

pemphigoid. Even though our region is the second most affected by COVID-19 in Italy (cumulative incidence: 718.72 cases/100 000 inhabitants),<sup>2</sup> only one of these patients tested positive for SARS-CoV-2, a 65-year-old female, affected by pemphigus for 40 months and in therapy with mycophenolate mofetil (MPM) for 38 months.

On March 24, her husband was discovered to be affected by COVID-19 and was isolated at home, while on March 27, our patient presented severe nausea, fever (37.1°C), anorexia and asthenia; the next day, she tested positive for SARS-CoV-2. However, she did not inform us immediately and did not suspend therapy until we contacted her on March 29, when we advised her to interrupt MPM.

We then called her daily for the next days: on April 2, her fever rose to 39°C, but lowered with paracetamol, and continued this pattern over the following 2 days. Starting from April 5, the fever ceased and she progressively improved; on April 8, she referred a total absence of any symptom.

The patient did not experience any pemphigus recurrence, but reported only some posterior tongue 'discomfort'. Moreover, she never developed cough, dyspnoea, anosmia, ageusia, myalgia or other symptoms of the infection. At present, we are waiting for 2 weeks after the end of symptoms to repeat a swab and restart the immunosuppressive treatment.

Mycophenolate mofetil is an immunosuppressant, antineoplastic and antiviral medication, used in pemphigus as a corticosteroid-sparing agent. Due to its antiviral properties, some studies have investigated MPM as a potential therapy for MERS-CoV.<sup>3</sup> The drug has also been demonstrated to inhibit mRNA expression of pro-inflammatory cytokines TNF- $\alpha$ , IL-6 and IL-1 $\beta$ ,<sup>4</sup> which are known to be associated with the progression of COVID-19 towards the worsening of clinical conditions.<sup>5,6</sup>


Even though the *in vitro* studies showed promising results for MPM against MERS, the *in vivo* studies suggest that its use is likely to cause more harm than benefit and hence is not likely to be useful against coronavirus infections.<sup>3</sup> However, our patient experienced a very mild form of the disease, without pulmonary complications, suggesting that the immunosuppressant therapy with MPM was not detrimental in the setting of COVID-19 infection.

Unfortunately, ABDs are rare conditions and it is difficult to collect large cohorts to confirm our observation. This would require much time, which is scarcely compatible with the urgency related to the COVID-19 sanitary emergency. Therefore, our present knowledge can only be based on anecdotal reports, and it is important to share also the single experience of any centre involved in the management of rare diseases.

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The patients in this manuscript have given written informed consent to publication of their case details.

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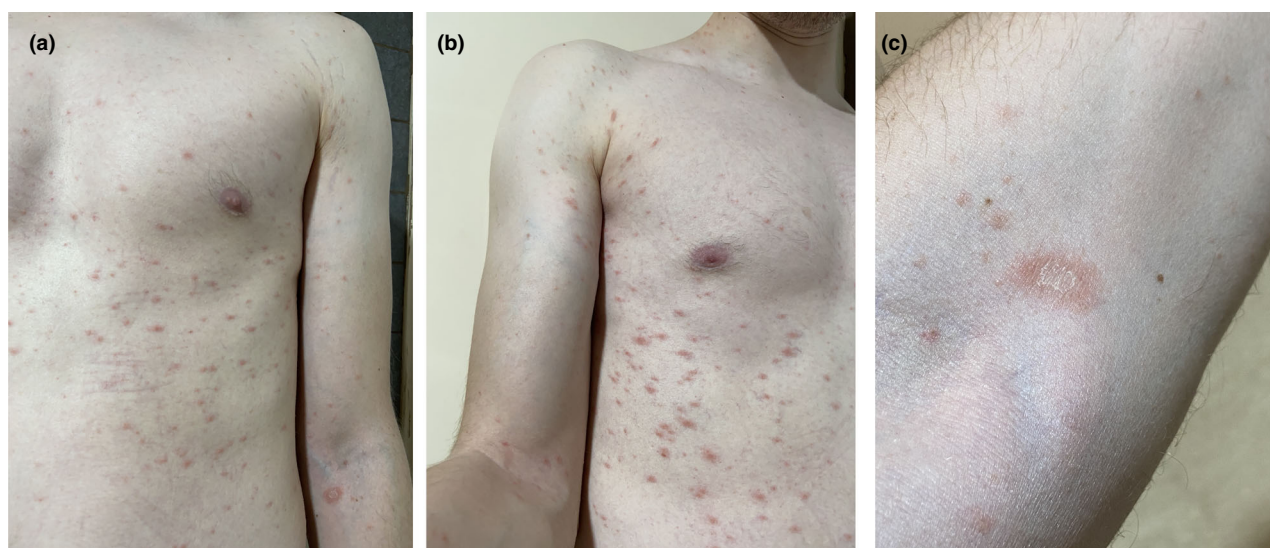
## Pityriasis rosea as a cutaneous manifestation of COVID-19 infection

Dear Editor

Cutaneous manifestation has been reported in 0.2% of patients infected by COVID-19 in China<sup>1</sup> and 18 out of 88 patients from Italy.<sup>2</sup> The most commonly reported features are exanthematous rash, urticaria, chickenpox-like vesicles, petechiae and acute haemorrhagic oedema of infancy.<sup>3–5</sup>

Herein, we report one case of pityriasis rosea in a patient infected with COVID-19.

A 27-year-old man with no previous medical history presented initially with low-grade fever, fatigue, gastroenteritis and anorexia. Three days later, an erythematous and scaly annular plaque appeared on the left forearm, and several days later, generalized papular and plaque-type lesions occurred all over the trunk and upper extremities in a shape that resembles drooping pine-tree branches (Fig. 1). Lesions continued to disseminate for 5 days and became pruritic. A chest CT showed patchy ground-glass infiltration at the peripheral and base of both lungs consistent with the COVID-19 infection. Laboratory



**Figure 1** Generalized erythematous papules and plaques on the trunk and upper extremities along the cleavage line (a, b). The typical presentation of herald patch with trailing scale (c).

investigation revealed no specific abnormality, and blood oxygen saturation was normal. Patient had history of long-term intake of sertraline and propranolol without any change in the treatment regime during the last months. Family history of patient uncovered confirmed COVID-19 infection in mother 50 days and father 40 days earlier with fever, dyspnoea, myalgia and ground-glass features in the chest CT. As patient's general condition and oxygen saturation were normal, patient was followed up out-patiently with topical corticosteroid and anti-histamine (cetirizine) for pruritic lesions and acetaminophen for fever, if indicated.

The described case here seems reminiscent of pityriasis rosea with typical presentation of herald patch with collaret of trailing scale that followed with smaller disseminated lesion developing along the lines of cleavage. Pityriasis rosea has been usually associated with reactivation of herpesvirus 6 and 7, but other viral aetiology, vaccination and drugs have also been implicated as the cause of this reaction.<sup>6</sup> Our case could be a cutaneous manifestation of COVID-19 viral infection and help dermatologist to get familiar with skin rash due to this new viral infection.

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