

BÖLÜM 34

COVID-19 VE DERMATOLOJİ

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Aralık 2019'da Çin'in Hubei eyaleti Wuhan şehrinde ilk olarak görülmeye başlanan Coronavirus Hastalığı (COVID-19) SARS-CoV-2 virüsü tarafından oluşmaktadır. Hızla tüm dünyaya yayılan COVID-19, 11 Mart'ta dünya sağlık örgütü tarafından pandemi ilan edilmiştir (1).

İnkübasyon süresi 14 güne kadar uzayan virüs, damlacık yoluyla, kontamine sekresyonlarla, aerosol yolla ve cansız yüzeylerden bulaşabilmektedir (2,3). Asemptomatik taşıyıcılar da hastalık bulaştırabilmektedir (3). Virüsün cansız yüzeylerde 9 güne kadar kalabildiği gösterilmiştir (4). Hastalık asemptomatik seyredebileceği gibi hafif-orta seyirli pnömoni olarak da görülebilir. Şiddetli vakalarda akut respiratuar solunum sendromuna, şok ve çoklu organ yetmezliğine hatta ölüme neden olmaktadır (2).

En büyük organımız olan deri, COVID-19 pandemisinde pek çok açıdan etkilenmiştir. Bu bölümde güvenli dermatoloji uygulamaları, kullanılan kişisel koruyucu ekipmanlara bağlı yaşanan cilt problemleri, COVID-19 enfeksiyonunun cilt bulguları ve COVID-19 tedavisinde kullanılan ilaçların kütanöz yan etkileri konuları ele alınacaktır.

Güvenli dermatoloji pratiği

Vücudun en büyük organıdır olan deri muayenesi yüz, oral mukoza, genital bölge gibi bölgelerin incelenmesini gerektirir (5). Dermatologlar hasta muayene ederken maske, eldiven, gözlük, bone gibi kişisel koruyucu ekipman kullanmalı ve eldiven kullanımı öncesinde ve sonrasında ellerini yıkamalıdır (2,3,5).

Cildimiz pek çok çevresel etkene karşı koruyucu bariyer olarak görev yaparak immün sistemin bir parçası olarak hareket eder (3). Epidermal bariyerin bozulması virüsün girişi içi yol olmaktadır (6,7). Bu nedenle cilt bütünlüğünün sıyrık, kaşınma, cilt hastalıkları, yanıklar enjeksiyon gibi nedenlerle bozulması dermatoloji hastalarını COVID-19 açısından risk altında bırakmaktadır (3,6,7).

COVID-19 döneminde dermatoloji muayeneleri tekrar gözden geçirilmeli ve öncelik acil durumlara ve dermatolojik malinitelere verilecek şekilde tekrar organize edilmelidir (3,4). Hastalar muhakkak maske takmalı, poliklinik girişlerinde ateş ölçümü yapılmalıdır. Sadece ayaktan tedaviye yanıt vermeyen ağır hastalar yatırılarak tedavi edilmelidir (3). Dermatосkopi muayenesinin ge-

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kortikosteroidler tedaviye eklenmelidir. Nadiren anafilaksi gelişimi gözlenebilir. Daha önce plazmaya bağlı reaksiyon gelişenlerde difenhidramin ve kortikosteroidlerle premedikasyon yapılmalıdır. Gecikmiş reaksiyonlar antihistaminik ve topikal veya sistamik kortikosteroidlerle tedavi edilebilir (27, 58).

Düşük molekül ağırlıklı heparin: COVID-19'da görülen trombotik olayları önlemek için kullanılmaktadır. Heparinin indüklediği cilt nekrozu (eritematöz plak, hemorajik bülleler, nekrotik ülser ve peteşi) en sık gözlenen cilt yan etkisidir (27, 59,60).

KAYNAKLAR

- Swarnkar B, Bhari N. Skin amidst COVID-19 pandemic. *Dermatol Ther.* 2020 Jun 7:e13789.
- Goldust M, Kroumpouzos G, Murrell DF, Rudnicka L, et al. on COVID-19 effects in dermatology specialty. *Dermatol Ther.* 2020 Jul;33(4):e13523.
- Fahmy DH, El-Amawy HS, El-Samony MA, et al. COVID-19 and dermatology: a comprehensive guide for dermatologists. *J Eur Acad Dermatol Venereol.* 2020 Jul;34(7):1388-1394.
- Wollina U. Challenges of COVID-19 pandemic for dermatology. *Dermatol Ther.* 2020 Apr 20:e13430.
- Gül Ü. COVID-19 and dermatology. *Turk J Med Sci.* 2020 Jun 30
- Darlenski R, Tsankov N. COVID-19 pandemic and the skin: what should dermatologists know? [published online ahead of print, 2020 Mar 24]. *Clin Dermatol.* 2020
- Tao J, Song Z, Yang L, Huang C, Feng A, Man X. Emergency management for preventing and controlling nosocomial infection of the 2019 novel coronavirus: implications for the dermatology department. *Br J Dermatol.* 2020 Jun;182(6):1477-1478.
- Jakhar D, Kaur I, Kaul S. Art of performing dermoscopy during the times of coronavirus disease (COVID-19): simple change in approach can save the day! *J Eur Acad Dermatol Venereol.* 2020.
- Balachandar V, Mahalaxmi I, Kaavya J, et al. COVID-19: emerging protective measures. *Eur Rev Med Pharmacol Sci.* 2020 Mar;24(6):3422-3425.
- Fathizadeh H, Maroufi P, Momen-Heravi M, et al. Protection and disinfection policies against SARS-CoV-2 (COVID-19). *Infez Med.* 2020 Ahead of print Jun 1;28(2):185-191. PMID: 32275260.
- Ağalar C, Öztürk Engin D. Protective measures for COVID-19 for healthcare providers and laboratory personnel. *Turk J Med Sci.* 2020 Apr 21;50(SI-1):578-584.
- Chang D, Xu H, Rebaza A, Sharma L, Dela Cruz CS. Protecting health-care workers from subclinical coronavirus infection. *Lancet Respir Med.* 2020 Mar;8(3):e13.
- Patruno C, Fabbrocini G, Stingeni L, Napolitano M. The role of occupational dermatology in the COVID-19 outbreak. *Contact Dermatitis.* 2020 Aug;83(2):174-175.
- Desai SR, Kovarik C, Brod B, James W, Fitzgerald ME, et al. COVID-19 and personal protective equipment: Treatment and prevention of skin conditions related to the occupational use of personal protective equipment. *J Am Acad Dermatol.* 2020 Aug;83(2):675-677.
- Elston DM. Occupational skin disease among health care workers during the coronavirus (COVID-19) epidemic. *J Am Acad Dermatol.* 2020 May;82(5):1085-1086.
- Long H, Zhao H, Chen A, Yao Z, Cheng B, Lu Q. Protecting medical staff from skin injury/disease caused by personal protective equipment during epidemic period of COVID-19: experience from China. *J Eur Acad Dermatol Venereol.* 2020 May;34(5):919-921.
- Etgü F, Önder S. (2020). COVID-19 pandemisinde sağlık çalışanlarının kişisel koruyucu ekipman kullanımına bağlı karşılaştıkları cilt problemleri. *Dermatolojide & Kozmetolojide Gelişmeler Kongresi, 2020 4-8 Kasım 2020, E-kongre, (p.32).*
- Lan J, Song Z, Miao X, et al. Skin damage among healthcare workers managing coronavirus disease-2019. *J Am Acad Dermatol.* 2020;pii: S0190-9622(20):30392-30393.
- Elston DM. Letter from the Editor: Occupational skin disease among healthcare workers during the Coronavirus (COVID-19) epidemic. *J Am Acad Dermatol.* 2020.
- Lin P, Zhu S, Huang Y, et al. Adverse skin reactions among healthcare workers during the coronavirus disease 2019 outbreak: a survey in Wuhan and its surrounding regions. *Br J Dermatol.* 2020.
- Bauer A, Rönsch H, Elsner P, Dittmar D, et al. Interventions for preventing occupational irritant hand dermatitis. *Cochrane Database Syst Rev.* 2018 Apr 30;4(4):CD004414.
- Yan Y, Chen H, Chen L. et al. Consensus of Chinese experts on protection of skin and mucous membrane barrier for health-care workers fighting against coronavirus disease 2019. *Dermatol Ther.* 2020 Jul;33(4):e13310..
- Yin ZQ. COVID-19: countermeasure for N95 mask-induced pressure sore. *J Eur Acad Dermatol Venereol.* 2020 Jul;34(7):e294-e295.
- Cavanagh G, Wambier CG. Rational hand hygiene during the coronavirus 2019 (COVID-19) pandemic. *J Am Acad Dermatol.* 2020 Jun;82(6):e211.
- Wang JV, Parish LC. Dermatologic Manifestations of the 1918-1919 Influenza Pandemic. *Skinmed.* 2019;17:296-297.
- Zheng Y, Lai W. Dermatology staff participate in fight against Covid- 19 in China. *J Eur Acad Dermatol Venereol.* 2020. <https://doi.org/10.1111/jdv.16390>.
- Martinez-Lopez A, Cuenca-Barrales C, Montero-Vilchez T, et al. Review of adverse cutaneous reactions of pharmacologic interventions for COVID-19: A guide for the dermatologist. *J Am Acad Dermatol.* 2020 Dec;83(6):1738-1748.
- Fernandez-Nieto D, Ortega-Quijano D, Segurado-Miravalles G, et al. Comment on: cutaneous manifestations in COVID-19: a first perspective. Safety concerns of



- clinical images and skin biopsies. *J Eur Acad Dermatol Venereol.* 2020; 34:e252-e254.
29. Van Damme C, Berlingin E, Saussez S, Accaputo O. Acute urticaria with pyrexia as the first manifestations of a COVID-19 infection. *J Eur Acad Dermatol Venereol.* 2020;34:e300-e301
 30. Criado PR, Abdalla BMZ, de Assis IC, et al. Are the cutaneous manifestations during or due to SARS-CoV-2 infection/COVID-19 frequent or not? Revision of possible pathophysiologic mechanisms. *Inflamm Res.* 2020;69(8):745-56.
 31. Li MY, Li L, Zhang Y, Wang XS. Expression of the SARS-CoV-2 cell receptor gene ACE2 in a wide variety of human tissues. *Infect Dis Poverty.* 2020;9(1):45. Published 2020 Apr 28.
 32. Genovese G, Colonna C, Marzano A. Varicella-like exanthem associated with COVID-19 in an 8-year-old girl: A diagnostic clue? *Pediatr Dermatol* 2020.
 33. Rahimi H, Tehranchinia Z. A comprehensive review of cutaneous manifestations associated with COVID-19. *Biomed Res Int.* 2020;2020:1236520. Published 2020 Jul 5.
 34. Catalá Gonzalo A, Galván Casas C. COVID-19 and the Skin. *Actas Dermosifiliogr.* 2020 Jul-Aug;111(6):447-449.
 35. Zhao Q, Fang X, Pang Z, Zhang B, Liu H, Zhang F. COVID-19 and cutaneous manifestations: a systematic review. *J Eur Acad Dermatol Venereol.* 2020 Jun 28;10.1111/jdv.16778.
 36. Wollina U, Karadağ AS, Rowland-Payne C, Chiriac A, Lotti T. Cutaneous signs in COVID-19 patients: A review. *Dermatol Ther.* 2020 Sep;33(5):e13549.
 37. Recalcati S. (2020). Cutaneous manifestations in COVID-19: a first perspective. *JEADV*, 34(5), e212-e213.
 38. Seirafianpour F, Sodagar S, Pour Mohammad A, et al. Cutaneous manifestations and considerations in COVID-19 pandemic: A systematic review. *Dermatol Ther.* 2020 Jul 8:e13986.
 39. Galván Casas C, Catalá A, Carretero Hernández G, et al. Classification of the cutaneous manifestations of COVID-19: a rapid prospective nationwide consensus study in Spain with 375 cases. *Br J Dermatol.* 2020 Jul;183(1):71-77.
 40. Mawhirt SL, Frankel D, Diaz AM. Cutaneous Manifestations in Adult Patients with COVID-19 and Dermatologic Conditions Related to the COVID-19 Pandemic in Health Care Workers. *Curr Allergy Asthma Rep.* 2020 Oct 12;20(12):75.
 41. Suchonwanit P, Leerunyakul K, Kositkuljorn C. Cutaneous manifestations in COVID-19: lessons learned from current evidence. *J Am Acad Dermatol.* 2020;83(1):e57-60.
 42. Suchonwanit P, Leerunyakul K, Kositkuljorn C. Diagnostic and prognostic values of cutaneous manifestations in COVID-19 [published online ahead of print, 2020 May 23]. *Dermatol Ther.* 2020;2020:e13650.
 43. Xiong M, Liang X, Wei YD. Changes in blood coagulation in patients with severe coronavirus disease 2019 (COVID-19): a meta-analysis. *Br J Haematol.* 2020;189(6):1050-2.
 44. Steinbuch Y. Chinese doctors' skin turns dark after coronavirus recovery. April 21, 2020, New York Post. <https://nypost.com/2020/04/21/chinese-doctors-skin-turns-dark-after-coronavirus-recovery/>
 45. Wollina U, Chiriac A, Karadağ AS. The Dermatological Spectrum of Coronavirus Disease-19 Disease: Cutaneous Signs for Diagnostics and Prognosis and an Expanded Classification. *Macedonian Journal of Medical Sciences.* 2020 Sep 03; 8(T1):294-303.
 46. Sanders JM, Monogue ML, Jodlowski TZ, Cutrell JB. Pharmacologic treatments for coronavirus disease 2019 (COVID-19): a review. *JAMA.* April 13, 2020.
 47. Türsen Ü, Türsen B, Lotti T. Cutaneous side-effects of the potential COVID-19 drugs. *Dermatol Ther.* 2020 Jul;33(4):e13476.
 48. US Food and Drug Administration. Coronavirus (COVID-19) update: FDA issues emergency use authorization for potential COVID-19 treatment. 2020. Available from: <https://www.fda.gov/news-events/press-announcements/coronavirus-2019-update-fda-issues-emergency-use-authorization-potential-covid-19-treatment>. Accessed May 20, 2020.
 49. Yao X, Ye F, Zhang M, et al. In vitro antiviral activity and projection of optimized dosing design of hydroxychloroquine for the treatment of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). *Clin Infect Dis.* 2020;71: 732-739.
 50. Kutlu O, Metin A. A case of exacerbation of psoriasis after oseltamivir and hydroxychloroquine in a patient with COVID-19: will cases of psoriasis increase after COVID-19 pandemic? *Dermatol Ther.* 2020.
 51. Bahloul E, Jallouli M, Garbaa S, et al. Hydroxychloroquine-induced hyperpigmentation in systemic diseases: prevalence, clinical features and risk factors: a cross-sectional study of 41 cases. *Lupus.* 2017;26(12):1304-1308.
 52. Leung AK, McMillan T, Human A, Lam JM. Hydroxychloroquine-induced hyperpigmentation in a 14-year-old female with systemic lupus erythematosus. *Drugs Context.* 2020 Jul 20;9:2020-5-8.
 53. Sardana K, Mathachan SR, Deepak D, Khurana A, Sinha S. Cutaneous side effects of hydroxychloroquine in health care workers in a COVID referral hospital - implications for clinical practice. *J Dermatolog Treat.* 2020 Jun 22:1-3.
 54. Markatseli TE, Theodoridou A, Zakalka M, et al. Persistence and adherence during the first six months of tocilizumab treatment among rheumatoid arthritis patients in routine clinical practice in Greece. Results from the single arm REMISSION II study (NCT01649817). *Mediterr J Rheumatol.* 2019;30(3):177-185.
 55. Matsushima Y, Hayashi A, Mizutani K, et al. Psoriasisiform dermatitis developing during treatment of juvenile idiopathic arthritis with tocilizumab. *Case Rep Dermatol.* 2019;11(3):317-321.
 56. Kremer JM, Blanco R, Halland AM, et al. Clinical efficacy and safety maintained up to 5 years in patients with rheumatoid arthritis treated with tocilizumab in a randomised trial. *Clin Exp Rheumatol.* 2016;34(4):625-633.



57. US Food and Drug Administration. Recommendations for investigational COVID-19 convalescent plasma. [cited 2020 May 20]. Available from: <https://www.fda.gov/vaccines-blood-biologics/investigational-new-drug-ind-or-device-exemption-973-on-ide-process-cber/recommendations-investigational-COVID-19-convalescent-plasma>.
58. Dashti-Khavidaki S, Aghamohammadi A, Farshadi F, et al. Adverse reactions of prophylactic intravenous immunoglobulin; a 13-year experience with 3004 infusions in Iranian patients with primary immunodeficiency diseases. *J Investig Allergol Clin Immunol*. 2009;19(2):139-145.
59. Thachil J, Tang N, Gando S, et al. ISTH interim guidance on recognition and management of coagulopathy in COVID-19. *J Thromb Haemost*. 2020;18(5):1023-1026.
60. Adya KA, Inamadar AC, Palit A. Anticoagulants in dermatology. *Indian J Dermatol Venereol Leprol*. 2016;82(6): 626-640.