

**МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ
БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ»**



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medicines in complex treatment, which have a wide range of adjustive properties and are characterized by softness, the gradualism of action, including minimal side effects or their absence. Plant-based preparations meet these requirements.

The aim of the study. To study the efficiency of the treatment of clinical manifestations of the "sludge" phenomenon among patients with obesity and NAFLD based on metabolic syndrome using alcohol tincture of *Chelidonium majus* L., prepared in accordance with officinal requirements in combination with ursodeoxycholic acid.

Material and methods. 32 patients with obesity and NAFLD against the background of metabolic syndrome with or without the "sludge" phenomenon who are aged 41 to 73 years, with a history of the NAFLD from 5 to 17 years, were examined. Women (63%) constituted the dominant contingent with a tendency to excessive body weight or stage I-II obesity. The diagnostic complex included a programmed examination of the abdominal cavity organs, complete blood count (CBC) and urinalysis, duodenal probing, determination of biochemical parameters of bilirubin fractions.

Results. The clinical course of the pathology among the patients was characterized by a tendency to the torpid progression, the decrease of life quality of the patients, the reduce of the efficiency of hepatoprotective and choleric therapy, which required a longer duration of use, and the development of the asthenic syndrome tendency.

The examination revealed that 23 patients suffered from the "sludge" phenomenon, which occupies from 1/4 to 1/2 volume of the gallbladder. The moderate increase of gallbladder volume, thickness and density of its wall, incarceration of the intrahepatic bile ducts with normal size and increased echo-density of the liver parenchyma served as a background. Complete blood count showed a tendency to an upper limit of normal red blood cell. Biochemical analyses with Alkaline phosphatase and GGT showed the phenomenon of modest cholestasis (exceeding the norm by 1,5-3 times). Moreover, there was a clear tendency to an upper limit of normal SCr level and levels of uric acid maintenance. Besides, the levels of TC and TG have increased significantly (TC – $8,3\pm 0,21$ mmol/L; TG – $4,29\pm 0,16$ mmol/L), and the ALT and LDH (gen.) activity has remarkably increased. Due to habits and professional circumstances, almost all patients were noted at shifting the main meals, for instance, from the morning to the evening. The "sludge" phenomenon was particularly pronounced among fast-food eaters. The rehabilitation program of the studied patients included normalization and diversification of the nutritional diet, the time aspects of nutrition, especially increasing the quota of the liquid food component to 2,2-3,0 litres, depending on the body mass index. Choleric and hepatoprotective therapy was additionally performed with an alcoholic tincture of *Chelidonium majus* L. (1:10) in combination with ursodeoxycholic acid during 1-1,5 months.

Conclusion. "Sludge" phenomenon develops among patients with obesity and NAFLD against the background of metabolic syndrome. Using the tincture of *Chelidonium majus* L. in combination with ursodeoxycholic acid is one of the most effective ways to improve the efficiency of these patients' rehabilitation. A beneficial aspect of the success of this approach is that the patients are aware of their continuing need to learn modern knowledge of healthy lifestyle and nutrition.

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USING OF INHALED ANTIBIOTICS IN THE TREATMENT OF PATIENTS WITH COMMUNITY-ACQUIRED PNEUMONIA

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Introduction. Antibiotics (AB) remain the main etiotropic drugs in the treatment of patients with community-acquired pneumonia (CAP). Long-term practice of antibiotic therapy has revealed not only the positive aspects of drugs of this group (reduction in mortality and the number of complications of CAP), but also disadvantages (development of resistance, side effects, including possible disorders of the cardiovascular system, etc.). It is especially important to avoid unwanted phenomena when using AB in people with such background pathological conditions as diabetes

mellitus, severe systemic atherosclerosis, renal and hepatic damages. Therefore, recently the issue of inhalation administration of AB as an alternative to their systemic use has been very actively studied.

The aim of the study. To examine the possibility of usage of the inhaled AB for the treatment of patients with CAP based on the analysis of literature data.

Material and methods. A large amount of scientific data in monographic, scientific databases and other printed and electronic publications.

Results. Attempts at the inhalation use of AB have been practiced in clinical medicine since the 40s of the 20th century, that is, from the very beginning of the discovery of this class of medications. However, the researchers immediately encountered many problems, in particular, irritation of the bronchial mucosa and pronounced cough syndrome, deposition of particles of the active substance in the upper respiratory tract, development of secondary local immunodeficiency, etc.

A major therapeutic advance took place in 1997, when tobramycin designed for inhalation was approved by the U.S. Food and Drug Administration for use in patients with cystic fibrosis with chronic *Pseudomonas aeruginosa* infection. Attracted by the clinical benefits observed in cystic fibrosis and the availability of dry powder AB formulations, there has been a growing interest in the use of inhaled AB in other lower respiratory tract infections, such as non-cystic fibrosis bronchiectasis, ventilator-associated pneumonia, chronic obstructive pulmonary disease, mycobacterial disease, and in the post-lung transplant setting over the past decade. ABs currently marketed for inhalation include nebulized and dry powder forms of tobramycin and colistin and nebulized aztreonam (Quon B.S., Goss C.H., Ramsey B.W., 2014).

The appeal to aminoglycosides was based on their high nephrotoxicity when administered systemically and the achievement of a sufficient minimum inhibitory concentration when administered by inhalation. Unlike aminoglycosides, respiratory fluoroquinolones have a significant ability to penetrate lung tissue and create a significant concentration even with intravenous administration.

These and other reasons determine the strict selection of AB for inhalation administration in patients with CAP. The authors emphasize the unconditional advantages of inhalation administration of AB. First, it is the possibility of achieving a low systemic concentration of AB. Undoubtedly, this can contribute to reducing the frequency of development of side effects of this group of drugs. The opportunity to reduce the need for the use of systemic AB is considered promising. This should lead to a decrease in antibiotic resistance of such clinically important microorganisms as *K. pneumonia*, *P. aeruginosa*.

In the scientific literature, the main requirements for inhalation AB have already been formed: sterility of the solution, non-pyrogenicity, absence of preservatives, proper pH of the solution (4.0-8.0) and osmolality (150-200 mOsm/L).

Conclusions. Inhaled use of AB in the treatment of patients with CAP requires more in-depth approval. The first step of such work should be the combined use of systemic and local ways of AB administration.

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LIGHT POLLUTION AND CHANGED LIFESTYLE AS IMPORTANT FACTORS OF MORBIDITY IN MODERN SOCIETY

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Introduction. For billion years, life on Earth was synchronized by a rhythm of light and darkness that was created solely by the illumination of the Sun, Moon and stars. Modern achievements of science and technologies within last 150 years changed our lives dramatically: artificial lights overpower the darkness and our cities glow at night, disrupting the natural day-night pattern and shifting the delicate balance of our environment. "Light pollution" term was introduced recently, and that is the presence of unwanted, inappropriate, or excessive artificial lighting. Even