ASPECTS OF CORONAVIRUS INFECTION PATHOGENESIS AND PROGNOSIS FOR PATHOMORPHOSIS OF PULMONARY TUBERCULOSIS DURING THE COVID-19 PANDEMIC

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Abstract

To date, the COVID-19 pandemic has surpassed all other health issues around the world. The interaction between COVID-19 and tuberculosis (TB), which remains the leading cause of death from a single infectious disease in the world, is important, as it can have serious consequences for both confirmed and underdiagnosed TB patients worldwide, especially in low- and middle-income countries, where TB is endemic and health services are poorly equipped.

The aim of the study is to assess the prospects of the epidemiology of tuberculosis in the context of the COVID-19 pandemic and the consequences of the interaction between SARS-CoV-2 and Mycobacterium tuberculosis, taking into account the current situation in Ukraine.

Materials and methods. Test access to various full-text and abstract databases was used.

Results. Pathomorphological changes in COVID-19 patients are due to the direct action of SARS-CoV-2, hyperactivity of the immune system, high levels of cytotoxicity of CD8 + T cells, autoimmune processes. In view of all the above, the governments of TB-affected countries must ensure the continuity and effective provision of TB services during COVID-19. This includes the protection of the most vulnerable groups, including protection from economic hardship, isolation, stigma and discrimination. The global response should identify and mitigate potential risks to the TB-control mission.

Conclusions. COVID-19 has pushed back anti-TB efforts for nearly a decade. This failure is likely to affect the long-term increase in TB morbidity and mortality worldwide. With low vaccination rates in TB-endemic countries and the emergence of new genotypes of the virus, this trend is likely to continue.

Key words: COVID-19, tuberculosis, pathogenesis, treatment, epidemiology.

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