Conclusions. In conclusions, Bearberry leaves polyphenolic extract showed a positive effect due to its antioxidant activity and scavenging abilityy. Therefore, this study confirmed that bearberry leaves can be used as a source of antioxidants with potential use to create a new drug with anti-inflammatory properties.

MECHANISM OF ACTION OF CORONAVIRUS 2019-nCoV ON A CELL OF A HUMAN ORGANISM

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Introduction. The world community is faced with the problem of global scale – the spread of the new deadly coronavirus – 2019-nCoV. The virus encompasses all the human population. All efforts have been devoted to curbing the spread and creation of a vaccine against the new generation of coronavirus.

Aim. Based on the literature, which disclose the nature and characteristics of the structure of the coronavirus 2019-nCoV, to study pathogenic mechanisms of its effect on human cells.

Materials and methods. Used information-analytical, bibliosemantic research method, structural analysis and comparative content analysis.

Results and discussion. Coronaviruses have a specific way to penetrate into the cells, which reduces the efficiency of conventional protecting cell membranes against viruses. They do not penetrate the cell membrane in arbitrary locations. The “crown” in coronaviruses serves to attack transmembrane cell receptors by imitating S-proteins attached to the “crown” molecules that are important for cell activity. The new 2019-nCoV mutation uses S-protein on the crown to attach the angiotensin converting enzyme 2 (ACE2) to the receptor, as does the SARS-CoV virus (atypical pneumonia). The difference between 2019-nCoV and SARS-CoV is that it is more stable and more easily attached to the receptor. The 2019-nCoV is more contagious, but less fatal than SARS in terms of mortality. The "deceived" cell receptors themselves securely attach the virus to the cell membrane, linking with fake molecules from the crown S-proteins. Then the coronavirus “detaches” the receptor from the membrane and pushes it inside the cell, then the virus RNA is injected into the cytoplasm of the cell. Virus RNA has a 5'-methylated beginning and a 3'-polyadenylated end. This allows the virus to initiate assembly of its proteins and copies in the ribosome of the cell, which is not able to determine whether it is RNA of the virus or RNA for the proteins of the cell. After receiving the virus RNA and its necessary proteins, viral nucleocapsids are assembled from the genomic RNA of the virus and N-protein in the cytoplasm. Virions are then released from the infected cell through exocytosis. After the virions exit the cell, it dies.

Conclusions. An in-depth study of the 2019-nCoV mechanism of action on the living cell makes it possible to create drugs for the prevention and treatment of this dangerous viral infection.

QUATERNARY AMMONIUM COMPAUDS IN PHAMACY

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Introduction. The quaternary ammonium compounds (QAC) are widely used in medicine, household and often content in different plant and nature at all. In medicine QAC are widely used as desinfectants. It is used to disinfect petient-care supplies or equipment.