## EFFECTIVENESS OF SHORT 12-MONTH CHEMOTHERAPY REGIMEN IN PATIENTS WITH MULTIDRUG-RESISTANT TUBERCULOSIS

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Abstract

*Aim:* to determine the effectiveness of short 12-month chemotherapy regimen based on use of linezolide in patients with multidrug-resistant tuberculosis (MDR TB).

Materials and methods. Into the clinical prospective "case-control" study there were enrolled 86 patients with new MDR-TB (without resistance to fluoroquinolones and aminoglycosides/polypeptides). The following regimen was used for treatment of the patients in the main group (43 patients): pyrazinamide (Z), kanamycin (Km) protionamid (Pt), linezolide (Lzd) (100–200 mg/kg), levofloxacin (Lfx) (15 mg / kg), cycloserine (Cs) and  $\pm$  PAS (150 mg/kg) for 5 months of intensive phase and the same regimen, excluding aminoglycoside/polypeptide - for the next 7 months of maintenance phase of chemotherapy. Individualized chemotherapy regimens without linezolide with standard duration of 20 months (8 month — intensive phase and 12 months - maintenance phase) were used in 43 control group patients.

Results. Short 12-month regimen in MDR TB patients appeared to be more effective by the end of the intensive phase and upon the completion of chemotherapy. The outcome «effective treatment» was registered in 41 (95,4 %) patients of main group versus 30 (69,8 %) patients in the control group. "Treatment failure" and "lost to follow-up» were reported in 2,3 % and 2,3 % of patients in main group versus 13,9 % and 11,6 % of patients in control group, respectively.

Conclusions. The use of 12-month short chemotherapy regimen in comparison with 20-months conventional regimen, allowed to increase treatment effectiveness in patients with new MDR TB cases from 69,8 % to 95,4 %.

**Key word:** multidrug-resistant tuberculosis, short chemotherapy regimen, effective treatment.

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