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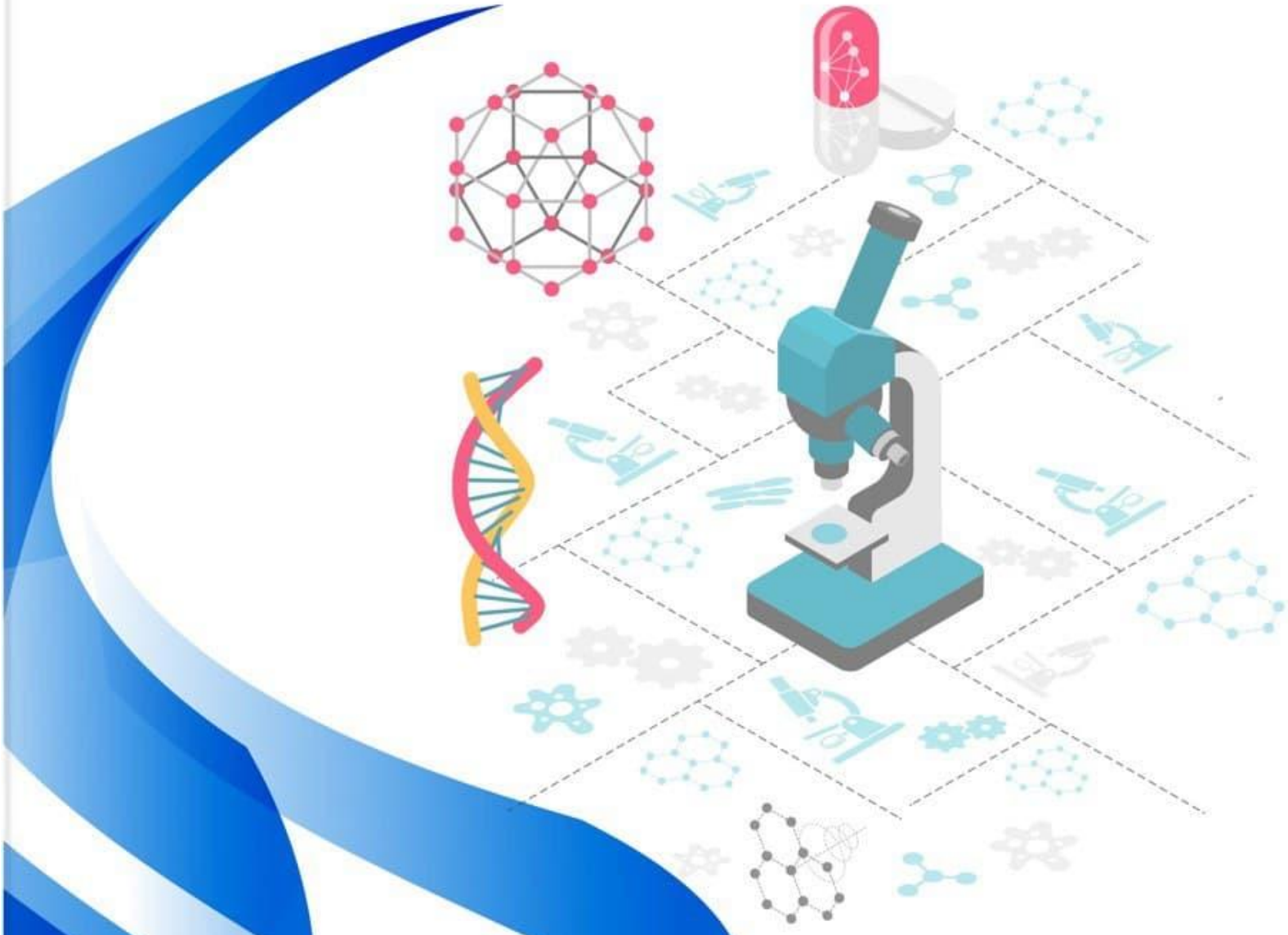

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IMPACT OF COVID-19 ON THE COURSE OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE

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Abstract. The aim of the study: to determine the distinctive clinical signs of COVID-19 among patients with chronic obstructive pulmonary disease. Material and methods: We examined 42 patients with COPD with a history of COVID-19. The study was conducted at the clinic of the Bukhara State Medical Institute in the therapy department. The study included a thorough clinical interview of patients, as well as laboratory and instrumental research methods. Results: among the patients we examined, deterioration of breathing, cough, fatigue and weakness were predominantly observed (in all patients). Fever was observed in 37, while loss of smell and taste was observed in 35 patients with COPD. Symptoms such as chest pain and cyanosis were observed much less frequently - in 32 and 22 patients, respectively. Thus, the impact of COVID-19 on the course of obstructive pulmonary disease is multifaceted and has significant consequences for patients. These patients are at higher risk of developing severe complications and require special attention from health care professionals.

Keywords: Chronic obstructive pulmonary disease (COPD), COVID-19, clinical symptoms.

Relevance. Obstructive pulmonary disease (OPD), including chronic bronchitis and emphysema, is one of the most common respiratory diseases in the world. At the same time, COVID-19, caused by the new coronavirus SARS-CoV-2, has had a significant impact on the health of patients with existing lung diseases, including OPD. The COVID-19 pandemic has become a real challenge for healthcare, affecting not only general health, but also worsening the course of chronic diseases, including obstructive pulmonary diseases.

Patients with COPD have an increased risk of severe complications if infected with SARS-CoV-2. Existing lung diseases reduce the body's ability to effectively fight infection, and chronic inflammation in the airways and impaired lung function make these patients more vulnerable to developing complications such as pneumonia, acute respiratory distress syndrome (ARDS), and the need for mechanical ventilation.

Purpose of the study: to identify distinctive clinical features of COVID-19 among patients with chronic obstructive pulmonary disease.

Material and methods of research: We examined 42 patients with COPD with a history of COVID-19. The study was conducted at the clinic of the Bukhara State Medical Institute in the therapy department. The study included a thorough clinical interview of patients, as well as laboratory and instrumental research methods.

Results and discussions: In patients with chronic obstructive pulmonary disease (COPD), the signs of COVID-19 may be similar to the symptoms of an exacerbation of COPD, which complicates diagnosis. However, there are some features and differences that can help in recognizing COVID-19 in such patients. Among the patients we observed, the following signs were present:

1. **Deterioration of breathing**– with COVID-19, there is often a sharp deterioration in breathing, shortness of breath, which can be more pronounced compared to a normal exacerbation of COPD.
2. **Fever**– the temperature may be elevated, which is a distinctive feature of COVID-19, since fever is not always observed during an exacerbation of COPD.
3. **Cough**– in patients with COPD, the cough is usually productive, with sputum, but with COVID-19, the cough may be dry or with minimal sputum production, especially in the early stages of the disease.
4. **Loss of smell and taste**– this symptom is quite specific for COVID-19 and may be the only sign in some patients.
5. **Fatigue and weakness**– may be more severe than usual during an exacerbation of COPD and last longer.
6. **Chest pain**– may be seen with COVID-19, especially if pneumonia develops, which is different from an exacerbation of COPD, where chest pain is not as pronounced.
7. **Dyspnea**– unlike COPD, where shortness of breath develops gradually, with COVID-19 it can occur quickly and be more pronounced, especially as the disease progresses.
8. **Cyanosis**– the appearance of cyanosis of the skin and mucous membranes may be more noticeable with COVID-19 due to a disruption in oxygen metabolism, especially if acute respiratory distress develops.

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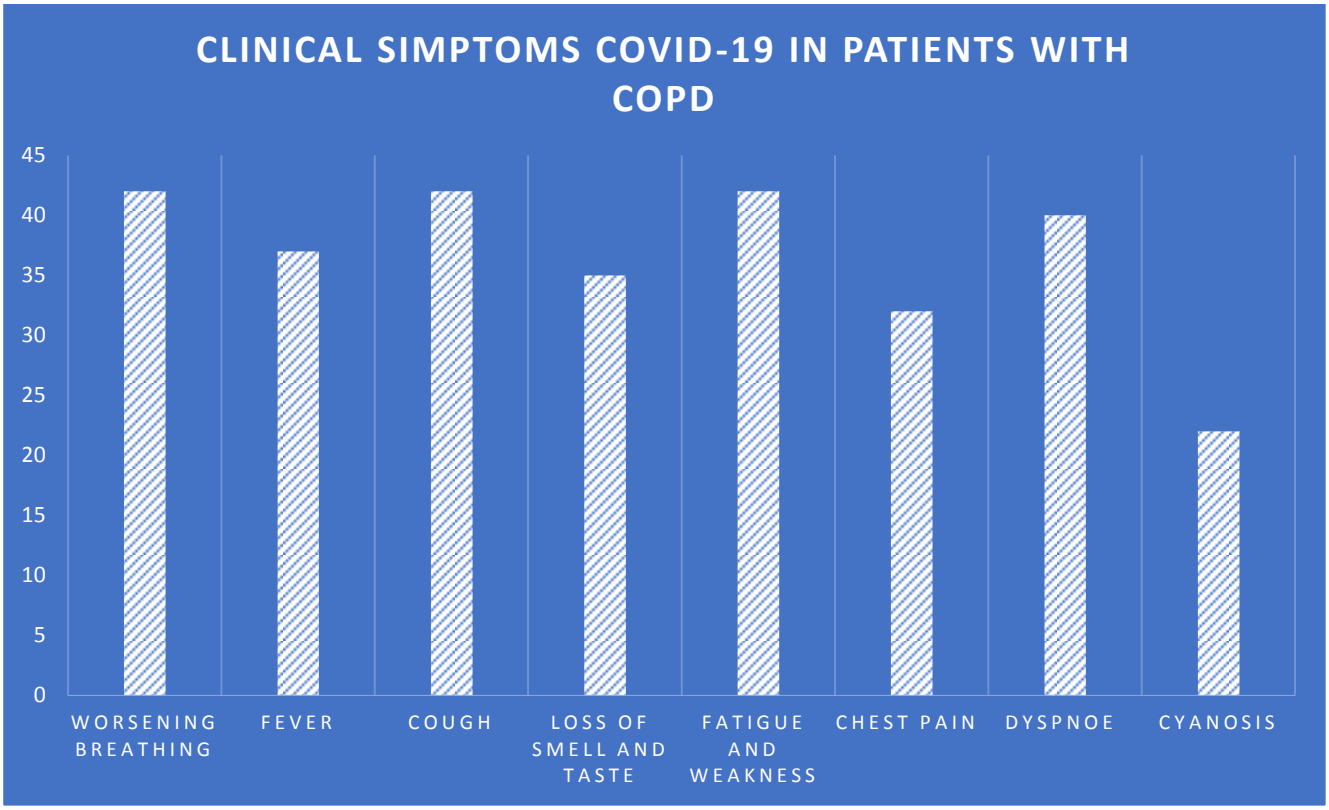

Among the patients we studied, the most common symptoms were worsening breathing, cough, fatigue and weakness (in all patients). Fever was observed in 37, while loss of smell and taste was observed in 35 patients with COPD. Symptoms such as chest pain and cyanosis were observed much less frequently – in 32 and 22 patients, respectively.

If a patient with COPD develops the above symptoms, especially fever, loss of smell, or a sudden deterioration in their condition, it is important to see a doctor and get tested for COVID-19.

In the comorbid course of COVID-19 and COPD, the following complications were observed:

1. **Worsening of OBL symptoms**

   COVID-19 infection significantly worsened the symptoms of obstructive pulmonary disease, such as shortness of breath, cough, and productive cough. In patients with chronic bronchitis or emphysema, the likelihood of disease progression and worsening of symptoms increases due to the additional burden on the respiratory system caused by the viral infection. The course of OBL in these patients becomes more unstable, exacerbations occur frequently.

2. **Impact on the treatment of OBL**

   Treating patients with OBL and COVID-19 is challenging. Medications used to treat obstructive disease (such as bronchodilators and steroids) can affect the immune system,

affecting its ability to fight infection. At the same time, in the case of an infectious process, such patients require close monitoring and adjustment of therapy to reduce the risk of complications.

3. **Psychological impact**

   In addition to the physical impact, COVID-19 also affects the psycho-emotional state of patients with OBL. Restricted mobility, fear of infection, prolonged hospitalization, and the need for oxygen exacerbate stress and depression in patients. Psychological health is important for the patient's overall condition and ability to cope with the disease.

Conclusion

Thus, the impact of COVID-19 on the course of obstructive pulmonary disease is multifaceted and has significant consequences for patients. These patients are at higher risk of developing severe complications and require special attention from health care professionals.

Patients with COPD may face difficulties in rehabilitation after COVID-19. Pneumonia caused by the virus and prolonged use of a ventilator may contribute to a long recovery of lung function. Such patients often have pronounced signs of weakness, lack of energy and decreased physical activity, which requires a comprehensive approach to rehabilitation.

The joint work of pulmonologists, infectious disease specialists and rehabilitation specialists plays a key role in the successful treatment and recovery of such patients. It is important to note that prevention, early diagnosis and competent treatment of COVID-19 in patients with COPD will help to minimize the risks and improve the prognosis of the disease.

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