

STATIN ADMINISTRATION AS A PATHOGENETIC-ASSOCIATED FACTOR OF REDUCING MORTALITY IN COVID-19

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Introduction. Coronavirus enters human cells by using angiotensin-converting enzyme (ACE). This interaction can lead to an imbalance of the angiotensin-aldosterone system, a potential mechanism that contributes to the virulence of this pathogen. The combination of direct viral toxicity and indirect effects, such as inflammation of the vascular wall, leading to thrombus formation and dysregulation of RAAS, may underlie severe manifestations of COVID-19, which may be manifested by acute respiratory distress syndrome, myocardial damage, and micro- and macrothrombotic phenomena. Thus, statins that exhibit anti-inflammatory and antithrombotic effects may be promising for the prevention or treatment of patients with COVID-19.

Aim. To investigate the correlation between statin intake and mortality in patients with COVID-19.

Materials and Methods. Electronic medical cards of 951 patients with COVID-19 and 151 records of "covid-negative" patients were studied. In the COVID-19 group, statins were taken by 19%, patients, ACE inhibitors - 21%, angiotensin receptor blockers - 12%. The average length of stay in the hospital is 10.7 days.

Results and discussion. It was found that statins before hospitalization were associated with a 50% reduction in the risk of severe COVID-19 and mortality compared with those who did not take these drugs. Also in this group of patients there was a faster recovery.

Conclusion. Statins not only have a high safety profile, but are also likely to have a protective effect against severe coronavirus infection. This may be due to the ability of statins to affect lipid cell ranges (plasma membrane subdomains) by lowering lipid concentrations; limit the interaction of the virus with angiotensin-converting enzyme-2 and CD-147 receptors; have an anti-inflammatory effect (blocking the molecular mechanisms of inflammation, including NF-kB and NLRP3); limit the development of "cytokine storm" in patients with severe COVID-19; inhibit the main protease SARS-CoV-2, affect coagulation, reduce sympathetic activity of the nervous system and more. Thus, this group of drugs may take its place in the treatment of COVID-19.

SUBMICROSCOPIC DISORDERS IN PERIODONTAL TISSUES IN LIPOPOLYSACCHARIDE PERIODONTITIS

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Introduction. The pathogenesis of inflammatory and inflammatory-dystrophic periodontal diseases is such a systemic and complex process that despite the large number of fundamental works of scientists remains unexplored to this day. It is known that chronic generalized periodontitis belongs to the group of multifactorial diseases. Genetic, endocrine, hematological, immune, metabolic, vascular, neurotrophic disorders and decreased reactivity of the organism play an important role in its development. Submicroscopic studies of periodontal components in