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**MODERN ASPECTS OF DIAGNOSTIC AND TREATMENT  
OF COMMUNITY-ACQUIRED PNEUMONIA**

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***Problem statement:*** Relevance of the Community-Acquired Pneumonia (CAP) for modern medicine is characterized by high morbidity and mortality, an increase in the frequency of its complicated course, significant eco-

conomic losses from temporary disability and disability [5, p. 8; 6, p. 1315]. The complexity and multifactorial mechanisms of the development of the inflammatory process in the lungs requires a comprehensive approach to its treatment using antibiotics, detoxification, anti-inflammatory, mucolytic, immunomodulatory, antioxidant and other groups of drugs. At present one of the most effective ways of influencing the metabolic homeostasis is the use of Thiotriazolin. Many clinical and experimental studies have demonstrated its effectiveness [2, p. 92]. It has been shown that Thiotriazolin has a regulatory effect on all types of metabolism in the organism, possesses detoxification, antioxidant, membrane stabilizing, and immunomodulatory properties, as well as improves the reparative processes [2, p. 92].

**Study objective** is to increase the treatment rates of the patients with Community-Acquired Pneumonia and to study the dynamics of the indicators of endogenous intoxication by inclusion of the metabolic correction of Thiotriazolin in the complex of therapeutic measures.

#### **Methods and Materials:**

150 patients with CAP of the 3<sup>rd</sup> group were examined. The age of the examined patients was  $56.4 \pm 1.6$  years. The control group included 60 (40%) patients who received the traditional therapy, according to the order of the Ministry of Health of Ukraine [5, p. 52]. The main group consisted of 90 (60%) patients whom, along with the baseline therapy, were additionally administered the 2.5% solution of Thiotriazolin 4 ml (100 mg) per day mg for 10 days. The groups were represented according to the age, gender, and severity of the disease. The efficiency of treatment was obtained by dynamics of clinical course of disease: indexes of endogenous intoxication leukocyte index of intoxication (LII) [3, p. 22], average molecules level (AML<sub>254</sub>) [1, p. 38], sorption erythrocytes capacity (SEC) [4, p. 22] on 3<sup>rd</sup> and 10 days of treatment. The X-ray examination of the thoracic organs was performed for all patients. The treatment was considered clinically effective if after completion of the study the symptoms completely disappeared (recovery) or the symptom expression and X-ray disease signs significantly reduced (improvement). The obtained data were processed using the methods of variation statistics with the calculation of the average values according to the known formulas, errors of averages. The accuracy of the differences was determined by Student's criterion (t) and was evaluated using the confidence probability (p). The differences were considered to be significant at  $p < 0.05$ .

**Results:** In patients group, who took Thiotriazolin, the level of endogenous intoxication improved reliably quicker comparing with patients of control group ( $p < 0.001$ ): already at 3<sup>rd</sup> day of treatment the temperature became normal, appetite became better, sweats decreased, on the 10<sup>th</sup> day of the treatment level of intoxication decreased considerably (LII more than 3 times, AML<sub>254</sub> more than 2 times, SEC by 44.9 %). The traditional pathogenic therapy of the patients with CAP on the 10<sup>th</sup> day of the treatment re-

duces the indices of the endogenous intoxication (LII 16.5 %, AML<sub>254</sub> 35.0 %, SEC by 16.2 %).

One of the most important criteria for the treatment of the patients with CAP is the positive dynamics of X-ray pattern. The residual X-ray changes in the form of inter-particle and pleurodiaphragmatical conjunctions and post-pneumonia fibrosis were detected in 28.0% of the patients in the main group and 40.0% – of the control group. Regarding the clinical treatment rates, the recovery was observed in 72.0% of the patients in the main group and only 60.0% – of the control group.

There are also certain differences in the terms of hospitalization of the patient. Staying in the hospital for the patients receiving only the baseline therapy made up on the average  $14.10 \pm 0.48$  days, and the patients who were prescribed the comprehensive treatment with Thiotriazolin inclusion –  $10.90 \pm 0.32$  days or was by 29.3% less,  $p < 0.001$ .

**Conclusions:** The inclusion of Thiotriazolin in the complex treatment of the patients with Community-Acquired Pneumonia allows to significantly reduce the level of endogenous intoxication, has a positive effect on the inflammatory process in the lungs, enhances the effect of basic therapy and reduces the time to eliminate clinical manifestations of the disease, prevent complications and reduce the length of stay in the hospital on average by 29.3% ( $p < 0.001$ ).

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