

- Dermatol* 2020; S0190-9622(20)30564-8. <https://doi.org/10.1016/j.jaad.2020.04.024> [Epub ahead of print].
- 5 Ghosn J, Duvivier C, Tubiana R, Katlama C, Caumes E. Acute generalized exanthematous pustulosis induced by HIV postexposure prophylaxis with lopinavir-ritonavir. *Clin Infect Dis* 2005; **41**: 1360–1361.
 - 6 Szatkowski J, Schwartz RA. Acute generalized exanthematous pustulosis (AGEP): A review and update. *J Am Acad Dermatol* 2015; **73**: 843–848.
 - 7 Schwartz RA, Janniger CK. Generalized pustular figurate erythema: a newly delineated severe cutaneous drug reaction linked with hydroxy-chloroquine. *Dermatol Ther* 2020; **6**: e13380.
 - 8 Lin JH, Sheu HM, Lee JY. Acute generalized exanthematous pustulosis with erythema multiforme-like lesions. *Eur J Dermatol* 2002; **12**: 475–478.
 - 9 Kostopoulos TC, Krishna SM, Brinster NK, Ortega-Loayza AG. Acute generalized exanthematous pustulosis: atypical presentations and outcomes. *J Eur Acad Dermatol Venereol* 2015; **29**: 209–214.
 - 10 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 [published online ahead of print, 2020 Apr 16]. *J Am Acad Dermatol* 2020; S0190-9622(20)30657-5. <https://doi.org/10.1016/j.jaad.2020.04.044>

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Urticaria-like lesions in COVID-19 patients are not really urticaria – a case with clinicopathological correlation

Dear Editor,

We have read with great attention the article by 1 considering urticarial lesions as a coronavirus disease 2019 (COVID-19)-

associated skin manifestation. They observed two patients with erythematous-oedematous lesions surrounded by whitish halo, thus similar to hives but without additional data on their evolution.² A previous report of COVID19-related urticarial lesions had also been first published by Recalcati.¹ However, none of these two published articles detailed if the lesions were evanescent, as it is mandatory for urticaria, nor did a pathological study.

Madrid, Spain, has been considered by the World Health Organization as an area of SARS-CoV-2 of community transmission.³ Since then, we began to observe different skin manifestations in patients with COVID-19 infection. We present the case of a patient with non-evanescent urticarial lesions and its clinicopathological correlation.

A 60-year-old woman was admitted to the hospital for dry cough and pyrexia in the previous 3 weeks. In the last 5 days, she developed an urticarial eruption (Fig. 1). The patient had no relevant past medical history and had only suffered one episode of pompholyx 3 years ago. When the cutaneous rash appeared, she was not under any medication. She presented a bilateral interstitial pneumonia on X-ray, and blood test revealed a mild lymphopenia ($370/\text{mm}^3$) and increased liver enzymes (GOT, GPT, LDH, GGT three times normal). A cutaneous punch biopsy was performed showing slight vacuolar-type interface dermatitis with occasional necrotic keratinocytes. No eosinophils were encountered. These histological alterations were compatible with an erythema multiforme-like pattern (Fig. 2).

On follow-up, the lesions were persistent on the same locations without evolving to blistering. Surprisingly, in the work by Marzano *et al.*,⁴ reporting varicella-like lesions on COVID-19 patients, the histological image included in their report resembles our case.

In conclusion, we want to highlight that histopathological studies are important to characterize COVID-19-related skin lesions. In our experience, these urticaria-like lesions may also



Figure 1 Confluent weals on anterior (a) and posterior (b) trunk.

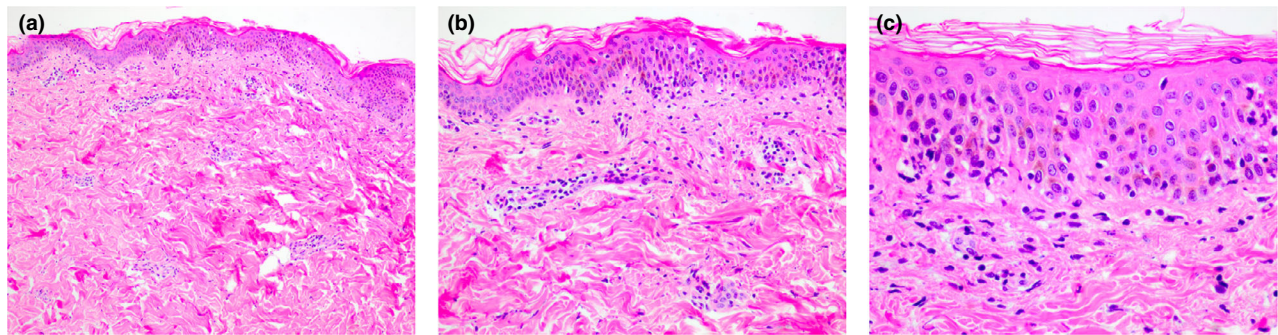


Figure 2 Haematoxylin and eosin. Slight vacuolar-type interface dermatitis with occasional necrotic keratinocytes 10× (a), 20× (b) and 40× (c).

appear in late phases and not only as early manifestations of COVID. Thus, this type of skin lesions should be further studied to clarify its relation with COVID-19 and whether it may be useful to identify earlier COVID-19 patients.



But we must remember that even today, when it seems that all of our patients are affected of COVID-19 and all the skin diseases may be related to it, we have to ground on clinicopathological correlation and to maintain the same quality standards that we used to have before SARS-CoV-2 appeared. This will be the key to unravel our enemy in this battle.

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References

- Recalcati S. Cutaneous manifestations in COVID-19: a first perspective. *J Eur Acad Dermatol Venereol* 2020; **34**: e212–e213. <https://doi.org/10.1111/jdv.16387>
- van Damme C, Berlingin E, Saussez S, Accaputo O. Acute urticaria with pyrexia as the first manifestations of a COVID-19 infection [published online ahead of print, 2020 Apr 24]. *J Eur Acad Dermatol Venereol* 2020. <https://doi.org/10.1111/jdv.16523>
- World Health Organization. Novel coronavirus situation reports. URL <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports/> (last accessed: 28 April 2020).

- 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 [published online ahead of print, 2020 Apr 16]. *J Am Acad Dermatol* 2020; S0190-9622(20)30657-5. <https://doi.org/10.1016/j.jaad.2020.04.044>

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A clinicopathological study of eight patients with COVID-19 pneumonia and a late-onset exanthema

Editor

Our hospital diagnosed the two first non-imported COVID-19 cases in Spain on 26 February. Up to date, a total of 1177 COVID-19-infected patients have been hospitalized. Eight of them were referred for dermatological examination. Due to the overwhelming situation, the incidence of cutaneous manifestations in our hospitalized COVID-19-infected patients is probably greater than this 0.7%.^{1,2}

We studied four males and four females with a mean age of 72.2 years (Table 1). The mean hospital stay was 23.2 days. Two patients required intensive care. No patient has died so far.

Analytically, all the patients presented lymphopenia and elevated D-dimer and C-reactive protein. Patient 1 presented also neutrophilia, eosinophilia and elevated liver enzymes.

Most frequent drugs during hospitalization were hydroxychloroquine (HCQ), lopinavir/ritonavir and ceftriaxone. These treatments had finished at least 1 week before the onset of the cutaneous rash in all cases, except patient 2. Three patients had no new medications in the previous 15 days. Only two patients received new drugs in the previous 48 h.

Mean latency time from systemic symptoms to exanthema was 27.6 days. Exanthema varied from ill-defined erythematous