Reply to "Varicella-like exanthem as a specific COVID-19-associated skin manifestation: Multicenter case series of 22 patients": To consider varicella-like exanthem associated with COVID-19, virus varicella zoster and virus herpes simplex must be ruled out



To the Editor: We have read with great interest the article by Marzano et al<sup>1</sup> considering varicella-like papulovesicular exanthem as a rare but specific coronavirus disease 2019 (COVID-19)—associated skin manifestation. They included patients with a COVID-19—positive nasopharyngeal swab and no medications in the previous 15 days with varicella-like lesions.<sup>1</sup> A previous case report of COVID19-related varicella-like vesicles had also been published by Recalcati<sup>2</sup> for the very first time. However, only the Marzano et al<sup>1</sup> article included scarce clinical images due to safety or logistic concerns.

In these past few weeks we have been living in an epidemic situation in Spain, considered by the World Health Organization as an area of severe acute respiratory syndrome coronavirus 2 (SARS-Cov-2) of community transmission, especially in Madrid.<sup>3</sup> Since then, we began to observe different skin manifestations in patients with COVID-19 infection. We encountered 3 in-ward patients during the last few weeks, all with microbiologically proven COVID-19 by nasopharyngeal swab, and all of them presenting with vesicles (Table I, Figs 1 and 2).

Because the COVID-19 infection mechanism to produce vesicles is not known, we performed a herpesvirus family microarray polymerase chain reaction of the vesicle fluid, and we demonstrated a combination of herpes simplex-1 virus, herpes



Fig 1. Patient 1: Vesicles and punched out perioral erosions.

simplex-6 virus, and Epstein-Barr virus in patient 1, herpes simplex-1 virus and herpes simplex-7 in patient 2, and varicella zoster virus in patient 3. We could not simultaneously perform SARS-COV-2 polymerase chain reaction in the vesicle fluid, so we cannot completely rule out its additional involvement. Marzano and colleagues did not mention in their article whether they ruled out a herpes virus infection in every case; one might assume they did, and therefore used the term varicella-like exanthem.

COVID-19 infection characteristically produces lymphopenia, and we have previous evidence of lymphopenia, which is a known factor favoring herpesvirus recurrences, in our 3 patients. We would like to know whether the patients in the Marzano et al<sup>1</sup> report also had this characteristic sign in their blood tests.

**Table I.** Summary of patients with coronavirus disease 2019 (*COVID-19*) positivity and cutaneous scattered vesicles

Patient	Sex	Age, y	Past relevant medical history	COVID symptoms	Chest x-ray	Total number of days since onset of symptoms	Medications	Lymphocyte count*
1	Female	59	None	Fever Dry cough Dyspnea	Bilateral interstitial pneumonia	25	Hydroxychloroquine Lopinavir/ritonavir Ceftriaxone	620/mm <sup>3</sup>
2	Male	69	None	Fever Dry cough Dyspnea Myalgias	Bilateral interstitial pneumonia	43	Hydroxychloroquine Lopinavir/ritonavir Amoxicillin/clavulanic acid	820/mm <sup>3</sup>
3	Male	79	Parkinson disease Melanoma	Fever Skin rash	Normal	21	None	710/mm <sup>3</sup>

<sup>\*</sup>Lower count of lymphocytes of the patient during the follow-up of COVID-19 infection.

J AM ACAD DERMATOL SEPTEMBER 2020 **e253** 



Fig 2. Patient 3: Hemorrhagic blisters on the (A) anterior trunk and (B) posterior trunk.

Finally, we agree with the idea of further studying this recently described varicella-like exanthem to clarify how we can distinguish it from other dermatosis and use it to identify otherwise asymptomatic patients to test them earlier. But even today, when it seems that all of our patients are affected by COVID-19 and all the skin diseases may be related to COVID-19, we must keep in mind that other dermatologic diseases still exist. That is why we think that when we face a patient presenting with a varicella-like rash, we should perform Tzanck smear, virus culture, polymerase chain reaction on the vesicle fluid, or skin biopsy, or a combination of these, to rule out disseminated forms of other common viral infections.

Mar Llamas-Velasco, MD, PhD, Pedro Rodríguez-Jiménez, MD, Pablo Chicharro, MD, Diego De Argila, MD, Patricia Muñoz-Hernández, MD, and Esteban Daudén, MD, PhD

From the Department of Dermatology, Instituto de Investigación Sanitaria la Princesa (IIS-IP), a and the Department of Pathology, h Hospital Universitario de La Princesa, Madrid, Spain.

Drs Llamas-Velasco and Rodríguez-Jiménez contributed equally to the manuscript.

Funding sources: None.

Conflicts of interest: None disclosed.

IRB approval status: Not applicable.

Reprints not available from the authors.

Correspondence to: Mar Llamas-Velasco, Dermatology Department, Diego de León St 62, CP 28006, Madrid, Spain

E-mail: mar.llamasvelasco@gmail.com

## REFERENCES

- Marzano AV, Genovese G, Fabbrocini G, et al. Varicella-like exanthem as a specific COVID-19-associated skin manifestation: multicenter case series of 22 patients. J Am Acad Dermatol. 2020;83(1):280-285.
- Recalcati S. Cutaneous manifestations in COVID-19: a first perspective [e-pub ahead of print]. J Eur Acad Dermatol Venereol. https://doi.org/10.1111/jdv.16387. Accessed April 20, 2020.
- World Health Organization. Novel coronavirus situation reports. https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports. Accessed April 20, 2020.

https://doi.org/10.1016/j.jaad.2020.04.180