

Clinical and immunological characteristics of vitamin D level in drug-resistant tuberculosis

L.D. Todoriko¹, Ya.I. Toderika¹, O.S. Shevchenko², M.G. Gingulyak¹

1. Bukovinian State Medical University, Chernivtsi, Ukraine

2. Kharkiv National Medical University, Kharkiv, Ukraine

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BACKGROUND. To date, there are not enough studies that prove the relationship between a decrease in the level of vitamin D and the formation of resistance of mycobacterium tuberculosis.

OBJECTIVE. Determination of vitamin D level in drug-resistant pulmonary tuberculosis and evaluation of its influence on the clinical course of the disease.

MATERIALS AND METHODS. The randomized case-control study included 45 patients with newly diagnosed pulmonary tuberculosis with preserved sensitivity (group 1), 41 patients with multidrug-resistant tuberculosis (group 2) and 30 practically healthy individuals (control group).

RESULTS. The analysis of integral indices of endogenous intoxication showed that in patients of groups 1 and 2 there was a significant increase in the leukocyte index of intoxication (by 1.8 and 1.2 times, respectively; $p < 0.001$).

CONCLUSIONS. The level of 25(OH)D in blood serum is significantly lower in patients with pulmonary tuberculosis than in healthy controls. The concentration of vitamin D varies depending on the severity of the intoxication syndrome. We found that in patients with severe intoxication syndrome, vitamin D deficiency was detected in 89 % (group 1) and 94 % (group 2) of cases.

KEY WORDS: pulmonary tuberculosis, vitamin D, intoxication syndrome, clinical course.