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THE RELATIONSHIP OF THE COURSE OF DRUG-RESISTANT TUBERCULOSIS IN PATIENTS WITH TYPE II DIABETES MELLITUS

Resume: The results of the study included 289 patients with diabetes mellitus, 258 (89.2%) patients had type 2 diabetes, and 31 patients had type 1 diabetes. It was found that in patients with diabetes, tuberculosis was diagnosed quite late with the breakdown of parenchyma and bacterial excretion. Among this contingent of patients, multiple and widespread drug resistance is most often observed in patients who are registered in an antituberculous dispensary and have relapses of the process. The effectiveness of treatment among those newly diagnosed with preserved sensitivity to anti-tuberculosis drugs remains quite low, and fatal cases are observed in the group with drug resistance. To increase the effectiveness of tuberculosis treatment against the background of type 2 diabetes mellitus, it is necessary to ensure early detection by increasing the alertness of endocrinologists and gps, as well as to conduct explanatory work with patients.
Key words:tuberculosis, diabetes mellitus, multiple and broad drug resistance, treatment effectiveness

Relevance. The problem of a combination of diabetes and tuberculosis remains in the field of vision of phthisiologists and diabetologists all the time, and during the period of increasing drug-resistant tuberculosis worldwide, a large number of problems have appeared that need to be addressed. Currently, there are more than 422 million patients with diabetes worldwide, with 90% of these patients being type I patients and 10% type I patients. In Uzbekistan, the number of patients with diabetes mellitus is more than 245 thousand, including more than 2,300 children and 879 adolescents [6]. Although type I is in the minority, they have a 15-fold higher risk of developing tuberculosis, while type II has a 2-6-fold higher risk. [1, 2, 4, 5,7]. Moreover, with the second type of diabetes, the authors note that the process is more difficult than with diabetes mellitus of the first type of diabetes [3, 4, 6,7]. Currently, multidrug-resistant tuberculosis (MDR) is one of the urgent problems in the field of public health. WHO notes 558,000 new cases of rifampicin-resistant tuberculosis (R), of which 82% have MDR. 8.2% of MDR-TB patients had XDR-TB [2].

The purpose of the study. to study the prevalence of drug-resistant tuberculosis in patients with type 2 diabetes mellitus.

Materials and methods of research. During the year, 289 patients with diabetes mellitus were treated at the regional phthisiological center, 258 (89.2%) were patients with type 2 diabetes, 31 patients had type 1 diabetes. In a hospital setting, all patients underwent a detailed examination using clinical, radiological and laboratory methods, the presence of drug resistance was determined by PCR: GeneXpert Rif and Hain test, as well as by bacteriological method.

The results of the study and their discussion. Of the 258 patients with tuberculosis combined with type 2 diabetes mellitus, 196 (76%) patients had the first tuberculosis, 56 patients were registered for 2-4 years, and 6 patients were diagnosed with a recurrence of the tuberculosis process. At the same time, in most patients, pulmonary tuberculosis was detected during hospitalization at an endocrinological dispensary for decompensation of diabetes mellitus, and symptoms such as weakness, sweating, and weight loss were associated with worsening diabetes. 201 patients included in the study were aged 40-50 years.

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In 213 patients, diabetes mellitus preceded tuberculosis, the duration of the disease ranged from 3 to 5 years, the course of type 2 diabetes mellitus was moderate in 183, and severe in 75. The study of the distribution by clinical forms of the disease: among those who contracted tuberculosis for the first time, the largest group consisted of patients with infiltrative pulmonary tuberculosis - 110 (56.1%) people. Fibrous-cavernous tuberculosis was diagnosed in 50 (25.5%), tuberculosis in 16 (8.1%), disseminated pulmonary tuberculosis in 13 (6.6%) and caseous pneumonia in 7 (3.7%) patients. Destructive changes in the lungs were detected in 169 patients (86.2%).

In the studied group, the cavities averaged from 4 to 6 cm in 135 (80%) patients. Bacterial excretion was detected in 229 (%) patients. Among the registered patients with recurrent disease, 24 (38.7%) were diagnosed with infiltrative tuberculosis with 2-sided lung damage, while 38 (61.3%) had fibrotic-cavernous tuberculosis in the remaining 38. Among those newly infected with tuberculosis, multidrug resistance was detected in 9 (4.5%) patients, and broad drug resistance was established in 1 patient. In patients with chronic forms of tuberculosis, multiple resistance was observed in 12 (21.4%), broad drug resistance was diagnosed in 3 (5.3%) patients. The frequency of detection of multiple and widespread drug resistance in patients with type 2 diabetes mellitus who are registered is several times higher than in those who have become ill for the first time, which dictates the need for high-quality treatment with the inclusion of various drugs aimed at reducing residual effects and speeding up the repair process.

All patients under our supervision were treated according to standard regimens for patients with preserved sensitivity and with multiple and widespread drug resistance. The chemotherapy regimens were determined after receiving subsequent data on drug resistance, the MBT carried out a correction of the chemotherapy regimen, which was prescribed by the medical commission, in accordance with international standards.

All patients were treated with symptomatic and pathogenetic agents against the background of anti-tuberculosis drugs and insulin correction. Summing up the results of inpatient treatment, it should be noted that bacterial excretion stopped in 220 patients, cavern closure among 169 newly diagnosed patients, healing was observed in % of cases, and several patients underwent surgical treatment. Low efficiency is associated with a sufficiently late detection of tuberculosis among patients with type 2 diabetes mellitus.

The effectiveness of treatment in the group with chronic course and relapses was even lower. as this group was dominated by patients with fibrous-cavernous tuberculosis with drug resistance. 3 patients with widespread drug resistance and decompensated diabetes, despite comprehensive treatment, died at 3 to 5 months of treatment.

Conclusions. The results of the study established that in patients with diabetes mellitus, tuberculosis was diagnosed quite late with the breakdown of parenchyma and bacterial excretion. Among this contingent of patients, multiple and widespread drug resistance is most often observed in patients who are registered in an antituberculous dispensary and have relapses of the process. The effectiveness of treatment among those newly diagnosed with preserved sensitivity to anti-tuberculosis drugs remains quite low, and fatal cases are observed in the group with drug resistance. To increase the effectiveness of tuberculosis treatment against the background of type 2 diabetes mellitus, it is necessary to ensure early detection by increasing the alertness of endocrinologists and gps, as well as to conduct explanatory work with patients.

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