

## LETTER

## A Gianotti-Crosti-like eruption in the setting of SARS-CoV-2 infection

Dear Editor,

Since the first report of skin lesions in the setting of COVID-19 infection by Recalcati,<sup>1</sup> a progressively larger body of knowledge has been developed around this topic. A nationwide Spanish consensus study classified these skin lesions in five main categories: pseudochilblains (19%), vesicular eruptions (9%), urticarial lesions (19%), other maculopapular rashes (47%), and livedo or necrosis (6%), each one with a specific prognosis.<sup>2</sup> A similar classification was proposed by Marzano et al,<sup>3</sup> with a sixth group defined as purpuric “vasculitic” pattern. Nevertheless, a Gianotti-Crosti-like pattern has not been included in any of these studies, even in those which specifically evaluate and classify maculopapular<sup>4</sup> and vesicular eruptions,<sup>5</sup> the two primary lesions encountered in this setting.

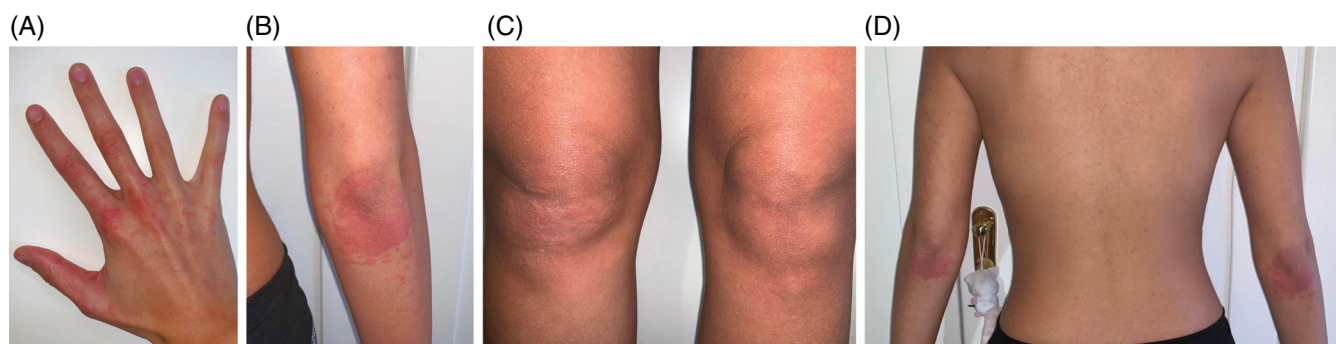
A previously healthy 25 years-old female presented to the emergency department with a one-day history of fever, diarrhea, and pruritic skin lesions on the dorsum of her hands. No treatment had been administered in the previous months. Physical examination revealed erythematous papules in the aforementioned locations, with a tendency to coalesce (Figure 1A). A nasopharyngeal SARS-CoV-2 reverse transcriptase-PCR (RT-PCR) test confirmed the diagnosis of COVID-19 infection. Chest-X-ray and blood analysis were otherwise normal. The patient was discharged with oral paracetamol. However, 2 days later she contacted with our department. The fever and the diarrhea had disappeared, but the rash persisted beyond it and had extended symmetrically to her arms, knees, and feet, with papules coalescing into plaques. Due to isolation measures, a teledermatology consultation was performed (Figure 1B–D), and a one-week course of methylprednisolone cream was prescribed. The buttocks and proximal thighs

were also affected during the next day. Hand, foot, and knee papules progressively resolved in 11 days, along with RT-PCR negativization, but residual lesions persisted in the buttock and proximal thighs one more week. After isolation measures, a serological test excluded acute infection with hepatitis A, B, or C, Epstein–Barr Virus (EBV), cytomegalovirus, parvovirus B19, Human Immunodeficiency Virus, *Mycoplasma pneumoniae* or *Borrelia burgdorferi*. Instead, IgM and IgG antibodies against SARS-CoV-2 were positive.

Due to the lack of histopathological data and monomorphism in certain locations, we could not establish a definitive diagnosis of Gianotti-Crosti syndrome (GCS).<sup>6</sup> However, given the parainfectious setting and the course, morphology and distribution of the lesions, we consider it was the most probable diagnosis in our patient. Assuming these limitations, the patient was finally diagnosed with a Gianotti-Crosti-like eruption.

GCS is a relatively common dermatosis during childhood, primarily affecting children between 3 months and 15 years of age. Conversely, its appearance in adults is much rarer, with few cases reported in the literature. Regarding its etiopathogenesis, viral infections seems to be the main cause of this syndrome, with EBV being the most common causative agent. However, the spectrum of associated infectious agents in GCS is not completely identified. In some cases, the causal agent remains unknown even after a complete study.<sup>7</sup>

The first authors who reported an association between GCS and COVID-19 were Brin et al.<sup>8</sup> In their case, the rash appeared 3 weeks after the beginning of the symptoms. In ours, conversely, the onset of the eruption coincided with the initial peak of fever. Its morphology



**FIGURE 1** (A) Multiple non-scaly erythematous papules and plaques on the dorsum of the left and right hand of the patient. (B) Multiple erythematous papules coalescing into a plaque on the right elbow of the patient. (C) Skin-colored to erythematous papules on the knees. (D) General overview. Note the complete sparing of the trunk and the symmetrical distribution of the rash

and, especially, the distribution of papules were otherwise similar, and both the COVID-19 infection and the absence of a pharmacological origin seem well documented.

In conclusion, we report a case of a Gianotti-Crosti-like eruption in the setting of a COVID-19 infection. This is also a good example of the usefulness of teledermatology, a tool that is playing a major role in the pandemic, breaking down barriers to patient assessment derived from confinement and isolation measures.<sup>9</sup> More reports based on morphology and distribution of COVID-19 skin manifestations could be of great interest in this setting. Though we could not establish a definitive GCS diagnosis, we hope this report could modestly help clinicians to identify atypical presentations of the infection.

### CONFLICT OF INTEREST

The authors have no conflict of interest to declare.

### AUTHOR CONTRIBUTIONS

Emilio de Dios Berná-Rico had full access to all data in the study and takes responsibility for the integrity of the data and the accuracy of data analysis. *Study concept and design:* Berná-Rico, Álvarez-Pinheiro, and Fernandez-Nieto. *Acquisition, analysis, and interpretation of data:* Berná-Rico, Álvarez-Pinheiro, Fernández-Nieto, Burgos-Blasco, Selda-Enriquez, and Azcárraga-Llobet. *Drafting of the manuscript:* Berná-Rico, Fernandez-Nieto, and Burgos-Blasco. *Critical revision of the manuscript for important intellectual content:* Fernandez-Nieto and Fernandez-Guarino.


### DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request. The data are not publicly available due to privacy or ethical restrictions.

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