A severe psoriasis flare after COVID-19 treated with risankizumab: complete skin clearance after 16 weeks

Luciano Ibba,[1,2] Luigi Gargiulo,[1,2] Giulia Pavia,[1,2] Alessandra Narcisi,[2] Antonio Costanzo,[1,2] Mario Valenti[1,2]

[1]Department of Biomedical Sciences, Humanitas University, Pieve Emanuele; [2]Dermatology Unit, IRCCS Humanitas Research Hospital, Rozzano, Italy

Correspondence: Mario Valenti, Department of Biomedical Sciences, Humanitas University, via Rita Levi Montalcini, 4, 20090 Pieve Emanuele (MI), Italy. Tel./Fax: +39.0282244050.
E-mail: mario.valenti@hunimed.eu

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Abstract

The development of flares or new-onset of immune-mediated dermatologic diseases, including psoriasis, has occurred with the worldwide spreading of the COVID-19 pandemic. We report the case of a 38-year-old woman who came to our department with a severe flare of plaque psoriasis four weeks after SARS-CoV-2 infection. Her Psoriasis Area Severity Index was 25, and her Dermatology Life Quality Index was 18. Our initial decision was to prescribe acitretin, but the patients reported adverse events. For this reason, we started risankizumab with complete skin clearance after 16 weeks. The patient is still on treatment, and no adverse events have been reported to date.

Introduction

Since the worldwide spreading of the COVID-19 pandemic, several cutaneous reactions have been described.[1] In addition to the fact that COVID-19 infection may have specific skin manifestations, there is a growing concern about the possible exacerbation of pre-existing dermatological conditions, including psoriasis and atopic dermatitis, following infection from SARS-CoV-2.[2]

Case Report

We present the case of a 38-year-old female patient coming to our attention for a severe psoriasis flare that arose one month after COVID-19 infection occurred with a mild fever and cough that lasted about a week. The patient had a history of psoriasis since her childhood, which she successfully controlled with topical corticosteroids and vitamin D analogues. She was also known for arterial hypertension and overweight, with a body mass index of 28,7.

Our first examination revealed several erythematous-desquamative patches and plaques spread at the trunk, back and limbs, with a Psoriasis Area and Severity Index (PASI) of 25 and an involvement of 40% of the body surface area (BSA) (Figure 1). The patient also filled out a Dermatology Life Quality Index (DLQI) questionnaire that revealed a total score of 18, showing a greatly compromised quality of life. The patient did also refer systemic symptoms such as fever and joint pain, and a significative complaint was intense itching.

We first prescribed a systemic therapy with 25 mg tabs of acitretin, 1 tab daily for 3 months. However, after 4 weeks, the patient came back to our department with a major complaint of intense xerosis, worsening itch and nose bleeding. Blood tests showed mild neutrophilic leukocytosis and normal liver and kidney function. Given the adverse events experienced by the patients, the unsuccessful therapy with acitretin, the persistence of

the intense itch and the severity of the cutaneous manifestations, we started, after assessing HIV, hepatitis B and hepatitis C serological status and Quantiferon as negative, therapy with risankizumab 75 mg with two subcutaneous injections at week 0 and at week 4. At the week 16 follow-up visit, we observed a remarkable complete remission of psoriatic lesions (Figure 2) with the presence of post-inflammatory hyperpigmentation in the previously affected areas (PASI 0, BSA 0). The patient also referred the complete remission of the symptoms, as DLQI was null, reflecting a massive positive impact of risankizumab therapy on the patient's life quality.

Discussion

The exacerbation of psoriasis and other dermatoses after COVID-19 infection has been reported in several case series.[2,3] Furthermore, acute adverse reactions to COVID-19 vaccines, including pustular manifestations, are described in literature.[4,5] An immune response Interferon-1-related has been proposed as a leading factor for COVID-19 vaccination or infections cutaneous reactions.[6]

We decided to start the therapy with risankizumab because of its high efficacy and favorable safety profile, as seen in different clinical trials.[7,8]

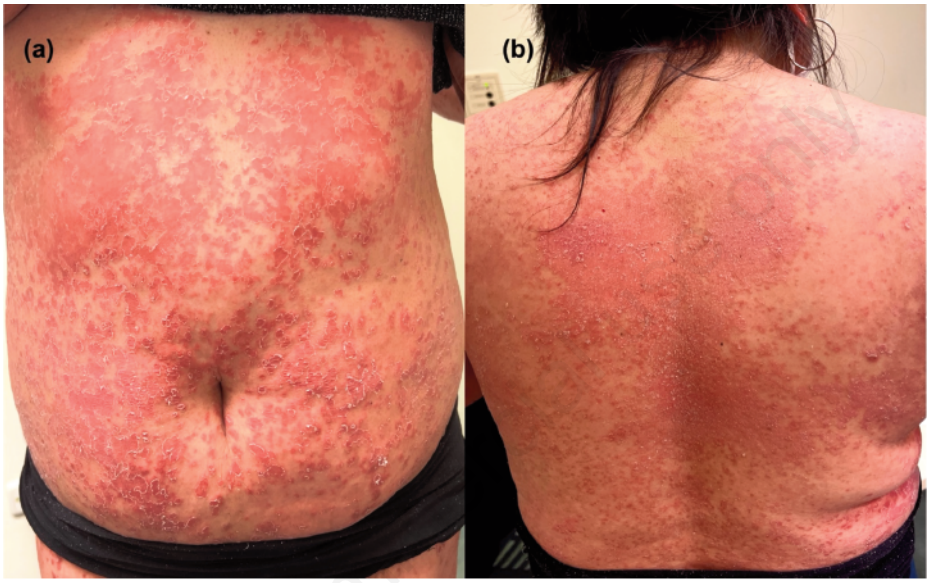

Figure 1. Several erythematous-desquamative patches and plaques spread at the trunk (a) and the back (b) of a 38-year-old woman.

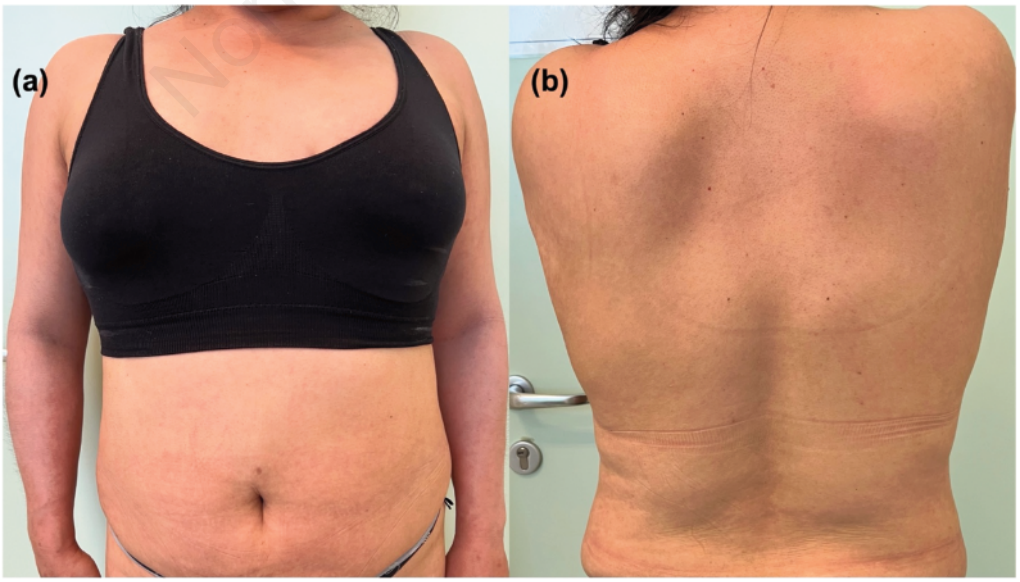

Figure 2. Complete skin clearance at the week 16 follow-up visit.

According to most authors, biological treatments for plaque psoriasis, including anti-interleukin (IL)-23 or anti-IL-17, are safe options and should not be discontinued during a mild infection from SARS-CoV-2.[9,10]

Conclusions

In our case, risankizumab demonstrated effectiveness and safety, achieving a fast and complete clinical remission in a severe case of psoriasis flare-up.

Further reports and case series on the exacerbations of skin dermatoses after COVID-19 infection are required to support our experience and to suggest other potential effective management.

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