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

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Abstract: The Republic of Uzbekistan, like many countries in the world, has experienced several waves of coronavirus outbreaks. Since no country in the world had experience in combating this infection, medicine faced great difficulties.

Key words: GeneXpert Rif, Tuberculosis, bacterial excretion, MDR tuberculosis, ELISA.

INTRODUCTION

The anti-tuberculosis service suffered no less than others, many specialized hospitals were profiled for COVID infection. All attention was switched to providing assistance to patients with COVID, which led to a significant decrease in the number of detected tuberculosis patients. In the following months, as the infection decreased, an increase in tuberculosis cases began to be noted among people who had had COVID infection. The lack of guidelines and other documents on the management and observation of patients after COVID, a long-term persistent cough led to the fact that under the guise of a protracted post-COVID condition or a condition after COVID pneumonia, an increase in cough, weakness, malaise and other symptoms that were associated with the onset of tuberculosis were assessed and associated with a post-COVID condition [1].
To identify the impact of COVID-19 in children and adolescents on the occurrence and course of active tuberculosis. The study included 68 children and adolescents who had contact with close relatives sick with coronavirus infection.

RESULTS

Tuberculosis after COVID was observed 2 times more often in male patients - 15 (versus 7); residents of rural areas prevailed - 15 patients. By age, the observed children and adolescents were distributed as follows: from 1 year to 6 years old - 4 patients; 7-12 years old - 7 patients; 13-17 years old - 11 patients. In 21 patients, tuberculosis was detected for the first time, in 1 there was a relapse of the disease [2].
Distribution of patients by clinical forms of tuberculosis

Clinical forms	quantity	The presence of decay	bacterial excretion
Extrapulmonary tuberculosis	4		
Primary tuberculosis complex	4	2	2
Tuberculosis of the intrathoracic lymph nodes	9		
Infiltrative tuberculosis	5	5	5
Total	22	7 (31.8%)	7 (31.8%)

Extrapulmonary tuberculosis - 4 cases: tuberculosis of the skin - 1 patient; pleurisy - was detected in 2 patients and in one patient tuberculosis of the peripheral lymph nodes. Primary

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tuberculosis complex - was established in 4 patients, of which 2 had radiologically established disintegration of the lung parenchyma in them GeneXpert Rif established bacterial excretion with preserved sensitivity. Tuberculosis of the intrathoracic lymph nodes was detected in 9 (and 5 of them had lesions of the peripheral lymph nodes) A 12-year-old child had contact with a mother sick with MDR tuberculosis, received preventive treatment in a sanatorium, had contact with a patient with covid, no clinical symptoms were observed, after 3 months 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.

positive in 16, and hyperergic in 4 ; All patients were given the Diaskintest in parallel with the Mantoux test, a negative result was observed in 1 teenager with infiltrative tuberculosis with the breakdown of BK+ with a severe course of the process, and in 9 the Diaskintest gave a hyperergic reaction [3].

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

The average size of the BCG scar was 5.8 mm, and in 3 patients the scar was absent; it was in these patients that primary complex and infiltrative tuberculosis with decay were observed[4].

Of the patients examined, only 1 patient, aged 16, was treated for COVID in hospital for a week. She was discharged with an improvement in her condition. After 5 months, she was diagnosed with infiltrative tuberculosis with the breakdown of BK+.

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

Analysis of the timing of tuberculosis development after a previous COVID infection revealed that only one 3-year-old child who had contact with a grandfather with MDR tuberculosis had both diseases diagnosed simultaneously. Two months after contact with COVID, in 8 patients. After 3-4 months, tuberculosis was diagnosed in 8 patients, 5-6 months - 4 patients, and a year later - in 2 [5]. In children and adolescents who fell ill after 5 months or more, the following forms of tuberculosis were observed: infiltrative with decay in 2, tuberculosis of the intrathoracic lymph nodes in combination with tuberculosis of the peripheral lymph nodes in 3.

5 children had contact with relatives sick with tuberculosis: 3 from the focus of drug-resistant tuberculosis and 2 from the focus of 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, the erased clinic leads to the development of severe forms of tuberculosis, which requires general practitioners and pediatricians to be alert to the possible development of tuberculosis in children and adolescents with concomitant diseases, when the condition worsens and the cough becomes protracted.

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

CONCLUSION

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

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