

# EFFICACY AND TOLERABILITY OF METHOTREXATE IN TREATMENT OF PATIENTS WITH PULMONARY SARCOIDOSIS DEPENDING ON THE DOSE OF THE DRUG

V. K. Gavrysyuk, Y. O. Dziublyk, I. O. Merenkova,  
G. L. Gumeniuk, N. A. Vlasova, N. V. Pendalchuk, N. D. Morska,  
A. I. Iachnik, S. I. Leshchenko

## Abstract

*The objective of the study was to assess the efficacy and safety of methotrexate (MTX) administered in doses 10 and 15 mg once per week in sarcoidosis patients with contraindications for use of glucocorticosteroids (GCS).*

*Materials and methods.* We enrolled 46 patients with stage II pulmonary sarcoidosis (28 women and 18 men, aged 24–70 years) with contraindications for GCS use and divided them into two groups. Group 1 patients were administered MTX 10 mg weekly, and group 2 —15 mg weekly, respectively. Diagnosing and assessment of treatment response were performed based on clinical symptoms, chest high-resolution computed tomography and bodyplethismography data. A significance of differences between study indices was determined using Student's and exact Fisher's tests.

*Results.* Successful cure rate without residual fibrotic lesions of lung parenchyma was significantly higher in patients taking MTX 15 mg weekly than in those taking 10 mg weekly (83,3 % and 42,4 %, respectively,  $p = 0,01297$ ). An increase of therapeutic dose from 10 to 15 mg of MTX per week resulted in shorter time to cure ( $(10,5 \pm 0,5$  months and  $(12,8 \pm 0,8)$  months, respectively,  $p < 0,02$ ), demonstrating faster regression of sarcoidosis. Immunosuppressive therapy using MTX both in doses 10 and 15 mg weekly is characterized by satisfactory tolerability.

**Key words:** pulmonary sarcoidosis, methotrexate, efficacy, tolerability.

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Volodymyr K. Gavrysiuk  
National institute of phthisiology and pulmonology  
named after F. G. Yanovskyi NAMS of Ukraine  
Chief of clinical-functional department  
Corresponding member of NAMS of Ukraine  
Doctor of medicine, professor  
10, M. Amosova str., 03038, Kyiv, Ukraine  
Tel./fax: 38 044270-35-59, gavrysyuk@ukr.net