

LETTER

Cutaneous lupus erythematosus patients in a high-epidemic COVID-19 area, Bergamo, Italy

Dear Editor,

The current pandemic of coronavirus disease 2019 (COVID-19) has raised interest in reporting the management's experience with systemic lupus erythematosus (SLE) patients under long-term treatment with immunosuppressor drugs or hydroxychloroquine (HCQ). SLE patients could have a higher potential risk of a severe COVID-19 course^{1,2} due to underlying immune dysregulation, the potential presence of organ damage associated with the disease, and comorbidities.^{3,4} Indeed, infections remain a leading cause of mortality in lupus patients.⁵

Recently, some authors reported the importance to maintain disease remission in lupus patients, especially in high-epidemic areas, avoiding unnecessary emergency room visits and hospitalization. Therefore, it has been suggested not to discontinue current therapy in such patients.^{5,6} However, no data about the management of risk infection in cutaneous lupus erythematosus (CLE) during the current pandemic are present in the literature to date.

Our hospital is located in a high-epidemic area of Lombardy: we decided to advise patients affected by SLE with cutaneous manifestations and CLE, to scrupulously comply with hygiene rules and protective devices use, to maintain social distancing, not to spontaneously suspend ongoing therapy, and to inform the dermatologist in case of the onset of symptoms, as suggested by the Italian Society of Dermatologists (SIDeMaST)⁷ and several papers.^{5,6,8,9} All patients (SLE: n = 6, CLE: n = 19, Table 1) were contacted by telephone 45 to 50 days after the beginning of the spread of the coronavirus infection in the Bergamo area. Cutaneous disease was stable in all patients; 17/19 patients were treated with HCQ for more than 36 months, in association with glucocorticoids (n = 4), thalidomide (n = 1), or methotrexate (n = 1); 4/6 SLE patients received HCQ in association with azathioprine in two cases and with glucocorticoids in one case. Two CLE patients and one SLE patient received only thalidomide. For all the patients taking systemic steroid therapy, the current dosage was not considered immunosuppressive (<20 mg/day; mean dosage 4.17 ± 1.29 mg/day, range 2.5-5 mg/day). No patient independently discontinued the therapy for fear of recurrence of skin lesions. Two SLE (33.3%) and two CLE patients (10.5%) experienced mild/moderate COVID-19-suspected symptoms resolved without hospitalization, only in one of these cases (CLE) contact with suspected COVID-19 was reported. Of note, three patients did not develop symptoms despite established contact with a COVID-19 patient.

Observation of these data shows that lupus patients with cutaneous manifestations could have susceptibility to COVID-19 independently of

contact with known or suspected COVID-19 patient. In particular, a higher risk factor to experience severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection could be observed in SLE patients as reported in the literature.⁴⁻⁷ Fortunately, all the four COVID-19 suspected patients experienced mild symptoms without severe respiratory complications. Furthermore, none of our patients showed a recurrence of the underlying disease.

The role of HCQ on COVID-19 is still debated⁹ and our data do not allow us to draw conclusions on the matter. Therefore, we think it is important to create a communication channel with patients to

TABLE 1 Clinical characteristics of patients with cutaneous and systemic lupus erythematosus

	CLE	SLE
Number of patients	19	6
Age (years) (mean ± SD, range)	58.9 ± 16.2 (31-93)	46.2 ± 14.1 (24-62)
Female	78.9% (15/19)	100% (6/6)
Duration disease (months) (mean ± SD, range)	35.2 ± 35.4 (8-135)	53.2 ± 42.6 (14-111)
Comorbidities (% , n/N)		
Hypertension	15.8% (3/19)	0.0% (0/6)
Neoplasia	10.5% (2/19)	0.0% (0/6)
Other rheumatic diseases	10.5% (2/19)	16.7% (1/6)
Therapy (% , n/N)		
Hydroxychloroquine	89.5% (17/19)	66.6% (4/6)
Systemic steroid	21.1% (4/19)	50.0% (3/6)
Mean dosage ± SD (range) (mg/day) ^a	4.0 ± 1.4 (2.5-5)	4.2 ± 1.4 (2.5-5)
Thalidomide	10.5% (2/19)	16.7% (1/6)
Azathioprine	5.3% (1/19)	33.3% (2/6)
Methotrexate	5.3% (1/19)	0.0% (0/6)
COVID-19-suspected symptoms ^b	10.5% (2/19)	33.3% (2/6)
Contact with suspected/ known COVID-19 patients	10.5% (2/19)	16.7% (1/6)
Hospitalization	0.0% (0/19)	0.0% (0/6)

Abbreviations: CLE, cutaneous lupus erythematosus; COVID-19, coronavirus disease; and SLE, systemic lupus erythematosus.

^aPrednisone or equivalent.

^bOne or more of the following: fever, nonproductive cough, rhinorrhea, anosmia/ageusia, dyspnea, and myalgia/fatigue.

reduce in-person follow-up visits, to give human support, and to help in managing therapies. We observed that it is essential to advise and empower LE patients on activities to limit the risk of infection (such as hand hygiene, social distancing, use of protective devices), not only in the systemic form but also in the cutaneous form.

CONFLICT OF INTEREST

The authors declare no conflicts of interest.

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REFERENCES

- Torres T, Puig L. Managing cutaneous immune-mediated diseases during the COVID-19 pandemic. *Am J Clin Dermatol.* 2020;21(3):307-311. <https://doi.org/10.1007/s40257-020-00514-2> [Epub ahead of print].
- Rademaker M, Baker C, Foley P, Sullivan J, Wang C. Advice regarding COVID-19 and use of immunomodulators, in patients with severe dermatological diseases. *Australas J Dermatol.* 2020;61(2):158-159. <https://doi.org/10.1111/ajd.13295> [Epub ahead of print].
- Mathian A, Mahevas M, Rohmer J, et al. Clinical course of coronavirus disease 2019 (COVID-19) in a series of 17 patients with systemic lupus erythematosus under long-term treatment with hydroxychloroquine. *Ann Rheum Dis.* 2020;79(6):837-839. <https://doi.org/10.1136/annrheumdis-2020-217566> [Epub ahead of print].
- Konig MF, Kim AH, Scheetz MH, et al. Baseline use of hydroxychloroquine in systemic lupus erythematosus does not preclude SARS-CoV-2 infection and severe COVID-19. *Ann Rheum Dis.* 2020. <https://doi.org/10.1136/annrheumdis-2020-217690> [Epub ahead of print].
- Sawalha AH, Manzi S. Coronavirus disease-2019: implication for the care and management of patients with systemic lupus erythematosus. *Eur J Rheumatol.* 2020. <https://doi.org/10.5152/eurjrheum.2020.20055> [Epub ahead of print].
- Horisberger A, Moi L, Ribi C, Comte D. Impact of COVID-19 pandemic on SLE: beyond the risk of infection. *Lupus Sci Med.* 2020;7(1):e000408. <https://doi.org/10.1136/lupus-2020-000408>.
- Società Italiana di Dermatologia medica, chirurgica, estetica e delle Malattie Sessualmente Trasmesse (SIDeMaST) Infezione da Coronavirus, Vademecum per i pazienti affetti da malattie bollose e malattie autoimmuni. <https://www.sidemast.org/blog/infezione-da-coronavirus-vademecum-per-i-pazienti-affetti-da-malattie-bollose-e-malattie-auto-immuni/>. Accessed May 25, 2020.
- Liu Y, Chang C, Lu Q. Management strategies for patients with autoimmune diseases during the COVID-19 pandemic: a perspective from China. *Eur J Rheumatol.* 2020. <https://doi.org/10.5152/eurjrheum.2020.2056> [Epub ahead of print].
- Bozzalla Cassione E, Zanframundo G, Biglia A, Codullo V, Montecucco C, Cavagna L. COVID-19 infection in a northern-Italian cohort of systemic lupus erythematosus assessed by telemedicine. *Ann Rheum Dis.* 2020. <https://doi.org/10.1136/annrheumdis-2020-217717> [Epub ahead of print].