



The Course of Neurodermatosis in Patients with COVID19

Mamedova D. N.¹, Raxmatova S. M.²

Regional branch of the Bukhara Regional Center of Scientific and Practical Medicine of specialized Dermatovenerology and Cosmetology of the Republic

Summary: *The covid-19 pandemic is associated with dermatological care. A study of a number of cases around the world has revealed a number of potential dermatological manifestations of COVID-19. It is difficult to determine the frequency (from 0.2 to 20.4%) and the time of the appearance of skin manifestations of COVID-19. In addition, the connection of some skin manifestations with the severity of the disease remains unclear. In addition, it cannot be excluded that the observed skin manifestation is a reaction to many COVID-19 treatment methods.*

Keywords: *neurodermatosis, COVID-19, itching, rash.*

With Omicron, a person may develop various skin rashes. This manifestation of this strain occurs in 19% of patients with COVID-5. In addition, rashes can be almost imperceptible and manifest. After COVID-19, the inflammatory process begins in patients. If there is a predisposition to chronic skin dermatoses, it may never manifest itself, but in patients who have undergone coronavirus, an inflammatory process begins. Chronic dermatosis can be allergic dermatitis, coronary heart disease, atopic dermatitis – these are already considered skin diseases, but they began to worsen after the virus. "Allergic dermatitis and donkey fever can have an acute onset, but they can also become chronic. You can predict the disease by contacting a dermatologist, based on additional laboratory data. Whether this is a chronic problem or it can be stopped now and it won't happen again, such problems can be solved. In addition, hemorrhagic rashes similar to vasculitis, bruises or a bloody rash may also occur after the coronavirus. "In adolescents, for example, in children, pale marble of the skin may be observed. The purple mesh may not itch, but it will cosmetically irritate the patient."

Patients with COVID-19 also complain of hair loss and fragility, striped nails, and their thinness. In case of any deviation, it is important to immediately determine the cause and begin proper treatment. Any spots are the main reason for additional examinations to avoid complications. A number of scientists have warned that patients with coronavirus may lose their hair 2-3 months after the disease. In addition, some may lose up to 50% of fluid, and all this can be observed along with constipation, as well as itching.

External manifestations scientists of the Department of Dermatology and Allergology of the Dresden State Clinic noted that the pandemic of coronavirus infection is a serious problem for specialists. There is a lot of information about the skin symptoms identified during the tests, although their specificity for COVID-19 has not yet been proven. The researchers also draw attention to the fact that due to the epidemic it is very difficult to treat patients with inflammatory diseases - for example, psoriasis. Although COVID-19 is not a skin disease, it has had a serious impact on the field of dermatology. In fact, various external manifestations have been described in patients with coronavirus infection.

Under the influence of coronavirus infection, the inflammation may be excessive overexpression of cytokines (proteins that dissolve low-molecular information that provide signals between cells.), this leads to an imbalance of the inflammatory response, which in turn can cause the development of certain skin manifestations. However, this is only one of the possible mechanisms for the development of skin symptoms, there may be many reasons, and they need to be studied more deeply.

Seven types of pathologies

Specialists of the Moscow Scientific and Practical Center of Dermatology and Cosmetology, the Pirogov RNIMU and the RUDN studied skin pathologies associated with coronavirus infection. In general, they can be divided into seven categories.

The first group is cutaneous angitis (blisters, hemorrhagic spots of various sizes, inflammation of the walls of blood vessels, manifested in the form of inflammatory nodules and plaques), which are caused directly by coronavirus infection caused by damage to immune complexes that stand out on the walls of small blood vessels of the dermis.

The second group is papulo-vesicular rashes. Such injuries are always characterized by acute clinical signs; usually they cover the entire body of the maxcam. A striking example of such rashes can be acne with chickenpox. With coronavirus, this is more like the sweating process that occurs when sweating increases for several days in patients with high temperatures.

To the third category of skin manifestations, experts include pink glandular and papulo-squamous rashes (inflammatory skin diseases characterized by red or pink papules and ulcers covered with mites (psoriasis belongs to this group).

They are infectious and allergic skin criteria associated with COVID - 19 infection, the clinical feature of the pink skin in coronavirus infection is the absence of "maternal pilaccae" - the largest sign that appears first in the classic course of dermatosis. Experts attributed the shell-like rash to the fourth category, and toxidermy to the fifth. These rashes are not directly related to coronavirus infection. They appear as a result of individual side effects of medications in some patients. In the sixth group of skin manifestations of the coronavirus, scientists introduced a donkey - in some cases, they concluded that this could be a harbinger of the onset of COVID 19. The last, seventh category is represented by the fact that trophic changes in facial tissues occur due to prolonged stay of patients in the ventilator and lying on their backs.

Diagnosis on the fingers: despite such a variety of clinical manifestations, their causative agent may be Sars-CoV-2, it cannot be said that homrox is a complication of diseases. It is for this reason that it is important to continue further research. The manifestation of various signs on the skin may also be associated with drugs used in the treatment of coronavirus. In such cases, it is necessary to determine which drug caused this reaction and cancel it. With such skin manifestations, the dermatologist should carefully collect an anamnesis and suspect the presence of a coronavirus infection in the patient, especially in the presence or absence of signs of SARS. Also, with an atypical clinical picture of other skin diseases, such as the pink gland of Jibert, which is not an ordinary maternal plaque, it is necessary to exclude infection with COVID—19," the expert explained. Skin symptoms can be used to determine the stage of the disease. Some scientists have already proposed to assess the course of the virus and associate it with the appearance of dermatological symptoms, as they noted the serious appearance of the skin in severe coronavirus infection. Spanish experts described the characteristic skin symptom as "covid fingers". Externally, this pathology may be similar to mechanical damage or a cold. At the same time, patients refuse the possibility of such injuries. Perhaps this is a special form of cutaneous angitis, which often has an infectious and allergic origin and is one of the signs of infection with COVID-19.

Literatures:

1. Freeman EE, McMahon DE. Creating dermatology guidelines for COVID-19: The pitfalls of applying evidence-based medicine to an emerging infectious disease. *J Am Acad Dermatol* 2020; 82:e231.
2. Galván Casas C, Català 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; 183:71.
3. de Masson A, Bouaziz JD, Sulimovic L, et al. Chilblains is a common cutaneous finding during the COVID-19 pandemic: A retrospective nationwide study from France. *J Am Acad Dermatol* 2020; 83:667.
4. Freeman EE, McMahon DE, Lipoff JB, et al. Pernio-like skin lesions associated with COVID-19: A case series of 318 patients from 8 countries. *J Am Acad Dermatol* 2020; 83:486.
5. Daneshgaran G, Dubin DP, Gould DJ. Cutaneous Manifestations of COVID-19: An Evidence-Based Review. *Am J Clin Dermatol* 2020; 21:627.
6. Guan WJ, Ni ZY, Hu Y, et al. Clinical Characteristics of Coronavirus Disease 2019 in China. *N Engl J Med* 2020; 382:1708.
7. Recalcati S. Cutaneous manifestations in COVID-19: a first perspective. *J Eur Acad Dermatol Venereol* 2020; 34:e212.
8. Madigan LM, Micheletti RG, Shinkai K. How Dermatologists Can Learn and Contribute at the Leading Edge of the COVID-19 Global Pandemic. *JAMA Dermatol* 2020; 156:733.
9. Suchonwanit P, Leerunyakul K, Kositkuljorn C. Cutaneous manifestations in COVID-19: Lessons learned from current evidence. *J Am Acad Dermatol* 2020; 83:e57.
10. Türsen Ü, Türsen B, Lotti T. Cutaneous side-effects of the potential COVID-19 drugs. *Dermatol Ther* 2020; 33:e13476.
11. Freeman EE, McMahon DE, Fitzgerald ME, et al. The American Academy of Dermatology COVID-19 registry: Crowdsourcing dermatology in the age of COVID-19. *J Am Acad Dermatol* 2020; 83:509.
12. Freeman EE, McMahon DE, Lipoff JB, et al. The spectrum of COVID-19-associated dermatologic manifestations: An international registry of 716 patients from 31 countries. *J Am Acad Dermatol* 2020; 83:1118.
13. Najarian DJ. Morbilliform exanthem associated with COVID-19. *JAAD Case Rep* 2020; 6:493.
14. Sachdeva M, Gianotti R, Shah M, et al. Cutaneous manifestations of COVID-19: Report of three cases and a review of literature. *J Dermatol Sci* 2020; 98:75.
15. Fernandez-Nieto D, Jimenez-Cauhe J, Suarez-Valle A, et al. Characterization of acute acral skin lesions in nonhospitalized patients: A case series of 132 patients during the COVID-19 outbreak. *J Am Acad Dermatol* 2020; 83:e61.
16. Bouaziz JD, Duong TA, Jachiet M, et al. Vascular skin symptoms in COVID-19: a French observational study. *J Eur Acad Dermatol Venereol* 2020; 34:e451.
17. Alramthan A, Aldaraji W. Two cases of COVID-19 presenting with a clinical picture resembling chilblains: first report from the Middle East. *Clin Exp Dermatol* 2020; 45:746.
18. Andina D, Noguera-Morel L, Bascuas-Arribas M, et al. Chilblains in children in the setting of COVID-19 pandemic. *Pediatr Dermatol* 2020; 37:406.
19. Salomova N.Q. //Measures of early rehabilitation of speech disorders in patients with hemorrhagic and ischemic stroke// *Europe's Journal of Psychology*.2021. Vol. 17(3).-P.185-190.

20. Salomova N.K. //The effectiveness of psychological tests for the diagnosis of psychological disorders in patients who have undergone COVID-19// Central Asian Journal of Medical and Natural Science. 2021.-C. 323-326.
21. Salomova N.K //Features of neurorehabilitation itself depending on the pathogenetic course of repeated strokes, localization of the stroke focus and the structure of neurological deficit// European journal of research development and sustainability (ejrds) vol. 3 no. 11, november 2022/8-12/
22. Salomova N.K // Risk factors for recurrent stroke// Polish journal of science N52(2022). 33-35.
23. Salomova N.Q //The practical significance of speech and thinking in repeated stroke// ScienceAsia 48 (2022): 945-949.