On the other hand, CLL are often found in negative patients and they could be related to an immune reaction, probably mediated by interferon, in young patients with strong response to virus and fast clearance of serum antibodies.[9,10]

Whether the association between PR and CLL could be considered casual or not could be matter of debate, but anyway, the two phenomena, although different in clinical presentation, have in common some features: (i) they usually affect young patients; (ii) no or mild systemic symptoms are seen; (iii) the direct presence of guilty virus is hard to demonstrate; (iv) spontaneous long-lasting resolution.

In this particular case, as the patient had a recurrence of CLL after a first episode a few months before, the second occurrence of CLL together with the unusual association with PR could be considered as an immune response following either another contact with SARS-CoV-2 or a reactivation of HHV-6 or 7 in a patient who previously developed immunity against SARS-CoV-2.

Our invite to researchers is to observe and describe other patients with this very singular association in order to start further and deeper investigations to better clarify the genesis of this very interesting phenomenon, new for everyone such as all what has happened to health community and people in the world.

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Ipsilateral herpes zoster after the first dose of BNT162b2 mRNA COVID-19 vaccine

Editor

As vaccination campaign against SARS-CoV-2 is ongoing worldwide, dermatologists are witnessing an increasing number of cutaneous adverse events. Delayed hypersensitivity reactions at the site of injections with mRNA-1273 (Moderna)[1] and BNT162b2 (Pfizer-BioNtech) vaccines[2] are now known as 'COVID-arms'. Besides, cases of Rowell's syndrome 24 h after vaccination[3] and persistent exanthema have been recently reported.[4] Bostan and Yalici-Armagan[5] described the case of a 78-year-old man with thoracic herpes zoster (HZ) 5 days after COVID-19 vaccination. We wish to report an additional case from Finland.

A 44-year-old healthcare provider received his first injection of BNT162b2 mRNA COVID-19 vaccine on 2nd February. He had a history of dyslipidemia and active smoking. He presented pain and local redness after vaccination, as widely reported.[2] However, after a week, pain had not subsided and extended to the neck and the left hand. It also changed to a neuropathic pain. He also developed intense tiredness and noticed a rash on the left upper limb. Upon full examination, he displayed an herpetiform vesicular and erythematous rash on the left upper back (Fig. 1a) and lateral side and inner side of the left arm (Fig. 1b) that followed approximately C5–C6 dermatomes. A diagnosis of HZ was made. He still

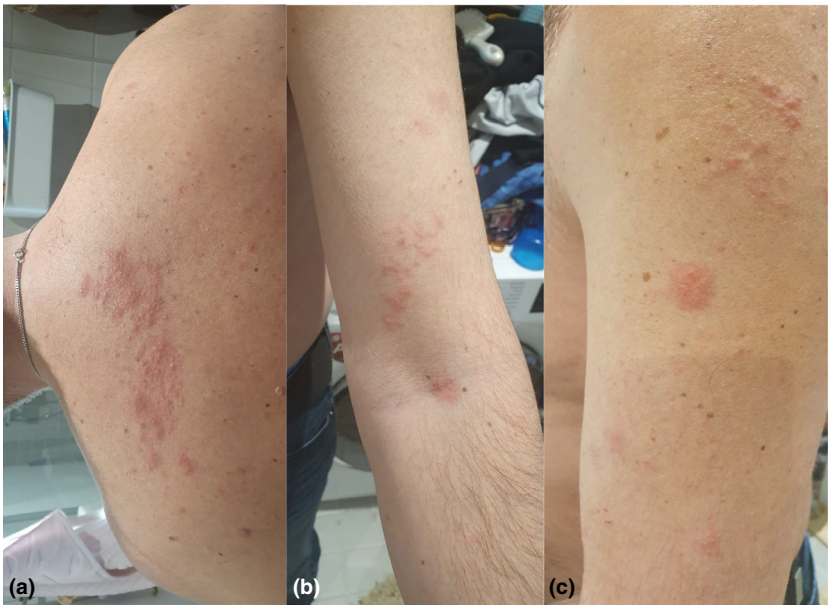

Figure 1 Vesicles and erythematous patches in clusters evocative of a herpes virus infection. The lateralized distribution on the left side of the upper back (a) and arm (b) favours herpes zoster on C5-C6 dermatomes. Local hypersensitivity reaction after vaccination on the left upper arm ('COVID-arm') is still notable (c).

presented the local reaction at the site of injection (Fig. 1c). He received oral valaciclovir thrice a day for 2 weeks. Evolution was favourable, although postzoster neuropathic pain lasted for a month. He had mild varicella during childhood and acknowledged that the very same period was stressful, but denied any other immunosuppressive factor. He received his second injection of BNT162b2 vaccine on 21st April without side effect.

In the multinational placebo-controlled study that included 43 548 participants for BNT162b2 vaccination,[6] 27%, 21% and 1% of the patients in the vaccination group reported an adverse event, a related event and severe event, respectively. However, HZ was not mentioned. At the time of writing this manuscript, we had found no report of HZ after mRNA-1273 vaccine.

Arguments that support in our case a link between SARS-CoV-2 vaccination and HZ include the following: (i) short delay of onset after vaccination; (ii) eruption on the same side as the vaccinated arm; (iii) a previous case of HZ after SARS-CoV-2 vaccination[5]; (iv) numerous cases of HZ have been described in critically-ill or seemingly immunocompetent COVID-19 patients[7–9]; and (v) cases of herpes viruses reactivations reported after various vaccinations.[10] HZ in COVID-19 patients may be related to physical and emotional stress associated with acute illness and also to COVID-19-induced lymphopenia and functional impairment of T cells.[8,9] It is likely that immune dysregulation created by the vaccine played a role in the reactivation of latent Varicella Zoster Virus infection in our case as in the previous on,[5] although we cannot rule out a fortuitous event.

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Acute postinfectious pityriasis rubra pilaris as a cutaneous manifestation in COVID-19: a case report and its dermoscopic features

Editors

Coronavirus disease 2019 (COVID-19) is an ongoing global pandemic caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). There have been many reports of COVID-19 skin manifestations in the literature; the clinical spectrum is wide and includes urticarial rash, confluent erythematous/maculopapular/morbilliform rash, papulovesicular exanthem, chilblain-like acral pattern, livedo reticularis/racemosa-like pattern, purpuric 'vasculitic' pattern.[1] According to our best knowledge, this report is a first described case of pityriasis rubra pilaris (PRP) in a COVID-19 patient.

A 7-year-old male child was admitted to our outpatient clinic presenting generalized erythematosquamous skin lesions. Cutaneous examination revealed generalized well-demarcated, large reddish-orange plaques and keratotic follicular papules with islands of uninvolved skin mainly on the face, trunk and limbs. Keratosis of the palms and soles was also present (Figs 1a, b and 2a). The body surface area involvement was approximately 80%. No other abnormalities were observed. Birth history, medical history, surgical history and family history were unremarkable. The patient's mother claimed that the disease began with a diffuse fine scale on the scalp and over time extended to the whole body. Appearance of skin lesions was preceded by a bout of infection with fever.

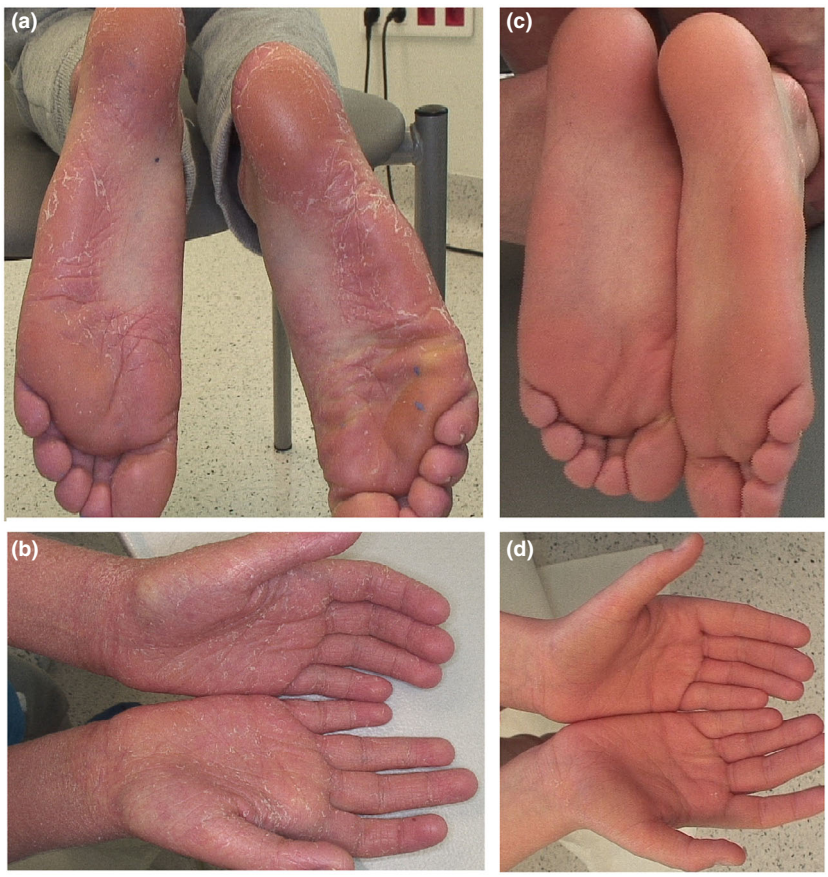

Figure 1 (a and b) Initial clinical picture with orange hyperkeratosis on the palms and soles. (c and d) Improvement after 3 months of acitretin and emollient therapy.