



## ALCOHOL AND PNEUMONIA

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### Abstract

Pneumonia is the most common complication of alcohol use. In an experiment on animal models, it was found that excessive consumption of ethanol leads to dysfunction of the mucociliary apparatus, which is the cause of the chronic respiratory system, that is, the cleansing of the lower respiratory tract. The function of alveolar macrophages is also impaired.

**Keywords:** chronic alcoholism, rats, lungs, experiment, morphology.

**Relevance** In patients who abuse alcohol, lung diseases are the cause of death in almost half of cases. Characterized by a protracted, severe course of pneumonia, abscess formation (up to 30% of cases), the formation of bronchiectasis. Often there are exudative complications. Aspiration pneumonia may occur. Despite all these clinical observations, lung lesions of an alcoholic nature are not included in the International Classification of Diseases (unlike alcoholic cirrhosis, cardiomyopathies, gastritis and a number of other diseases), which also applies to alcoholic nephropathies, which, in our opinion, is unfair.

The link between alcohol abuse and diseases of the respiratory system has been noticed for a long time. More than two centuries ago, the American physiologist Benjamin Rush noted that pneumonia and tuberculosis were the most common infectious diseases among alcohol drinkers. A century later, William Osler called alcohol consumption one of the main risk factors for pneumonia. Lung pathology has been studied to a lesser extent, although it is respiratory diseases that occupy the first place in the face, the structure of the overall incidence of low alcohol consumption. Chronic inflammatory diseases of the respiratory organs account for about 7% of the total structure of diseases. the place of the cause of death will be ranked 4th after cardiovascular, oncological diseases and injuries. Many researchers believe that in the pathology of the lungs in patients with alcoholism, the leading place belongs to chronic nonspecific diseases. Alcoholic death is not limited to alcohol poisoning from violent causes (murder, suicide), it includes a significant percentage of death from somatic pathology associated with alcohol consumption. In addition, studies, vetom - correction and dynamic determination of chronic alcohol intoxication allow us to





establish that a single use of a moderate dose of ethanol has little effect on the development of pneumonia, since the work is focused on determining the amount of ethanol administered and the duration of its use as a risk factor. Legkiks for blood transfusion . However, there is a simple concept of six different levels of anti-infection resistance in alcohol intoxication. The respiratory system as a whole seems to be a target for chronic alcohol abuse.

### **Purpose:**

The purpose of this study is the phenomenon in the experiment of the nature of pathomorphological changes in the respiratory organs in chronic alcoholism in rats.

### **Material and Method:**

The study was conducted on 30 belix belix outbred rats weighing 170-220 g. The animals were divided into 2 groups, 10 rats reproduced by intrayolk injection of saline, served under control. Animals of the 2nd series were injected intragastrically with ethanol at a dose of 7 mg/kg of body weight. Animals were slaughtered 3, 7, 15, 30 days after exposure to ethanol and were removed from the experiment at the age of 3 months by instantaneous decapitation of animals under ether anesthesia. Extracted from the chest of a light, fixed in a 10% formalin solution and embedded in paraffin according to generally accepted rules. Next, histological sections are made with a thickness of 6-7 microns, which are stained with hematoxylin and eosin. Morphological studies of lung tissue were studied under a Leica microscope. The process of implementation of experimental and laboratory animals and compliance with the Declaration of the International Medical Association, adopted in Helsinki.

### **Results and Discussion**

violation, in the flying composition betrothed the disintegration of lymphocytes in the form of karyopyknosis and karyolysis . In the experiment, it was not found in rats that the intake of ethanol inside has a short-term effect on lung tissue and causes aspiration pneumonia, and the drainage function of the bronchi and atrophy of the ciliated epithelium were also impaired. Histologically, there is a focus of acute emphysema with smallish arterioles, atrophic changes in the parenchyma and subsequent changes in the parenchyma. On the 30th day after the administration of ethanol, there was a pronounced dysfunction of alveolar macrophages, incapable of phagocytosis of immune cells. Structural changes including cell loss and metaplasia. There is also an increase in the number and size of lymphoid cell infiltration of the stroma with the onset of fibrosis and sclerosis in the lung tissue, impaired





microcirculation in the lung. Signs of chronic bronchitis and bronchiolitis of varying severity were revealed in the bronchus, the number of goblet cells was increased. mucociliary dysfunction apparatus, which is the cause of the chronic respiratory system, i.e. ocular lower soul paths. The function of alveolar macrophages was also impaired. Against the background of ethanol intake, ventilation, diffusion and pulmonary blood were disturbed.

## Conclusions

1. Thus, the study of the combined course of respiratory diseases and alcoholism is an urgent task of modern medicine. Research in this direction is of primary importance for the development of new approaches to the treatment and prevention of lung diseases in patients with alcoholism. 2. In conclusion, the author notes that researchers and clinicians have only begun to study the problem of alcohol damage to the respiratory system. It is hoped that the negative effects of alcohol on respiratory health can be significantly reduced in the near future.

## Literature

1. Kamolov, HY (2022). MORPHOLOGICAL FEATURES OF THE LUNG AND BRONCHIAL TREE IN CHRONIC ALCOHOLISM. World Research Journal, 2(2), 179-184.
2. Kamolov, K.Yu. (2022). Alcohol and lungs. City Przyszłości, 24, 371-373.
3. Metabolic correction of alcohol intoxication: monograph / S.V. Lelevich [i dr.]. Grodno: GrGMU, 2013. - 176 p.
4. Lelevich, S.V. Central and peripheral mechanisms of alcohol and morphine intoxication / S.V. Lelevich. - Grodno: GrGMU, 2015. - 251 p.
5. Ostrovsky, Yu.V. M. Amino acids in the pathogenesis, diagnosis and treatment of alcoholism. / Ostrovsky Yu. M. Ostrovsky S.Yu. //Minsk: Science and technology and ka. - 1995. - 279 p.
6. Smith, A. Differential increase in taurine levels under the influence of low doses of ethanol in the dorsal and ventral striatum, detected using microdialysis with real-time capillary electrophoresis / A. Smith, // Alcohol Clinic Exp res. - 2004. - Issue 28, no. 7. - S. 1028-1038.
7. Kamolov, K.Yu. (2022). MORPHOLOGICAL FEATURES OF THE LUNGS IN ALCOHOLISM. EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE, 2(3), 12-15.
8. Schuman, Y. New IFCC reference procedures for determining catalytic activity. concentrations of five enzymes in blood serum: preliminary upper reference limits obtained from hospitalized persons / Yu. Shuman, R. Kbanke // Klin. chem.





- act. - 2003 - T.327. - No. 1-2. - P. 69-79.
9. Muzafarovna K.S., Joraboy S. (2022). Influence of scoliosis on morphometric aspects of the lower extremities. City Przyslotsi , 24, 101-103
10. Kamalova, Sh. M., Teshaev , Sh. AND . , Khasanova D. A. (2021). Morphometric characteristics of the parameters of the physical development of children with scoliosis. Operative surgery and clinical anatomy ( Pirogov Scientific Journal), 5(2), 26-31.
11. Kamalova S.M., Teshaev S.Yu. Comparative characteristics of morphometric parameters of children with scoliosis. measurements, 14, 15.
12. Kamalova S.M. (January 2021). CHANGES IN INDICATORS OF PHYSICAL DEVELOPMENT OF CHILDREN 9 YEARS OLD WITH SCOLIOSIS. In the archive of conferences (pp. 5-6).
13. Muzaffarovna , K.S. (2021). Morphometric changes in the parameters of the physical development of children with scoliosis. ACADEMY: AN
14. Yakubovich, K.K. (2023). APPLICATION OF AMINO ACIDS FOR CORRECTION IN CHRONIC ALCOHOL INTOXICATION. Open Access Repository , 4 (3), 1216-1219.
15. Yakubovich , K.K. . (2023). Alcoholic intoxication of the lungs. Scholastic: Journal of Natural and Medical Education , 2 (4), 178-181. Retrieved from <http://univerpubl.com/index.php/scholastic/article/view/1217>.

