

Acral Peeling Skin Syndrome in a Patient with Covid-19: A Case Report

Covid- 19 Tanılı Hastada Akral Peeling Deri Sendromu: Olgu Sunumu

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Summary

Coronavirus disease 2019 (Covid-19) pandemic continues with a wide range of clinical manifestations worldwide. Covid-19 is characterized primarily by fever, cough, and shortness of breath. In addition to fever and respiratory findings, it presents with a variety of other signs/symptoms. Besides respiratory symptoms, Covid-19 disease is also associated with multisystem organ involvement. Some patients may progress to organ failure and death. One of the diseases caused by the skin is acral peeling skin syndrome, which is often characterized by peeling on the tips of the hands and feet.

Key words: Covid-19, pandemic, peeling, skin, syndrome

Özet

Coronavirüs hastalığı (Covid-19) dünya çapında çok çeşitli klinik belirtilerle kendini gösteren bir pandemi olmaya devam etmektedir. Hastalığın karakteristik semptomları ateş, öksürük ve dispne olarak kabul edilmektedir. Ateş ve solunum sistemi semptomları dışında, hastalığın birçok bulgusu mevcuttur. Covid-19 multisistem tutulumu olan bir hastalık olabilmektedir. Organ yetmezliğine ve sonrasında ölüme yol açabilmektedir. Hastalık deriyi de tutabilmektedir. Deride neden olduğu hastalıklardan biri de sıklıkla el ve ayak uç kısımlarında soyulmayla seyreden akral peeling deri sendromudur.

Anahtar Sözcükler: Covid-19, pandemi, soyulma, deri, sendrom

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Introduction

Coronavirus disease 2019 (Covid-19) caused by severe acute respiratory syndrome-coronavirus 2 (SARS-CoV-2) often presents with symptoms of lower respiratory tract infection. However, with the increasing number of cases worldwide, it has been revealed that numerous extrapulmonary symptoms are also present (1).

As the SARS-CoV-2 infection turned into a pandemic, several reports related to skin lesions have been published (2,3). In some cases, extrapulmonary manifestations of Covid -19 disease, one of which is acral peeling skin syndrome (APSS) may occur as skin involvement. APSS is an extremely rare clinical picture characterized by the painless peeling of the epidermis (4). Etiopatogenesis is not known exactly (5). The term “acral” refers to the peeling most commonly occurring on the hands and feet (4,6). The peeling of the skin is exacerbated by exposure to heat, humidity and

friction, the lower layer of the skin may be temporarily red and itchy and the affected areas typically heal without scarring (4,6).

In this study, it was aimed to present a Covid-19 patient with APSS.

Case

The 57-year-old man was admitted to the emergency department with chest pain, cough and fever. At the time of admission to the emergency department, his body temperature was 38.0 °C, blood pressure 110/70 mmHg, and heart rate 110 beats/minute. Physical examination demonstrated scattered inspiratory crackles in the base of the right lung. Other system examinations were normal. There was no systemic disease other than asthma in the patient history. Regular drug use was not reported. The patient’s nasopharyngeal swab reverse transcription-polymerase chain reaction (RT-PCR) test was positive. Thoracic computed tomography

imaging showed typical findings of Covid-19 pneumonia. Laboratory examinations revealed minimal lymphopenia and elevated serum C reactive protein. Favipiravir treatment was commenced because of the diagnosis of Covid-19. However, the patient stated that he discontinued treatment after the second dose of favipiravir. On day two of PCR positivity, lesions presenting with crusting and peeling appeared on the distal end of the fingers of both hands, predominantly on the right hand and on the heel of the right foot. (Figure 1,2,3,4). There was an increase in the severity of skin lesions during the follow-up. The patient was consulted with dermatology and was diagnosed with APSS. Emollients were started to relieve the symptoms. The skin lesions regressed in the subsequent follow-ups and had completely disappeared after nearly a month.

Figure 1. Crusting and peeling in the right ankle



Figure 2. Crusting and peeling in the little finger of the right hand



Figure 3. Dryness, crusting, and peeling in the distal end of the left hand fingers



Figure 4. Dryness, crusting, and peeling in the distal end of the right hand fingers



Discussion

APSS, has been rarely reported during the course of covid 19. APSS lesions due to covid 19 usually give mild symptoms (5). On day two of PCR positivity, lesions presenting with crusting and peeling were seen. The patient reported that he did not use a different cosmetic or cleaning product than usual during the illness. The frequency and duration of showering and hand washing were also similar to those before the diagnosis of Covid-19. An increase in the severity of the skin lesions was detected during the follow-ups, and the patient was diagnosed with APSS.

The skin findings of patients with Covid-19 may be due to the treatments given or the skin involvement of the disease (7). The skin

manifestations include morbilliform rash, acral pernio-like lesions, urticarial plaques, vesicles, papulosquamous lesions, and retiform purpura, which are the ones that are most frequently observed (7). Our patient did not have any complaints of dry skin or acral scaling and peeling in any region of the body prior to the diagnosis of Covid-19. The skin findings of the patient appeared two days after the systemic symptoms and healed without sequelae one month later. No treatment was administered other than topical emollient cream (8). It was concluded that APSS was associated with the skin involvement of Covid-19 in this patient due to the regression of the lesions with treatment. Since the patient's symptoms were mild, laboratory analysis and skin biopsy were not performed.

Conclusion

One of the extrapulmonary manifestations of Covid-19 is skin involvement. APSS has rarely been reported during the Covid-19 pandemic. The condition was probably overlooked due to the fact that patients are asymptomatic or mildly symptomatic. Our findings are expected to raise awareness about this rare skin involvement of Covid-19.

References

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