

COVID CONCEPTS

Chilblains-Like Lesions as a Presenting Manifestation of Covid-19

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ABSTRACT

Dermatologic manifestations associated with coronavirus disease 2019 (COVID-19) remain broad and nonspecific. While a surge of “COVID toes” have been reported worldwide, very few cases have been documented in reverse transcriptase-polymerase chain reaction (RT-PCR) confirmed COVID-19 patients. Furthermore, majority of confirmed COVID-19 patients with chilblains-like lesions presented with cutaneous lesions localized to the toes, which was preceded by other systemic symptoms. Our case report describes an occurrence of chilblains-like lesions, limited to the fingers, in an asymptomatic COVID-19 patient confirmed by RT-PCR.

CASE PRESENTATION

A 30-year-old African American female with no medical history, presented to clinic complaining of sore fingers for one week. She reported “needle-like” sensations in the affected digits, rating the discomfort at “7-8 out of 10”. She denied systemic symptoms, sick contacts, and known COVID-19 exposure. She works in a healthcare facility, though not involved in direct patient care. Prior to presentation, she had been applying an antibiotic ointment to her fingers without relief.

Physical exam revealed tender, erythematous to violaceous, edematous lesions surrounding the proximal and lateral nail folds of the right 3rd digit and left 3rd and 4th digits (Figures 1A-B). The ventral aspect

of the right 1st digit also demonstrated erythema with scaling, peeling and subtle vesicular lesions (Figure 2). Involvement did not extend beyond the distal interphalangeal joint on any involved digits.

Biopsies of lesions were not obtained. The patient was sent for COVID-19 testing on the day of presentation, and was confirmed positive. She completed a course of Clobetasol 0.05% cream BID and mupirocin 2% ointment BID for two weeks. The patient reports the lesions on her digits resolved.

DISCUSSION

Although dermatologic manifestations associated with COVID-19 are rare, increasing cases are being reported worldwide. An international literature review

reported the most common cutaneous manifestation in COVID-19 patients is a generalized maculopapular exanthem followed by a papulovesicular rash, urticaria, painful acral papules, livedo reticularis-like lesions and petechiae.¹

While chilblain-like lesions have been described in association with COVID-19, few cases document chilblain-like lesions in confirmed patients. A case report from Belgium reported a 23-year old man with acute onset, violaceous, painful plaques on toes and lateral feet.² These symptoms were preceded by low-grade fever and cough. RT-PCR confirmed COVID-19.

Another case series from Spain, describes six patients with chilblain-like lesions.³ Five patients had lesions limited to the feet and only one patient had lesions on both fingers and heels. Majority of patients had systemic symptoms prior to the onset of skin lesions. While two of the patients tested positive for COVID-19, one patient tested negative despite bilateral pneumonia, and three could not be tested despite two of those having a known exposure. Unfortunately, without confirmatory testing of all patients, it is not possible to definitively correlate the relationship between chilblains-like lesions and COVID-19. However, the surge of chilblains-like lesions reported during the peak of COVID-19 infections suggests such lesions may help identify paucisymptomatic COVID-19 cases.⁴

Our case is unique in that we report chilblain-like lesions limited to the fingers in an asymptomatic but RT-PCR confirmed COVID-19 patient. Upon literature review, there has only been one international case series reporting chilblains-like lesions limited to the fingers in two asymptomatic COVID-19 positive women.⁵ As described above, most confirmed COVID-19 patients have

Figure 1. Erythematous, edematous lesions surrounding the proximal and lateral nail folds of the (A) right 3rd digit and (B) left 3rd and 4th digits.



Figure 2. Erythema, scaling, peeling and subtle vesicular lesions of the ventral aspect of the right 1st digit.



other symptoms preceding cutaneous manifestations and the chilblains-like lesions are localized to the toes.

Conflict of Interest Disclosures: None

Funding: None

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