

4.

DERMATOLOGY

CHAPTER

SEVERE SEBORRHEIC DERMATITIS ASSOCIATED WITH COVID-19 INFECTION

Münevver Meltem ERMAN¹

INTRODUCTION

A novel coronavirus, SARS-CoV-2 belongs to the same family as SARS-CoV and MERS coronaviruses and caused the World Health Organization to declare a pandemic, causing high mortality and morbidity worldwide. Typical clinic symptoms are fever, fatigue, dry cough, diarrhea, sore throat, conjunctivitis, loss of sense of taste, and smell(1,2). Especially older patients and individuals having an underlying disease may have more severe COVID-19 disease and it may proceed to lower respiratory tract infections, pneumonia, and acute respiratory distress syndrome. The incubation period of COVID-19 is up to 14 days. The travel history and contact with COVID-19 patients must be taken in anamnesis. The diagnosis is made through clinical symptoms, features of thorax CT and PCR positivity.

The skin is also involved in COVID-19 disease in addition to various organ systems. Several cases were reported in the literature presenting with novel cutaneous manifestation and aggravation of an underlying cutaneous disease (2,3). The dermatological manifestations may present in several different scenarios. In a study conducted in Spain, five distinct clinical patterns were described: acral areas with erythema-edema associated with some vesicles or pustules (pseudo-chilblain lesions), maculopapular eruptions, urticaria, other vesicular lesions (monomorphic disseminated vesicular lesions and acral vesicular-pustulous lesions),

¹ MD, Dermatologist, Istanbul Basaksehir Cam and Sakura City Hospital, Department of Dermatology
Email:meltemhudaverdi@hotmail.com

CONCLUSION

It is clear that the COVID-19 virus, which has started in the last quarter of 2019 is still effective all over the World. The disease affects the skin together with other organ systems. The manifestations can appear in different forms: Maculopapular, urticarial, vesicular, papulosquamous, and vasculitic. New studies and data are needed to clarify both the mechanisms by which the COVID-19 virus affects the skin and the etiology of seborrheic dermatitis.

TAKE HOME MESSAGES

It should be kept in mind that the COVID-19 virus, which still has much unknown information to learn about, may play a role in the etiopathogenesis of cutaneous diseases encountered in this process, and should be directed to the related departments in any hesitation.

REFERENCES

1. Zhu N, Zhang D, Wang W, et al. A novel coronavirus from patients with pneumonia in China, 2019. *N Engl J Med.* 2020;382(8):727-733.
2. Wollina U, Karadağ AS, Rowland-Payne C, Chiriac A, Lotti T. Cutaneous signs in COVID-19 patients: A review. *Dermatol Ther.* 2020 May 10:e13549. doi: 10.1111/dth.13549. Epub ahead of print. PMID: 32390279; PMCID: PMC7273098.
3. Recalcati S. Cutaneous manifestations in COVID-19: a first perspective. *J Eur Acad Dermatol Venereol.* 2020 May;34(5):e212-e213. doi: 10.1111/jdv.16387. PMID: 32215952.
4. Galván Casas C., Català A., Carretero Hernández G. Classification of the cutaneous manifestations of COVID-19: a rapid prospective nationwide consensus study in Spain with 375 cases. *Br J Dermatol.* 2020;183:71-77.
5. Gül Ü. COVID-19 and dermatology. *Turk J Med Sci.* 2020 Jun 30. doi: 10.3906/sag-2005-182. Epub ahead of print. PMID: 32599968.
6. Guan W, Ni Z, Hu Y, Liang W, Ou C et al. Clinical characteristics of coronavirus 437 disease 2019 in China. *The New England Journal of Medicine* 2020. 438 doi:10.1056/NEJMoa2002032 439
7. Alramthan A, Aldaraji W. A case of COVID-19 presenting in clinical picture 440 resembling chilblains disease. First report from the Middle East. *Clinical and 441 Experimental Dermatology* 2020. doi:10.1111/ced.14243
8. Torres T, Puig L. Managing cutaneous immune-mediated diseases during 494 the COVID-19 pandemic. *American Journal of Clinical Dermatology* 2020. 495 doi:10.1007/s40257-020-00514-2
9. Valia, R. (2006). Etiopathogenesis of seborrheic dermatitis. *Indian Journal of Dermatology, Venereology and Leprology*, 72(4), 253-5.
10. Molinero LL, Gruber M, Leoni J, Woscoff A, Zwirner NW. Up-regulated expression of MICA and proinflammatory cytokines in skin biopsies from patients with seborrhoeic dermatitis. *Clin Immunol.* 2003 Jan;106(1):50-4. doi: 10.1016/s1521-6616(03)00003-2. PMID: 12584051
11. Li Z, Zheng C, Duan C, Zhang Y, Li Q, Dou Z, Li J, Xia W. Rehabilitation needs of the first cohort of post-acute COVID-19 patients in Hubei, China. *Eur J Phys Rehabil Med.* 2020 Jun;56(3):339-344. doi: 10.23736/S1973-9087.20.06298-X. PMID: 32672029.

12. Misery L, Touboul S, Vinçot C, Dutray S, Rolland-Jacob G, Consoli SG, Farcet Y, Feton-Danou N, Cardinaud F, Callot V, De La Chapelle C, Pomey-Rey D, Consoli SM; Pour le Groupe Psychodermatologie. Stress et dermatite séborrhéique [Stress and seborrheic dermatitis]. *Ann. Dermatol Venereol*. 2007 Nov;134(11):833-7. French. doi: 10.1016/s0151-9638(07)92826-4. PMID: 18033062.
13. Oble DA, Collett E, Hsieh M, Ambjørn M, Law J, Dutz J, Teh HS. A novel T cell receptor transgenic animal model of seborrheic dermatitis-like skin disease. *J Invest Dermatol*. 2005 Jan;124(1):151-9. doi: 10.1111/j.0022-202X.2004.23565.x. PMID: 15654969.
14. Dessinioti C, Katsambas A. Seborrheic dermatitis: etiology, risk factors, and treatments: facts and controversies. *Clin Dermatol*. 2013 Jul-Aug;31(4):343-351. doi: 10.1016/j.clindermatol.2013.01.001. PMID: 23806151.
15. 30. Selden S. Seborrheic dermatitis. <http://www.emedicine.com/derm/topic396.htm> Last updated: September 23, 2005. Last accessed: June 12, 2006.
16. 31. Patnaik R, Choudary TN, Shashikiran B. Nutrition and skin. In: Valia RG, Valia AR, editor. *IADVL textbook and atlas of dermatology*. 2nd edn. Bombay: Bhalani Publishing House, 1999. p. 974-1001.