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Case Report

Covid-19 Induced Single-Toe Chilblain: A Case Report

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Introduction

The COVID-19 infection first seen in Wuhan, China and rapidly spread across the world and became a pandemic. In the world, there have been nearly 175 million confirmed COVID-19 cases and 3.7 million associated deaths [1]. Characteristic clinical signs of COVID-19 are fever, fatigue, dry cough, anorexia, dyspnoea, ageusia, anosmia. Nasopharyngeal and oropharyngeal swab, which show the viral PCR, confirm the diagnosis [2]. In the literature, sporadically reported skin manifestations of COVID-19 are often morbiliform eruption, urticaria, vesicular eruption, acral lesions and livedoid eruptions. Some of these skin findings have been reported to appear earlier than symptoms associated with COVID-19 [3,4]. Herein, we reported a case with pain and erythema on the toe which appeared two days before the characteristic COVID-19 symptoms.

Case Report

A 30-year-old female patient admitted to the emergency service with the complaint of sudden onset pain in the 2nd toe of the left foot that had been present for 2 days. She had no other underlying diseases and denied recent exposure to cold temperatures or trauma. The patient had no additional complaints and whose vital signs were normal. On physical examination, there was mild redness and swelling on the skin, and there was no history or trace of a trauma or an insect bite (Figure 1). Radiologic examinations and orthopedic concultations did not show any bone pathology (Figure 2 & 3).

Figure 1:

Figures 2 & 3: X-rays of patient.

Soft tissue injury diagnosis was thought and resting with a plaster splint, elevation and ice application recommended. Two days later, the patient has readmitted to the hospital with the complaints of fatigue, sore throat, fever, nasal congestion, rhinorrhea, headache, loss of taste and smell. Nasopharyngeal swab of the patient was positive for Severe acute respiratory syndrome coronavirus-2 (SARS CoV-2) PCR. Therefore, prior complaint about the toe was considered to be COVID-19-induced chilblain. In laboratory tests, complete blood cell count; erythrocyte sedimentation rate; coagulation tests; D-dimer; renal, hepatic functions; urine tests were normal. The patient, who did not have cough and respiratory distress, was followed up at home with favipiravir treatment in accordance with the national COVID-19 treatment protocol. The patient, whose double dose vaccination was completed 4 months ago, showed complete recovery 3 days after the diagnosis.

Discussion

Chilblain/pernio-like lesions are edematous/erythematous lesions mostly reported in young adults, and it has been reported that they regress spontanously after infection [5]. In an article from Spain, chilblain was detected in 19% of 375 patients infected with COVID-19. Chilblain-like lesions, which can be painful or itchy, were regressed in an average of 2 weeks and were seen slightly more in women [6,7]. The most important differential diagnosis of pernio/chilblain-like lesions are livedoid vasculopathy and acral ischemia which have thought to develop secondary to COVID-19 induced thrombotic vasculopathy, hypercoagulation state, or disseminated intravascular coagulation in severely ill patients, usually in the intensive care unit [3,7-9].

Recent articles reported positive COVID-19 serology in only 30% of patients who presented with chilblain-like lesions suggesting that these lesions are associated with mild/asymptomatic SARS-CoV-2 infection or a good prognosis [8,10]. Similarly in our case, full recovery was achieved only in 3 days.

Conclusion

Chilblain-like lesion on one finger has not been reported in a COVID-19 patient before. This case report was written to draw attention to the early diagnosis of Covid-19 with cutaneous onset. Further studies on COVID-19 related skin manifestations is needed for early diagnosis, proper management and treatment of the disease.

Acknowledgement

None.

Conflict of Interest

No conflict of interest.

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