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LETTER TO THE EDITOR

Authors' reply to comment by Ciccarese et al. regarding 'Negative SARS-CoV-2 antibodies in patients with positive immunohistochemistry for spike protein in pityriasis rosea-like eruptions'

Dear Editor,

We thank Ciccarese et al.[1] for their important observations and interest in our article 'Negative SARS-CoV-2 antibodies in patients with positive immunohistochemistry for spike protein in pityriasis rosea-like eruptions', which was published in April 2022.[2] We wish to respond to their observations.

The three patients described presented systemic symptoms 3–4 weeks prior to dermatological evaluation (first patient 3 weeks, second and third 4 weeks). A SARS-CoV-2 RNA PCR test was ordered at the initial evaluation, but unfortunately was not performed by the patients (for most patients in Mexico testing represents an important out-of-pocket expense). The serology evaluated with an ELISA kit (EUROIMMUN, Lübeck, Germany) with a sensibility >90% and a specificity >98%.[3] Nonetheless, we agree that performing two different assays would have been ideal, particularly because two patients had testing performed 5 months after initial diagnosis. The performance of tissue immunohistochemistry (IHC) for SARS-CoV-2 spike protein continues to be controversial. In an analysis of 7 commercially available monoclonal antibodies for IHC detection of SARS-CoV-2, only two showed specific immunoreactivity including the clone employed in our study.[4] We additionally employed positive and negative controls to address the potential bias of non-specific staining. Still, information on IHC in skin biopsies with manifestations other than pernio remains very limited and more reports are needed to clarify its usefulness and specificity. We believe that addition of SARS-CoV-2 RT-PCR and RNA in situ hybridization to the skin biopsies analyses could help define with more precision the relationship between SARS-CoV-2 and its skin manifestations. A recent report by Magro et al.[5] supports the notion that pseudovirions (spike protein or other capsid proteins), and not active viral replication, are responsible for several COVID-19-related skin manifestations. They additionally demonstrated presence of spike protein in dermic and subcutaneous tissue blood vessels in patients with skin manifestations secondary to COVID-19 vaccines.[5] Similar reports on pityriasis rosea (PR) and pityriasis rosea-like eruption (PR-LE) may help bridge the current knowledge gap.

Regarding the clinical findings, the three patients did not present a herald patch nor oropharyngeal involvement. The lesions were distributed in a theatre curtain distribution in the trunk and arms. One patient had involvement of the legs, and none had facial lesions. The rashes were predominantly characterized by erythematous plaques with collarettes of scale. One patient had abundant erythematous papules. The prodromal symptoms were attributed to COVID-19, and blood eosinophilia was not examined. We agree with the authors that the patients described share characteristics of PR particularly due to the lack of drugs or vaccines involved. We decided to classify the patients as having a PR-LE instead of PR predominantly due to the lack of human herpesvirus (HHV)-6 and HHV-7 testing (an important limitation of our report) and lack of herald patch. We agree with the authors that distinction between PR and PR-LE associated with COVID-19 and its vaccines is important. Detailed reports with a higher sample size and inclusion of additional testing (including HHV-6 and HHV-7, SARS-CoV-2 RT-PCR and RNA in situ hybridization, and sequential serological analyses) are necessary.

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None.

CONFLICT OF INTEREST

None to declare.

DATA AVAILABILITY STATEMENT

No data available.

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