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SHORT PAPER

Acute maculopapular eruption in Covid-19 patient: A case report

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Abstract

We report the case of a positive COVID-19 patient who presented to our hospital for a maculopapular skin rash which appeared 7 days after the onset of COVID-19 symptoms. He was 34 years old and nothing relevant was recorded at his previous anamnesis. The patient was hospitalized for 3 days and received systemic therapy with steroid, antihistamines, tocilizumab, and hydroxicloroquine. On the third day of the hospitalization the cutaneous rash had almost completely disappeared.

KEYWORDS

acetaminophen, Covid-19, drug reaction, exhantem, skin rash

1 | INTRODUCTION

A 34-year-old man was admitted to our emergency room reporting a skin eruption had started 2 days prior. The rash was not itchy. Seven days prior to his admission, he tested positive to the nasal swab for Covid-19, his main symptom being a fever of 37.5°C to 38°C. No respiratory symptoms were present. He self-isolated at home, upon medical recommendation. The only medication the patient had taken at that time was Acetaminophen 1000 mg, as needed. The blood test results were within the norm, with the exception of C-reactive protein which was 15 mg/dL. At consultation, a generalized maculopapular eruption was observed on the trunk, upper limbs, legs, and face without involvement of the palmoplantar areas.

The patient was admitted to the infectious disease ward. He was administered intravenous steroid bolus and antihistamines. The following day, due to a worsening of respiratory state, the patient was given hydroxychloroquine and an intramuscular injection of Tocilizumab. The use of Tocilizumab has recently been suggested as a treatment for the Cytokine Release Syndrome that can be associated to Covid-19, particularly in younger patients.

The patient was discharged from the hospital 3 days after admission, following a complete regression of the cutaneous symptoms. Upon discharge, antihistamines and hydroxychloroquine 200 mg/2 tablets per day were prescribed.

A photo was taken to document the skin manifestation at admission. The patient agreed to send through follow up photos via WhatsApp (Figures 1 and 2).

2 | DISCUSSION

A cutaneous maculopapular rash may be linked to several underlying disease/conditions. Skin reactions to Acetaminophen have been reported in the past.[1] The most frequent reactions reported are: fixed drug eruption,[2,3] Steven-Johnson/epidermal toxic necrolysis,[4] and Sweet syndrome.[3]

It could be said that Maculopapular eruption caused by Acetaminophen is quite rare, as it is only documented in occasional publications. Maculopapular eruption may appear 7 to 14 days after exposure to the drug. No other significant information was found in the literature. Viral infections can present a variety of skin symptoms. Maculopapular eruption is a well-known manifestation linked to viral infection.

Recalcati et al recently described different skin manifestations in Covid-19 inpatients: they concluded that skin rashes are similar to cutaneous involvement occurring during common viral infections.

The erythematous rash was the most frequently noted.[5] Other reports on isolated cases are now emerging about different skin

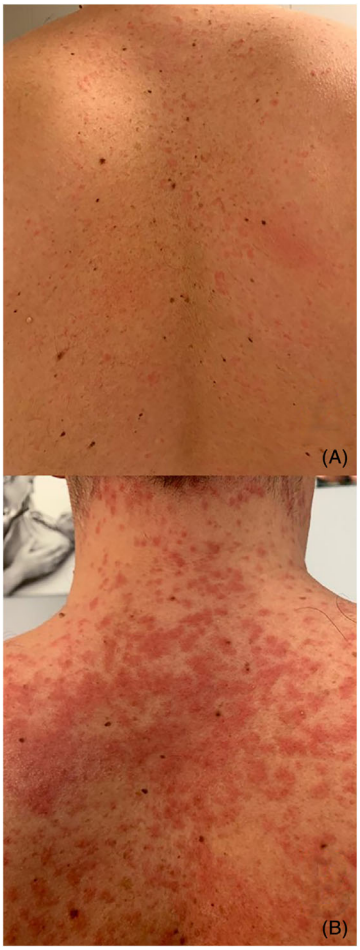

FIGURE 1 A, Close up of the early lesion 2 days before admission to hospital. B, The lesion documented 1 day before admission to hospital

features.[6,7] Skin involvement is also common in Dengue Fever (DF) and seen in almost 50% to 82% patients.

Asymptomatic maculopapular rash and morbilliform eruptions, not extending to palms and soles, are usually noted 3 to 6 days after a fever. The skin rash can heal completely or become generalized and involve dorsum of hands and feet, without extending to the palmoplantar regions, and lasting several days. Skin rash in DF is thought to be caused by virus-induced injury of smaller blood vessels.[8] Covid-19 has skin manifestation, such as erythematosus rash, that can be misdiagnosed as DF. Covid-19 also has other skin manifestation in common with DF.[6]

In the case described, the patient received anti-inflammatory drug, therefore, it is not possible to establish which was the cause of the cutaneous rash. However, it is important to keep in mind that Covid-19 patients may present skin rashes and/or skin lesions that should be managed accordingly.

Further studies are needed for those Covid-19 patients who initially only present a skin rash, unique clinical symptoms, or are asymptomatic and potential carriers of the virus. Further studies are also required to determine the correlation (or lack thereof) between Covid-related skin manifestations and organ involvement; and whether skin manifestations can be considered a predictor of increased complications and worse outcomes.

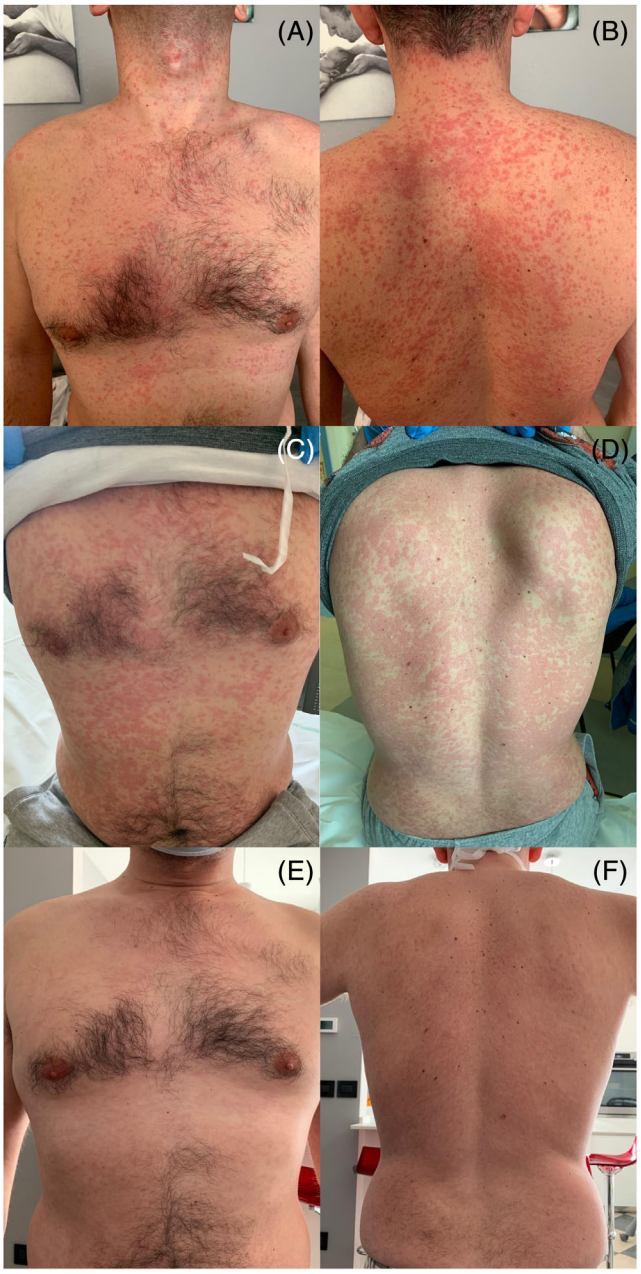

FIGURE 2 A and B, General overview of the patient 1 day before admission to the hospital. C and D, on the day of admission in hospital and, E and F, the day he was discharged from the hospital

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