

NEW CORONAVIRAL INFECTION COVID-19. ETIOLOGY AND PATHOGENESIS. EPIDEMIOLOGICAL CHARACTERISTICS. DIAGNOSTICS OF CORONAVIRUS INFECTION

Mirzoeva M.R, A.Kh. Radjabov
Bukhara State Medical Institute

Relevance: On December 31, 2019, Chinese authorities reported the first cases of new pneumonia caused by a previously unknown pathogen. The infection was first detected in Wuhan City, Hubei Province, PRC. The number of cases in China as of 02/29/2020 is 79,251 people, the deaths are 2,835, and the infection has also spread to the countries of Asia, North America, Europe: Thailand, Japan, the Republic of Korea, Vietnam, Malaysia, Nepal, Taiwan, Singapur, Australia, USA, Canada, France, Germany. In total, 85,681 people were infected in the world, of which 2,933 died.

Purpose of the study: to study the etiology of new atypical pneumonia, to analyze the currently available information about the pathogen and to characterize the epidemiological situation.

Materials and methods: statistical analysis, study of domestic and foreign literature on this topic.

Results: Oovid-2019 is a single-stranded RNA-containing virus, which belongs to the Cogonaviridae family, the Beta-CoV B line. The genome is packed inside a spiral capsid formed by a nucleocapsid protein (N) and surrounded by an envelope. Three structural proteins are associated with the viral envelope: membrane protein (M), envelope protein (E), spike protein (S). Virus transmission mechanisms - aerogenic, contact; the probability of a vertical path is currently denied by researchers. At the time of February 24, 2020, the incubation period varies from 2 to 27 days, on average, 5.2 days. The mortality rate is 3.42%. On February 19, 2020, the National Health Commission of China published the sixth version of the recommendations for the treatment of SARS caused by the new coronavirus infection. The list of supposedly effective drugs includes: chloroquine phosphate, arbidol, ribavirin is recommended in combination with interferon or lopinavir. For critical cases, extracorporeal hemocorrection is used. Plasma treatment is also effective.

Conclusions: the causative agent of SARS in China is the RNA-containing virus Covid-2019, which belongs to the Cogonaviridae family, the Beta-CoV B line. At the moment, 92.5% of infected and fatal outcomes are in the PRC. Despite the massive spread of the virus, the number of recovered patients is growing, which indicates the effectiveness of prevention and treatment measures.

References:

1. Касымов, Илхом Асамович, and Хуршид Хакимович Мухаммадиев. "К вопросу этиологической диагностики бактериальных и вирусных менингитов." Молодой ученый 16 (2017): 52-55.
2. Атамухамедова, Д., and М. Шаджалилова. "Клинико-эпидемиологическая характеристика COVID-19 в современных условиях." Современные аспекты инфекционных заболеваний 1.1 (2023): 5-6.
3. Густоварова, Т. А., Шарапова, Г. М., Иванян, А. Н., & Новикова, О. В. (2010). Особенности течения беременности и родов у женщин-переселенцев Калининградской области. Вестник Смоленской государственной медицинской академии, (4), 16-18.