonatate, and the patient started taking these medications the same day. Azithromycin was prescribed at 500 mg for the first day and 250 mg for the next 4 days. Benzonatate was prescribed at 100 mg every 6 hours as needed for cough. The patient reported never before experiencing a similar cutaneous eruption.

When the patient arrived in the dermatology clinic, his cough had resolved, but pain in his hands and lower extremities remained. He never had a fever at home or in the office. Physical examination demonstrated a well-appearing man with a Fitzpatrick IV skin type. There were erythematous macules with islands of normal-appearing skin between them, arranged in a morbilliform pattern, on the legs, thighs, forearms, arms, shoulders, back, chest, and abdomen. These primary lesions aggregated into confluent erythematous patches larger than 10 cm in diameter on the back, abdomen, and chest. The face, hands, and feet were spared, and

perniolike lesions on the fingers and toes were not observed. The patient reported no intraoral symptoms, and an intraoral examination was not performed.

The differential diagnosis for the dermatitis included viral exanthem, drug eruption caused by azithromycin, and hypersensitivity reaction to azithromycin because of a concurrent viral infection. The patient recalled that on February 14, 2020, he received azithromycin and benzonatate at the same prescribed doses to completion, without adverse effects, and his pharmacist confirmed the report, making drug eruption caused by azithromycin less likely in the differential diagnosis.

Triamcinalone 0.1% cream was prescribed to suppress the dermatitis, and COVID-19 testing was performed by swabbing the nasopharynx and oropharynx and submitting the swab to LabCorp (Raritan, NJ) in standard viral transport medium. The patient's test result was positive for severe acute respiratory syndrome coronavirus 2 (COVID-19) according to LabCorp's qualitative test using polymerase chain reaction technology.

On March 24, the patient reported improvement in his dermatitis before the pharmacy could dispense triamcinalone cream. Later that day, he applied the cream to most of his body, and by the next day the dermatitis and pain had cleared entirely and have remained in remission as of March 29. He completed his course of azithromycin on March 24, he continued to take benzonatate until March 27, and he never took medications for pain relief. His wife has remained asymptomatic throughout the episode.

DISCUSSION

This case suggests that COVID-19 is capable of stimulating a standard-appearing viral exanthem either by itself or in a patient sensitized by receiving

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azithromycin or benzonatate in the same way an Epstein-Barr virus infection may cause a cutaneous eruption by itself or in a patient sensitized by taking

amoxicillin. Understanding how COVID-19 may present on the skin may help practitioners and patients recognize and manage the illness better.