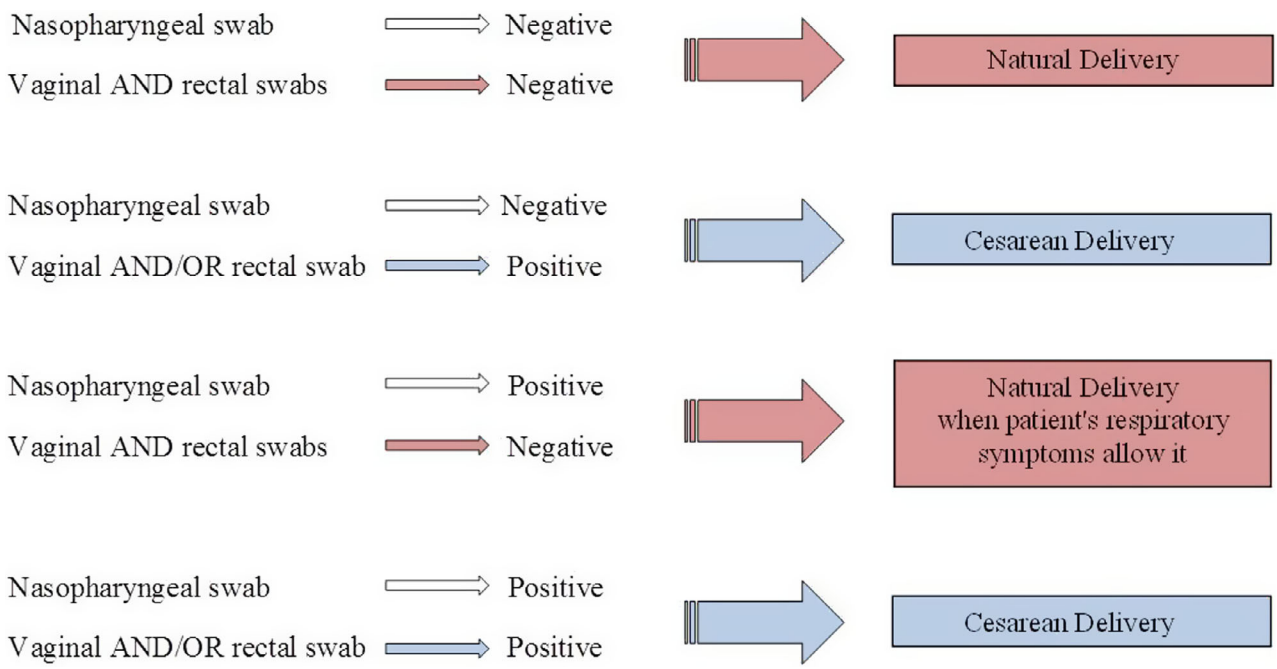

Figure 1 Decision algorithm proposal for the obstetric management of pregnant women during COVID-19 pandemic.

M. Delfino,[1] M. Guida,[2] A. Patrì,[1,*] L. Spirito,[3] L. Gallo,[1] G. Fabbrocini[1]

[1]Department of Clinical Medicine and Surgery, Section of Dermatology, University of Naples Federico II, Napoli, Italy, [2]Department of Neurosciences, Reproductive and Odontostomatological Sciences, Section of Gynecology and Obstetrics, University of Naples Federico II, Napoli, Italy, [3]Department of Neurosciences, Reproductive and Odontostomatological Sciences, Section of Urology, University of Naples Federico II, Napoli, Italy

*Correspondence: A. Patrì. E-mail: patriangela.ap@gmail.com

References

1 Patrì A, Gallo L, Guarino M, Fabbrocini G. Sexual transmission of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2): A new possible route of infection?. *J Am Acad Dermatol* 2020;**82**(6):e227

2 Mimouni F, Lakshminrusimha S, Pearlman SA, Raju T, Gallagher PG, Mendlovic J. Perinatal aspects on the covid-19 pandemic: a practical resource for perinatal-neonatal specialists. *J Perinatol* 2020; **40**(5):820–826. https://doi.org/10.1038/s41372-020-0665-6

3 Chen D, Yang H, Cao Y *et al.* Expert consensus for managing pregnant women and neonates born to mothers with suspected or confirmed novel coronavirus (COVID-19) infection. *Int J Gynaecol Obstet* 2020; **149**: 130–136.

4 Foggia M, Gentile I, Bonadies G *et al.* A retrospective study on HIV and syphilis. *Infez Med* 2014; **22**: 26–30.

5 Dong L, Tian J, He S *et al.* Possible vertical transmission of SARS-CoV-2 from an infected mother to her newborn. [published online ahead of print, 2020 Mar 26]. *JAMA*. 2020; **323**(18):1846–1848.

DOI: 10.1111/jdv.16591

Histologic features of long-lasting chilblain-like lesions in a paediatric COVID-19 patient

Dear Editor,

Since the beginning of the pandemic of coronavirus disease 2019 (COVID-19), an increasing number of skin manifestations have been reported.[1,2] Most reports concern adult patients and describe various patterns of skin eruptions, in most of cases with low specificity and no univocal temporal association with the onset of systemic symptoms of COVID-19.[1–3]

Recently, few papers describe chilblain-like lesions (CLL) as a possible skin clue of COVID-19 among young patients and children, mostly in the absence of systemic symptoms and with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) swab negativity.[4–8] This observation is consistent with the atypical outbreak of CLL reported in high endemic COVID-19 Italian regions among paediatric and dermatological networks.[6]

We hereby report a case of an adolescent boy with a reverse transcriptase (RT)-PCR-confirmed COVID-19 who developed long-lasting CLL.

A 16-year-old boy presented to our emergency room with multiple asymptomatic erythemato-oedematous, partially eroded, macules and plaques on dorsal aspects of the fingers

(Fig. 1) and a single similar plaque on the second right toe. A complete skin examination was otherwise unremarkable.

The acral findings appeared 20 days earlier preceded by about 3 days of transient dysgeusia and mild diarrhoea. He denied association with cold exposure, Raynaud's phenomenon or similar episodes in the past. The patient's mother was hospitalized due to COVID-19 a few days after the appearance of the CLL in our patient.

Because of this anamnestic data, blood tests, nasopharyngeal swab and skin biopsy were performed despite the patient's good health. Routine blood tests including coagulation, autoimmunity, cryoglobulins and viral serologies were either within normal limits or negative. RT-PCR for SARS-CoV-2 resulted positive on nasopharyngeal swab.

Histopathologic examination showed oedema of the papillary dermis, superficial and deep lymphocytic infiltrate in a perivascular and strong perieccrine pattern (Fig. 2); there were no signs of endothelial damage.

Clinico-pathological findings were consistent with a diagnosis of chilblains. In particular, the absence of autoimmune disorders and some pathological clues (oedema, deep infiltrate with perieccrine involvement) come out in favour of idiopathic chilblains rather than lupus erythematous chilblains.[9,10]

The temporary connection with general mild symptoms and the positivity of RT-PCR for SARS-CoV-2 has led us to suppose that CLL in our patient could be related to COVID-19. Our case reflects the prototype reported in the literature: an adolescent in good health with occasional history of systemic symptoms preceding cutaneous lesions.[4–8]

Interestingly, we observed in our patient long-lasting skin lesions several weeks after the first showings of the symptoms, concurrently with the positivity of the nasopharyngeal swab.

These findings may suggest that young patients with long-lasting CLL could be carriers of the virus also in the late stage of skin eruption and so they would be crucial for containment strategies. Further clinical and pathological studies are mandatory to better know the relation between SARS-CoV-2 infection and CLL and the possible pathogenetic link.

Acknowledgements

The parent of the patient featured in this manuscript has given written informed consent to publication of case details.

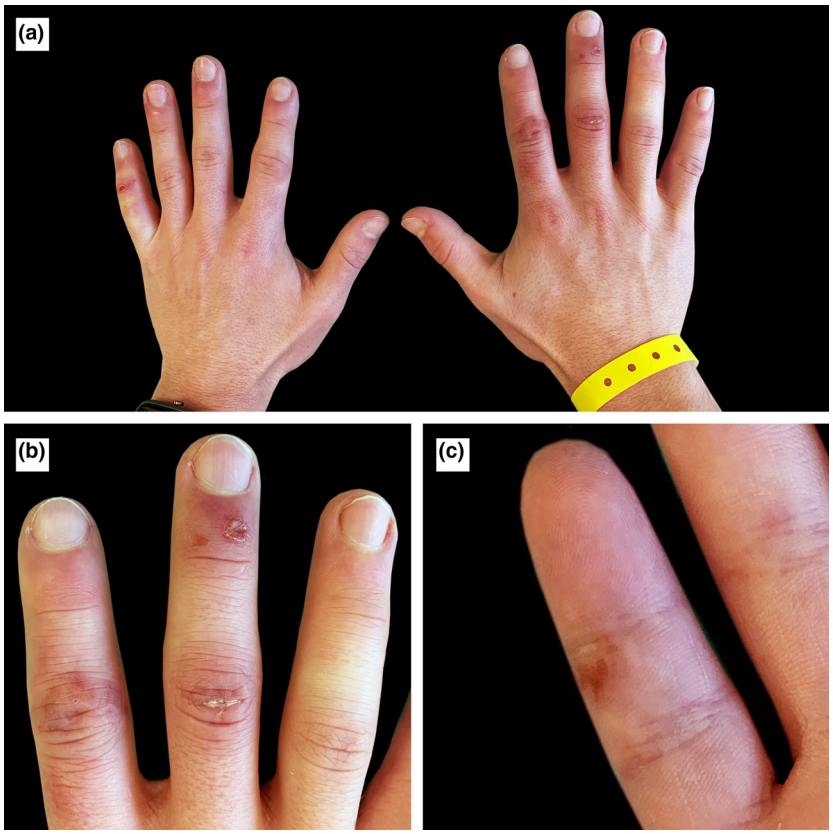

Figure 1 (a) Multiple erythemato-oedematous macules and plaques on dorsal aspects of the fingers. (b) Partially eroded papules. (c) Erythematous–oedematous macula on the palmar aspect of the fifth finger.

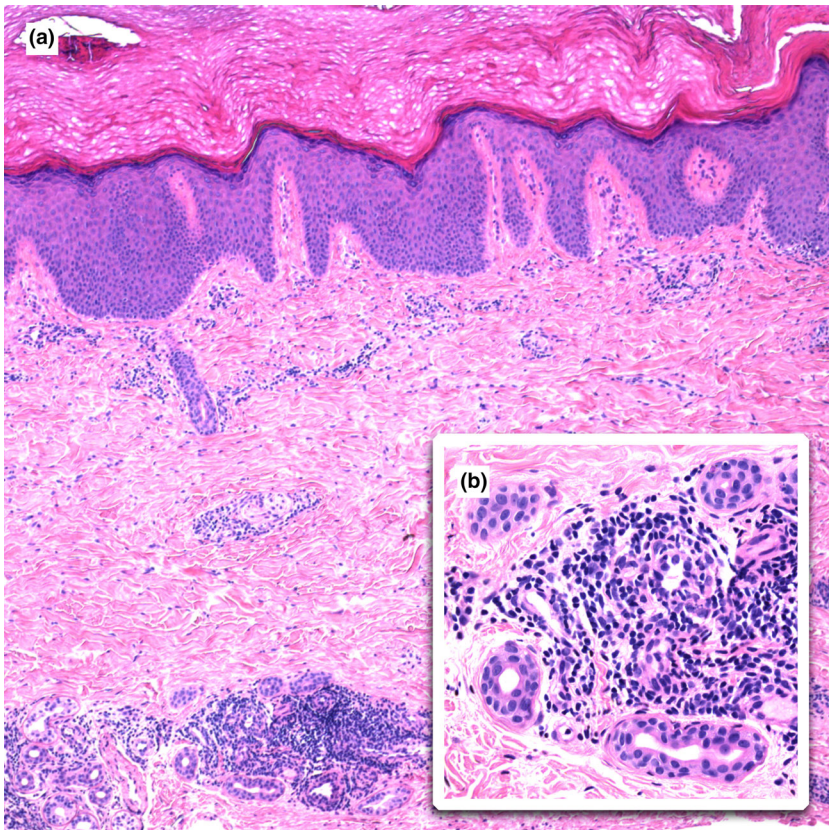

Figure 2 (a) Oedema of the papillary dermis, superficial and deep lymphocytic infiltrate in a perivascular and strong perieccrine pattern (haematoxylin–eosin stain; original magnification: ×20). (b) Higher magnification of perieccrine lymphocytic infiltrate (haematoxylin–eosin stain; original magnification: ×40).

Funding source

None reported.

A.G. Locatelli,[1,*] E. Robustelli Test,[2] P. Vezzoli,[1] A. Carugno,[1] E. Moggio,[1] L. Consonni,[1] A Gianatti,[3] P. Sena[1]

[1]Dermatology Unit, ASST Papa Giovanni XXIII Hospital, Bergamo, Italy, [2]Dermatology Clinic, Department of Medical Sciences and Public Health, University of Cagliari, Cagliari, Italy, [3]Pathology Unit, ASST Papa Giovanni XXIII Hospital, Bergamo, Italy

*Correspondence: A.G. Locatelli. E-mail: andrealocatelli@asst-pg23.it

References

1 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. https://doi.org/10.1016/j.jaad.2020.04.044. [Epub ahead of print].

2 Recalcati S. Cutaneous manifestations in COVID-19: a first perspective. *J Eur Acad Dermatol Venereol* 2020. https://doi.org/10.1111/jdv.16387. [Epub ahead of print].

3 Henry D, Ackerman M, Sancelme E, Finon A, Esteve E. Urticarial eruption in COVID-19 infection. *J Eur Acad Dermatol Venereol* 2020. https://doi.org/10.1111/jdv.16472. [Epub ahead of print].

4 Alramthan A, Aldaraji W. A case of COVID-19 presenting in clinical picture resembling chilblains disease. First report from the Middle East. *Clin Exp Dermatol* 2020. https://doi.org/10.1111/ced.14243. [Epub ahead of print].

5 Kolivras A, Dehavay F, Delplace D *et al*. Coronavirus (COVID-19) infection-induced chilblains: a case report with histopathological findings. *JAAD Case Reports* 2020. https://doi.org/10.1016/j.jdcr.2020.04.011. [Epub ahead of print].

6 Piccolo V, Neri I, Filippeschi C *et al*. Chilblain-like lesions during COVID-19 epidemic: a preliminary study on 63 patients. *J Eur Acad Dermatol Venereol* 2020. https://doi.org/10.1111/jdv.16526. [Epub ahead of print].

7 Recalcati S, Barbagallo T, Frasin LA *et al*. Acral cutaneous lesions in the Time of COVID-19. *J Eur Acad Dermatol Venereol* 2020. https://doi.org/10.1111/jdv.16533. [Epub ahead of print].

8 Fernandez-Nieto D, Jimenez-Cauhe J, Suarez-Valle A *et al*. Characterization of acute acro-ischemic lesions in non-hospitalized patients: a case series of 132 patients during the COVID-19 outbreak. *J Am Acad Dermatol* 2020. https://doi.org/10.1016/j.jaad.2020.04.093. [Epub ahead of print].

9 Cribier B, Djeridi N, Peltre B, Grosshans E. A histologic and immunohistochemical study of chilblains. *J Am Acad Dermatol* 2001; **45**: 924–929.
10 Wang ML, Chan MP. Comparative analysis of chilblain lupus erythematosus and idiopathic perniosis: histopathologic features and immunohistochemistry for CD123 and CD30. *Am J Dermatopathol* 2018; **40**: 265–271.

DOI: 10.1111/jdv.16617

SARS-CoV-2 asymptomatic infection in a patient under treatment with dupilumab

Dear Editor,

We have read with great interest the letter of the European Task Force on Atopic Dermatitis on SARS-CoV-2 infection and atopic dermatitis published in JEADV (March 2020)[1] in which the authors state: 'Targeted treatment selectively interfering with type-2 inflammation such as dupilumab is not considered to increase the risk for viral infections and might thus be preferred . . .in a situation such as COVID-19 pandemic'.[1]

We would like to report the case of a 72-year-old man affected by severe atopic dermatitis (histologically ascertained), who is under treatment with dupilumab since November 2019, with excellent clinical results.

At the beginning of SARS-CoV-2 pandemic in Italy, although he was totally asymptomatic for COVID-19, as all the other residents in Vo' Euganeo, a small town near Padua, in the so-called 'Vo' Red Zone' (i.e. restricted area), he was tested with nasopharyngeal swab for SARS-CoV-2 detection and resulted positive.

After 20 days of isolation period, the nasopharyngeal swab for SARS-CoV-2 resulted again positive. After 20 more days of isolation, he was tested positive for the third time. Three weeks later, the nasopharyngeal swab for SARS-CoV-2 was finally negative. Notwithstanding the risk factors (i.e. age >65 years and male gender), our patient throughout all this period (9 weeks) remained totally asymptomatic for COVID-19, in good general condition and free of atopic dermatitis.

It would seem that treatment with dupilumab, similarly to other antibodies targeting pro-inflammatory cytokines (e.g. adalimumab, infliximab, ustekinumab, secukinumab and guselkumab), does not worsen the condition of patients infected by SARS-CoV-2 or increase the risk of infection by SARS-CoV-2,[2–7] possibly because these antibodies neutralize individual mediators of the inflammation cascade rather than leading to broad immunosuppression.[8]

However, of course, more robust clinical data are needed in order to evaluate the safety of dupilumab and of other biologics in patients infected by SARS-CoV-2.

Acknowledgements

The patient has given written informed consent to publication of their case details.

Funding source

No funding sources.

F. Caroppo, G. Biolo, A. Belloni Fortina*
Dermatology Unit, Department of Medicine DIMED, University of Padova, Padova, Italy
*Correspondence: A. Belloni Fortina. E-mail: anna.bellonifortina@unipd.it

References

1 Wollenberg A, Flohr C, Simon D *et al*. European Task Force on Atopic Dermatitis (ETFAD) statement on severe acute respiratory syndrome coronavirus 2 (SARS-Cov-2)-infection and atopic dermatitis. *J Eur Acad Dermatol Venereol* 2020. https://doi.org/10.1111/jdv.16411
2 Ferrucci S, Romagnuolo M, Angileri L *et al*. Safety of Dupilumab in severe atopic dermatitis and infection of Covid-19: two case reports. *J Eur Acad Dermatol Venereol* 2020. https://doi.org/10.1111/jdv.16527
3 Carugno A, Raponi F, Locatelli AG *et al*. No evidence of increased risk for COVID-19 infection in patients treated with Dupilumab for atopic dermatitis in a high-epidemic area-Bergamo, Lombardy, Italy. *J Eur Acad Dermatol Venereol* 2020. https://doi.org/10.1111/jdv.16552
4 Messina F, Piaserico S. SARS-CoV-2 infection in a psoriatic patient treated with IL-23 inhibitor. *J Eur Acad Dermatol Venereol* 2020. https://doi.org/10.1111/jdv.16468
5 Mugheddu C, Dell'Antonia M, Sanna S *et al*. Successful Guselkumab treatment in a psoriatic patient affected with Cornelia de Lange Syndrome, and prosecution during the COVID-19 pandemic. *Dermatol Ther* 2020; e13433.
6 Megna M, Ruggiero A, Marasca C *et al*. Biologics for psoriasis patients in the COVID-19 era: more evidence, less fears. *J Dermatolog Treat* 2020; **31**: 328–329.
7 Gisondi P, Zaza G, Del Giglio M *et al*. Risk of hospitalization and death from COVID-19 infection in patients with chronic plaque psoriasis receiving a biological treatment and renal transplanted recipients in maintenance immunosuppressive treatment. *J Am Acad Dermatol* 2020; S0190-9622(20)30701-5.
8 Schett G, Sticherling M, Neurath MF. COVID-19: risk for cytokine targeting in chronic inflammatory diseases? *Nat Rev Immunol* 2020; **20**: 271–272.

DOI: 10.1111/jdv.16619

'Toxic erythema' and eosinophilia associated with tocilizumab therapy in a COVID-19 patient

Dear Editor,

Since the new fatal pneumonia was identified in December 2019 in Wuhan, China, the WHO declared the infection a health emergency of international concern.