Pityriasis Rosea after COVID-19 Infection

Dear Editor,

Pityriasis rosea (PR) is a common, self-limited erythematous papulosquamous dermatosis that mainly affects young adults. It is believed to represent a delayed reaction to viral infections and is usually associated with endogenous systemic reactivation of human herpesvirus (HHV) 6 and / or 7 (1).

A 46-year-old man presented to our Department with a two-week history of skin rash associated with mild pruritus. He described the appearance of an erythematous centrally scaled lesion at the right part of his abdomen, followed by the spreading of red oval mildly scaling lesions on the trunk, neck, and proximal parts of the upper extremities, which showed in the physical examination (Figure 1, a and b). He was otherwise healthy and taking no medications. Six weeks prior to the appearance of the initial skin lesion, the patient had coronavirus disease 2019 (COVID-19) infection with mild clinical presentation (fever up to 38 °C lasting for four days and mild headache) and with symptoms of post COVID-19 syndrome (excessive tiredness). He denied oropharyngeal lesions. Potassium hydroxide, syphilis, and laboratory tests were within normal limits. Within two weeks of topical betamethasone dipropionate treatment, the lesions disappeared completely.

In addition to reactivation of HHV-6 or HHV-7, PR can be triggered by some drugs (like angiotensin-converting enzyme inhibitors alone or in combination with hydrochlorothiazide, sartans plus hydrochlorothiazide, allopurinol, nimesulide, and acetyl salicylic acid (2) and vaccines (such as smallpox, poliomyelitis, influenza, human papillomavirus, diphtheria, tuberculosis, hepatitis B, pneumococcus, and yellow fever vaccines) (3). There is a growing number of published cases that link PR to COVID-19 infection, with PR appearing either in the acute phase of COVID-19 or, as in our patient, in the post COVID-19 period (4-9). Unlike in our patient, oropharyngeal lesions were observed

Figure 1. Scattered erythematous patches, some with a collarette of scale, in a Blaschkoid distribution on **(a)** the frontal and **(b)** lateral sides of the trunk.

in approximately 16% of patients with typical PR (10). It has been suggested that severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) induces reactivation of other viruses, such as HHV-6, HHV-7, varicella zoster virus, and Epstein-Barr virus (5). PR has also been reported to follow COVID-19 vaccination (11). As our patient did not receive a COVID-19 vaccine, we cannot evaluate the latter based on the present case.

We speculate that PR could be a delayed skin manifestation of COVID-19 infection, triggered either by SARS-CoV-2 immediately or indirectly by the reactivation of other viruses such as HHV-6 or HHV-7. However, the etiopathogenetic mechanisms remain largely unknown and further studies are needed in order to clarify the correlation between SARS-CoV-2 and PR.

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Marta Prtajin[1], Suzana Ljubojević Hadžavdić*[1]

Department of Dermatology and Venereology, University Hospital Centre Zagreb, School of Medicine, University of Zagreb, Zagreb, Croatia

Corresponding author:

Professor Suzana Ljubojević Hadžavdić, MD, PhD

Department of Dermatology and Venereology, University Hospital Centre Zagreb, School of Medicine, University of Zagreb

suzana.ljubojevic@gmail.com

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