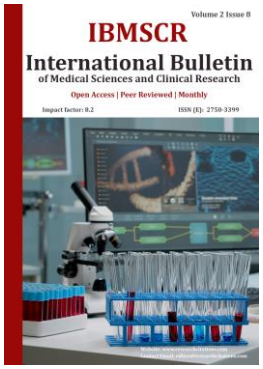

IMPACT OF COVID-19 ON THE COURSE OF TUBERCULOSIS IN CHILDREN AND ADOLESCENTS

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https://doi.org/10.5281/zenodo.7932064

Abstract. Several waves of the spread of the coronavirus infection have been observed in many countries of the world, and Uzbekistan is no exception. Since there was no such infection until this time, and as a result, none of the countries of the world had the experience of fighting this infection, so medicine faced great difficulties. The tuberculosis service was less affected than others, with many specialized hospitals being adapted and oriented for covid infection.

Key words: COVID-19, treatment, method, diagnosis, infection.

All attention was focused on providing care to patients infected with covid, which led to a significant reduction in the number of tuberculosis cases detected. In the following months, as the infection rate decreased, the number of cases of tuberculosis in people infected with covid began to increase. The lack of methodological recommendations and other documents on the management and monitoring of patients after covid, a prolonged persistent cough, increased cough under the guise of a prolonged post-covid condition or post-covid pneumonia, weakness, weakness and the onset of tuberculosis Other symptoms associated with were associated with a post-COVID condition.

The purpose of the study: to identify the impact of COVID-19 in children and adolescents on the occurrence and course of active tuberculosis.

Materials and research methods. The study included 68 children and adolescents who had contact with close relatives with coronavirus infection.

Research results. Tuberculosis after covid was 2 more often observed in male patients - 15 (against 7); residents from rural areas prevailed - 15 patients. By age, the observed children and adolescents were distributed as follows: from 1 year to 6 years - 4 patients; 7-12 years old - 7 patients; 13-17 years old - 11 patients. In 21 patients, tuberculosis was detected for the first time, and 1 patient had a relapse of the disease.

Distribution of patients by clinical forms of tuberculosis

Clinical forms	quantity	Presence of decay	bacterial excretion
Extrapulmonary tuberculosis	4		
Primary tuberculosis complex	4	2	2
Tuberculosis of intrathoracic lymph nodes	9		

Infiltrative tuberculosis	5	5	5
Total	22	7 (31,8%)	7 (31,8%)

Extrapulmonary tuberculosis - 4 cases: skin tuberculosis - 1 patient; pleurisy - detected in 2 patients and in one patient tuberculosis of peripheral lymph nodes. The primary tuberculous complex was found in 4 patients, of which 2 patients had radiological evidence of lung parenchyma decay; they also had GeneXpert Rif bacterial excretion with preserved sensitivity. Tuberculosis of the intrathoracic lymph nodes was detected in 9 (of which 5 of them had peripheral lymph nodes) the condition began to worsen, the temperature rose, sore throat appeared, and then a cough joined, an X-ray examination revealed tuberculosis of the intrathoracic lymph nodes.

Mantoux test was negative in 2, positive in 16, hyperergic in 4; Diaskin test was administered to all patients in parallel with the Mantoux test, a negative result was observed in 1 adolescent with infiltrative tuberculosis with the breakdown of BK+ with a severe course of the process, in 9 diaskin test gave a hyperergic reaction.

Infiltrative tuberculosis was observed in adolescents; all of them revealed decay and bacterial excretion.

The size of the BCG scar was on average 5.8 mm, and in 3 patients the scar was absent, it was in these patients that the primary complex and infiltrative tuberculosis with decay were observed.

Of the studied patients, only 1 patient, aged 16 years, was treated for covid in a hospital for a week. Discharged with improved condition. After 5 months, she was diagnosed with infiltrative tuberculosis with the decay of BC+.

The analysis of literary sources revealed a fact confirming the high contagiousness of covid in children and adolescents, however, most often it proceeds easily, in most patients in combination with tuberculosis without burdening each other [2,3,4]. In our observation: 21 patients were not treated for covid, but all noted the presence of contact with patients diagnosed with covid. An ELISA study for the presence of immunoglobulins in all 22 patients revealed that immunoglobulin of the Ig M- class was negative. Ig G-positive.

An analysis of the timing of the development of tuberculosis after a covid infection has established that only one 3-year-old child who had contact with a tuberculosis-sick grandfather with MDR tuberculosis had both diseases detected simultaneously. 2 months after exposure to covid in 8 patients. After 3-4 months, tuberculosis was detected in 8 patients, 5-6 months - 4 patients, after a year - in 2. In children and adolescents who fell ill after 5 months or more, the following forms of tuberculosis were observed: in 2 infiltrative with decay, in 3 tuberculosis of the intrathoracic lymph nodes in combination with tuberculosis of the peripheral lymph nodes.

5 children had contact with TB-sick relatives: 3 from a focus of drug-resistant tuberculosis and 2 from foci with preserved sensitivity to drugs. Contact 3 had contact with the father, 1 with the grandfather, 1 with the mother.

Thus, the longer it takes after contact with a patient with covid, an erased clinic leads to the development of severe forms of tuberculosis, which requires general practitioners to pediatricians to be vigilant about the possible development of tuberculosis in children and adolescents with concomitant diseases, when there is a deterioration condition and cough becomes protracted.

The onset of tuberculosis in most patients was characterized by the appearance of sore throat, then fever, weakness, malaise, cough appeared 2-3 weeks after the onset of the disease. 17 patients went to the polyclinic for the above complaints, they underwent a covid test, then an X-ray examination, after which they were sent to phthisiatric centers. 5 patients who had contact with patients with tuberculosis for covid were examined in anti-tuberculosis institutions in view of the deterioration of the condition.

Children without bacterial excretion or with preserved sensitivity to drugs were treated according to standard schemes, 3 patients with drug-resistant tuberculosis were included in a short-term 9-month course of treatment with the inclusion of: levofloxoaine, cycloserine clofasamine, linezolid and delamanid according to the patient's weight.

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