

PATHOGENETIC ASPECTS OF TREATMENT OF PATIENTS WITH COMMUNITY-ACQUIRED PNEUMONIA

**O. Ya. Dzyublik, M. I. Gumenyuk, G. B. Kapitan, N. M. Nedlinska,
V. A. Yachnik, O. V. Denisova, O. O. Mukhin, R. E. Sukhin**

Abstract

The aim of the study is to determine the feasibility and effectiveness of using the combined preparation of the amino acid arginine hydrochloride and L-carnitine in the complex treatment of patients with moderate community-acquired pneumonia (CAP).

Materials and methods. We examined and treated 20 patients with moderate CAP. Patients of the 1st group (10 patients) received combined antimicrobial therapy in combination with a mucolytic drug; patients of the 2nd group (10 patients) were additionally prescribed a complex preparation of the amino acid arginine hydrochloride and L-carnitine (Tivorel, Yuriya Farm, Ukraine) - 100 mg daily intravenously for 10 days. Along with standard clinical, laboratory and X-ray examinations, all patients were additionally tested for free radical lipid peroxidation (FRPOL) before and after treatment. Patients' data were compared with the data of 10 apparently healthy individuals (control group — donors).

Results and discussion. The use of the combined drug arginine hydrochloride and L-carnitine in the complex treatment of patients with moderate CAP reduced the severity of systemic activation of FRPOL (induction of oxidative stress and lipid peroxidation) and improved the body's antioxidant defense status from 26.0 to 65.0 %. This increased the effectiveness of treatment of patients in terms of faster therapeutic effect, reduction of the duration (in average 2.0 days) and the intensity of the intoxication, and the reduction the duration of treatment by 3.8 days.

Key words: arginine hydrochloride, L-carnitine, community-acquired pneumonia, pathogenetic therapy, free radical lipid peroxidation.

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*Oleksandr Y. Dzyublik,
SO "National institute of phthysiology and pulmonology named
after F. G. Yanovsky National academy of medical sciences of Ukraine"
Chief of non-specific lung diseases treatment technology department
Doctor of medicine, professor
10, M. Amosova str., 03038, Kyiv, Ukraine
tel.: 30044 270 35 50, treat @ifp.kiev.ua*