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Case Letter

Dear Editor,

SDRIFE-like rash associated with COVID-19, clinicopathological correlation

Symmetrical drug-related intertriginous and flexural exanthema (SDRIFE)-like rash has been recently reported as a skin manifestation potentially associated with coronavirus disease 2019 (COVID-19).[1]

A 73-year-old woman positive for SARS-CoV-2 by nasopharyngeal swab PCR test was admitted to the intensive care unit (ICU) with severe hypoxaemia and a bilateral pneumonia on X-ray. She was hospitalised ten days before, starting treatment with hydroxychloroquine and azithromycin. On the second day of hospitalisation, she developed an erythematous rash on both axillae and antecubital fossae, which extended on the following days to the trunk and the inner thighs, leaving the face unaffected (Fig. 1). No clinical pustules were found. The patient had a fever from the beginning of the illness. Histopathological analysis of a punch biopsy showed subcorneal pustules and superficial infiltrates of lymphocytes and eosinophils (Fig. 2). Blood test showed lymphopaenia without neutrophilia. Both hydroxychloroquine and azithromycin were interrupted at her admission to the ICU and intensive treatment with systemic steroids, and broad-spectrum antibiotic was initiated. She did not take antiviral therapy throughout her hospitalisation. The rash progressively disappeared over the following seven days.

Our case clinically resembles a SDRIFE-like rash in a COVID-19 scenario; however, the presence of subcorneal pustules is the main histopathological hallmark in acute generalised exanthematous pustulosis (AGEP), rather than a common finding in typical SDRIFE. Both diseases are typically related to drug intake, although they have occasionally been associated with viral infections.[2,3] In our case, there was a high suspicion of a possible drug reaction. Therefore, it remains uncertain whether the proinflammatory features associated with SARS-CoV-2 infection could have further enhanced neutrophilic recruitment and activation[4] thereby predisposing our

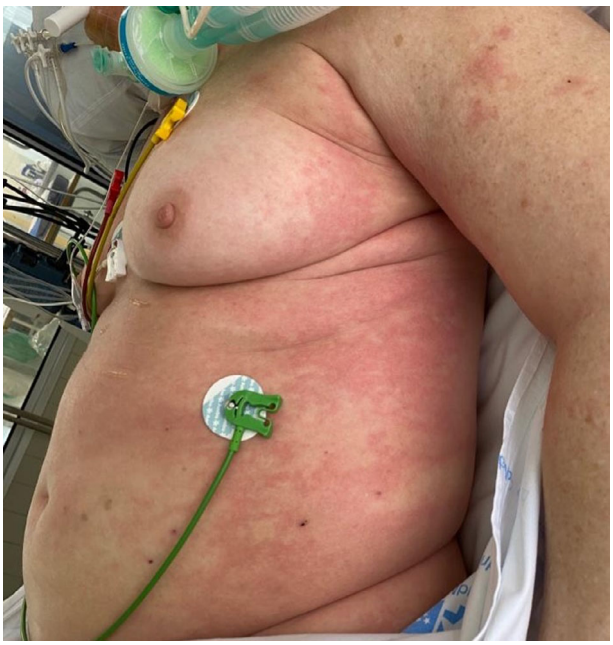

Figure 1 Erythematous rash extending from the left axilla to the trunk.

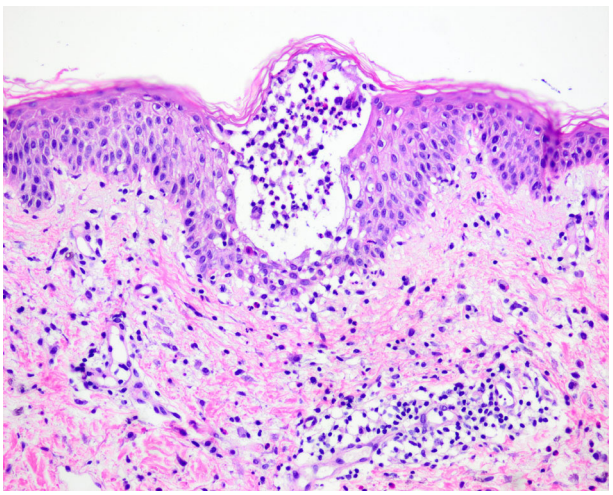

Figure 2 Subcorneal pustule and superficial infiltrates of lymphocytes and eosinophils (HE, x20).

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patient to develop a more intense pustular drug reaction or whether the lesion was an atypical SDRIFE-like rash secondary to COVID-19.[3]

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Case Letter

Dear Editor,

Think before you ink: Koebner phenomenon in a tattoo successfully treated with targeted UVB Phototherapy

Psoriasis is a multifactorial T-cell-mediated immune disorder. Environmental factors such as drugs, infections and trauma can trigger or exacerbate it. As tattooing traumatises the skin, it can induce the onset of diverse dermatoses, including psoriasis, through the isomorphic Koebner phenomenon. Phototherapy is a mainstay in psoriasis treatment. Targeted UVB therapy allows higher doses and can lead to a faster response and a lower cumulative UVB dose.[1]

A 27-year-old man with a history of psoriasis since adolescence presented with an itchy lesion on the right upper back. It had started a few days after receiving a tattoo of an image of his recently deceased grandmother. The patient was extremely distressed about the possibility that the tattoo could be permanently damaged. Physical examination revealed a well-demarcated erythematous scaly, thick plaque affecting the entire area of the tattoo (Fig 1), together with a few small psoriasis plaques on the trunk. A diagnosis of psoriasis and Koebner phenomenon was made. He had used topical calcipotriene 0.005% plus betamethasone dipropionate 0.05% without significant improvement. Treatment with a polychromatic 308–312 nm Targeted UVB lamp [Levia NB® (Daavlin, Bryan, OH) twice weekly was then initiated. An initial dosage of 450 mJ/cm^2 was administered. Dosage was increased by 10% to 30% at every session. After twelve sessions, a complete clinical response was observed with no damage to the tattooed image (Fig 2). The tattoo has remained without plaque psoriasis during 2 years of follow-up.

Tattooing is an ancient practice which has become common among young adults and adolescents. It is a way in which people express themselves and may have positive effects on self-esteem and well-being. Koebner phenomenon is a feared complication in psoriatic patients. Individuals with a history of psoriasis-related Koebnerisation and those with active psoriasis at the time of tattooing may be at higher risk.[2] Different mechanisms may contribute to Koebernisation in psoriasis: change in the ratio of CD4+/CD8+ T cells and increased expression of

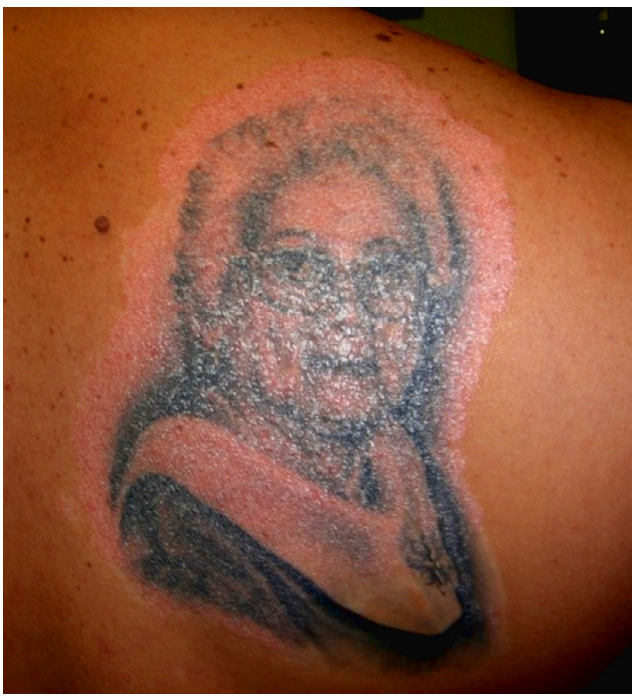

Figure 1 Isomorphic response of Koebner in a professional tattoo. A well-demarcated erythematous desquamative plaque of psoriasis affecting the entire area of the tattoo.

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