

Cutaneous Findings in Patients with COVID-19 – An Early Summary

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While initial descriptions of symptomology with the novel coronavirus failed to highlight significant skin involvement, recent reports have identified several patterns of cutaneous findings that are thought to be associated with COVID-19 infection. As the timeline for this disease has been so short, the scientific literature is still being developed and reviewed. I have put together a brief summary of the patterns of skin rashes that have been reported to date.

As dermatology providers, we may be in a position to identify cutaneous patterns of viral disease, assisting with diagnoses and potential recommendations for patient testing. We are also in a position to help advance our understanding of this infection – please consider reporting any suspected dermatologic feature of COVID-19 to the AAD Covid Registry at the below web address:

<https://www.aad.org/member/practice/coronavirus/registry>

Reported Patterns of Disease:

- 1) Dengue-fever like petechial rash^{1 2}
 - a. Single case report from Thailand – patient with low platelets
 - b. “islands in a sea of red”



¹COVID-19 can present with a rash and be mistaken for dengue. Joob, Beuv et al. Journal of the American Academy of Dermatology, volume 82, issue 5, e177.

² Dengue Fever – DermNet NZ

2) Transient livedo reticularis³

- a. Appeared in 2 patients 7-10 days after symptoms, then self-resolved
- b. Theory – transient microthrombi



3) Morbilliform eruption⁴

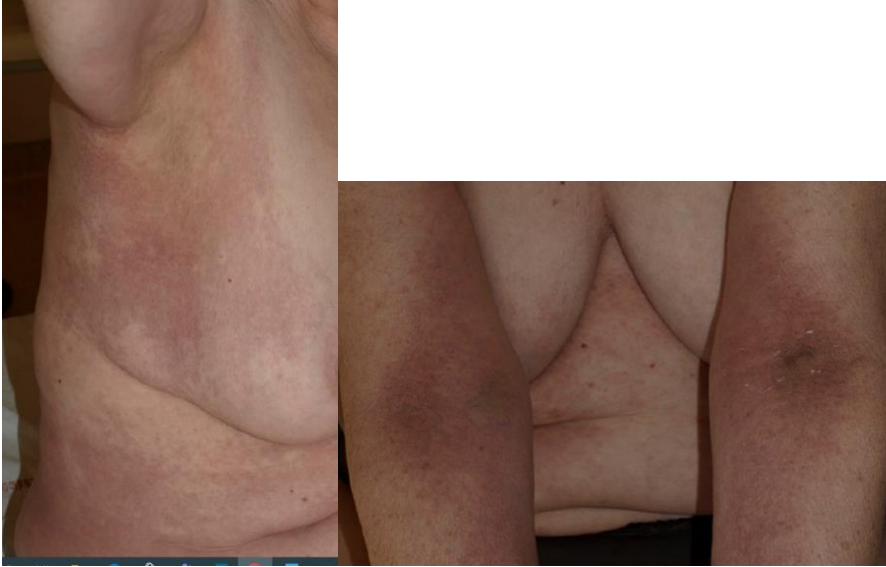
- a. Nonspecific – can be related to virus or medication
- b. Reported in Italy, France, and England



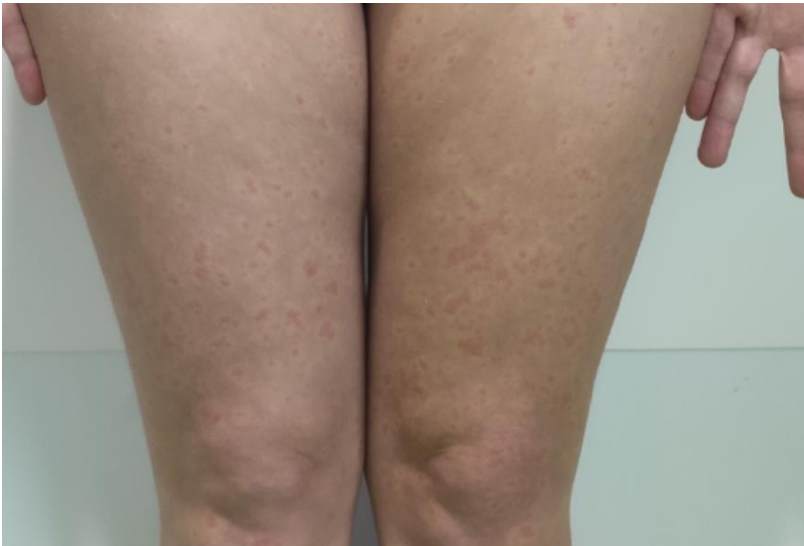
³ A dermatologic manifestation of COVID-10: Transient livedo reticularis. Manalo, Iviensan F et al. Journal of the American Academy of Dermatology, volume 0, issue 0 (epub ahead of print).

⁴ Cutaneous manifestations of COVID-19: A first perspective. Recalcati S. J Eur Acad Dermatol Venereol 2020 Mar 26.

- 4) Symmetrical Drug-Related Intertriginous and Flexural Exanthema (SDRIFE)- like eruption⁵
- a. Can be related to medication or viral infection – nonspecific
 - b. Eczematous eruption localized to flexor surfaces or folds of skin



- 5) Urticarial (hive-like)⁶



⁵ A distinctive skin rash associated with Coronavirus disease 2019? Mahe A, Birckel E, Krieger S, Merklen C, Bottlaender L. J Eur Acad Dermatol Venereol 2020 April 15.

⁶ Comment on: Cutaneous manifestations in COVID-19: a first perspective. Safety concerns of clinical images and skin biopsies. Fernandez-Nieto D et al. . J Eur Acad Dermatol Venereol 2020 April 15.

- 6) Vesicular (Chicken-pox like)⁴
a. One case report from Italy



- 7) Isolated pruritic plaques on the heels⁷



⁷ Cutaneous manifestations in COVID-19: a new contribution. Estebanez A et al. J Eur Acad Dermatol Venereol 2020 April 15.

- 8) Acral ischemia – chilblains or pernio like lesions (“covid toes”)⁸
- a. Only one publication to date
 - b. Anecdotal reports in minimally or asymptomatic patients
 - c. Theory – microthrombi
 - d. Testing – controversial – may be delayed finding, hence PCR can be falsely negative
 - i. Antibody testing (IgG) may be helpful once widely available
 - e. Treatment – controversial – no evidence for aspirin at this time
 - i. Can consider topical steroids or observation



⁸ A case of COVID-19 presenting in clinical picture resembling chilblains disease. First report from the Middle East. Alramtham A and Aldaraji W. Clin Exp Dermatol 2020 Apr 17.