PREVALENCE AND EFFECTIVENESS OF TREATMENT OF MULTIDRUG-RESISTANT TUBERCULOSIS AND DIABETES MELLITUS COMORBIDITY

L. D. Todoriko, I. O. Semianiv

Abstract

The aim of the study is a comprehensive retrospective assessment of the prevalence, features, course of treatment of multidrug-resistant tuberculosis (MDR-TB) and diabetes mellitus (DM) comorbidity.

Materials and methods. The study is based on an analysis of statistical data obtained from a retrospective study of 762 case histories and cases of MDR-TB in the register of tuberculosis patients from different regions of Ukraine and Grodno region of the Republic of Belarus for 2016-2020 years. In all patients MDR-TB was diagnosed retrospectively. The patients were allocated in two groups: group 1 — 88 patients with MDR-TB and DM comorbidity; group 2 — 674 patients with MDR-TB only.

Results. In both study groups the recurrence of TB prevailed — 49 cases (55.7%) vs newly diagnosed TB 39 cases (44.3%) in the group 1 and 363 cases (53.9%) vs 311 (46.1%), respectively, in the group 2 ($p < 0.05$).

The rate of successful treatment in group 2 was higher than in group 1 (64.7% vs. 61.4%; ($p < 0.05$)). However, more significant probable difference was characterized the cure rate: 27.3% in group 1 vs 40.3% in group 2 (almost 2 times; $p < 0.05$). The rate of ineffective treatment, which in patients with comorbidity was 27.3% (almost every third patient) vs 17.6% in group 2 was also important for scientists and practitioners.

Conclusions. There is a clear tendency to higher rate of comorbidities/chemoresistance and relapses of TB in patients with comorbid DM. Pulmonary TB developed significantly more often in middle-aged patients with type 2 DM (moderate to severe, subcompensated and complicated course).

Key words: resistant tuberculosis, diabetes mellitus, carbohydrate metabolism, treatment.

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