

The use of potentiated organopreparations  
to assess the functional state of the broncho-pulmonary system  
in patients with chronic obstructive pulmonary disease

B.I. Islamov<sup>1,2</sup>, M.V. Shilina<sup>one</sup>, M.Yu. Gotovsky<sup>2</sup>

(<sup>one</sup>Institute of Theoretical and Experimental Biophysics RAS, Pushchino,  
<sup>2</sup>Center "IMEDIS", Moscow, Russia)

Preparations made from organs and tissues of healthy animals and their embryos are called organopreparations. Based on the variety of tissue structures and organs of animals, the possibilities for expanding the range of organopreparations are endless. In this case, fetal, embryonic tissues or organs and tissues of young, sexually mature individuals can be used as a starting material.

Organopreparations have pharmacological precision in influencing the functions of a homologous organ or tissue. Due to the property of organotropy, they optimize the processes of regeneration in the homologous organs of the patient, which contributes to rejuvenation, restoration of young tissue, removal of the phenomena inflammation, lysis foci pathological proliferation, development antidegenerative effects.

Organopreparations are considered to be the standards of healthy tissue.

With the proliferation of diagnostic methods according to R. Voll and autonomic resonance test (ART) in clinical practice, organopreparations have become widely used for therapeutic and diagnostic purposes. However, in the literature, a comparative study of the diagnostic significance of organopreparations with generally accepted and recognized diagnostic methods has not been carried out, which casts doubt on the significance of these methods.

We tried to determine the significance of various "test preparations" for assessing the state of the bronchopulmonary system in patients with COPD using the electropuncture autonomic resonance test.

In this report, we present materials of a comparative study of spirometry and organopreparations of the bronchi and lungs in various dilutions to assess the functional state of the bronchopulmonary system in patients with chronic obstructive pulmonary disease.

#### Materials and research methods

We examined 154 patients with COPD, of varying severity, in the acute phase, who were inpatient treatment.

For the diagnosis of COPD, the International Classification of Diseases X revision (ICD-10) was used. According to the recommendations, the WHO assessed the degree of COPD depending on the level of reduction in the volume of forced expiration in 1 second (FEV<sub>one</sub>). I degree of COPD (mild) - FEV<sub>1</sub> > 70% of the proper values were established in 40 patients; II degree (medium) - 50-69% FEV<sub>one</sub> - at 54 sick; Grade III (severe) - <50% FEV<sub>one</sub> - in 60 patients with COPD. The control group consisted of 21 healthy volunteers, no smokers, no allergic diseases with no history of COPD risk factors.

The function of external respiration was investigated using the Spirotest Spirotest (Russia) with computer processing, with registration of pulmonary

---

volumes: VC (VC) - vital capacity of the lungs, FVC (FVC) - forced vital capacity of the lungs, FEV1 (FVC1.0) - forced expiratory volume in the first second; velocity indicators: POS (PEFR) - peak expiratory flow rate, MOS25 (FEF25%), MOS50 (FEF50%), MOS75 (FEF75%) - maximum volumetric flow rates of the curve at points corresponding to 25%, 50%, 75% FVC; relative indicator: the ratio of the forced expiratory volume in the first second to the vital capacity of the lungs (FEV1 / VC) - Tiffno's index

[one].

EP ART was performed using the device "MINI-EXPERT-DT" company "IMEDIS" and test kits for determining the state of the bronchopulmonary system: electronic copies of organopreparations company "WALA" of the bronchi and lungs

The results obtained were subjected to statistical processing on a personal computer using the Statistica 6.0 program. [2]. For the parameters described by the normal distribution, the mean arithmetic (M), standard error of the mean (m). In pairwise comparison, the level of significance of differences was assessed by the parametric Student's test for independent samples. The study of the strength and directionality of relationships between variables was carried out using a parametric coefficient correlations Pearson. For quality indicators used two-way correlations Fisher's exact coefficient. When determined by between nonparametric variables, the Spearman's rank correlation coefficient. The reliability of the differences in indicators determined by parametric and nonparametric methods was considered confirmed at  $p < 0.05$  (at  $t = 2$ ,  $p > 95.5$ ), the relationship of moderate strength was stated at  $r = 0.5-0.69$ ; strong at  $r = 0.7-0.89$  [3].

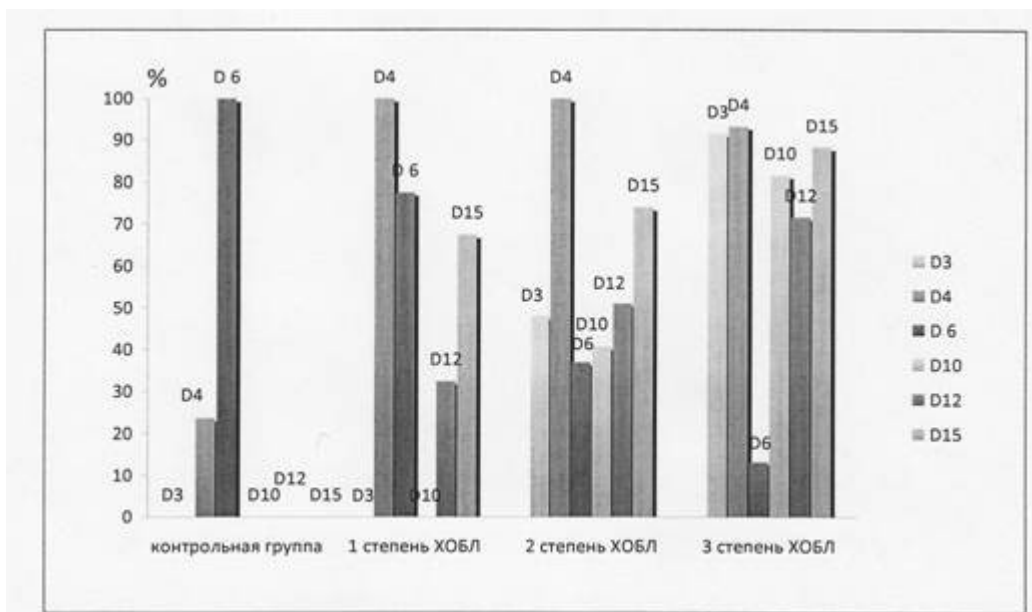
### Results and its discussion

In the materials of the XVI Conference on Bioresonance Therapy, we presented materials on the study of biological indices depending on the severity of COPD and the age of patients.

During the study, we observed a large difference in BI indices depending on the severity of the process in relatively young patients. As expected, with age, this difference was erased and the information content of the study of both private and general BI decreased [4]. The results of measurements of organopreparations of the bronchi and lungs turned out to be more informative and less dependent on the age of the patients.

In fig. 1 shows the cases of testing organopreparations of the lungs and bronchi in percentage in the main group. Organopreparations are most of all tested in potencies D4 and D15, which is associated both with the presence of severe degenerative changes in all patients to one degree or another, and with the presence of an active inflammatory process in the bronchi and lungs. The high degree of testability of these two potencies of the organopreparation can be used for screening patients with COPD during clinical examination.

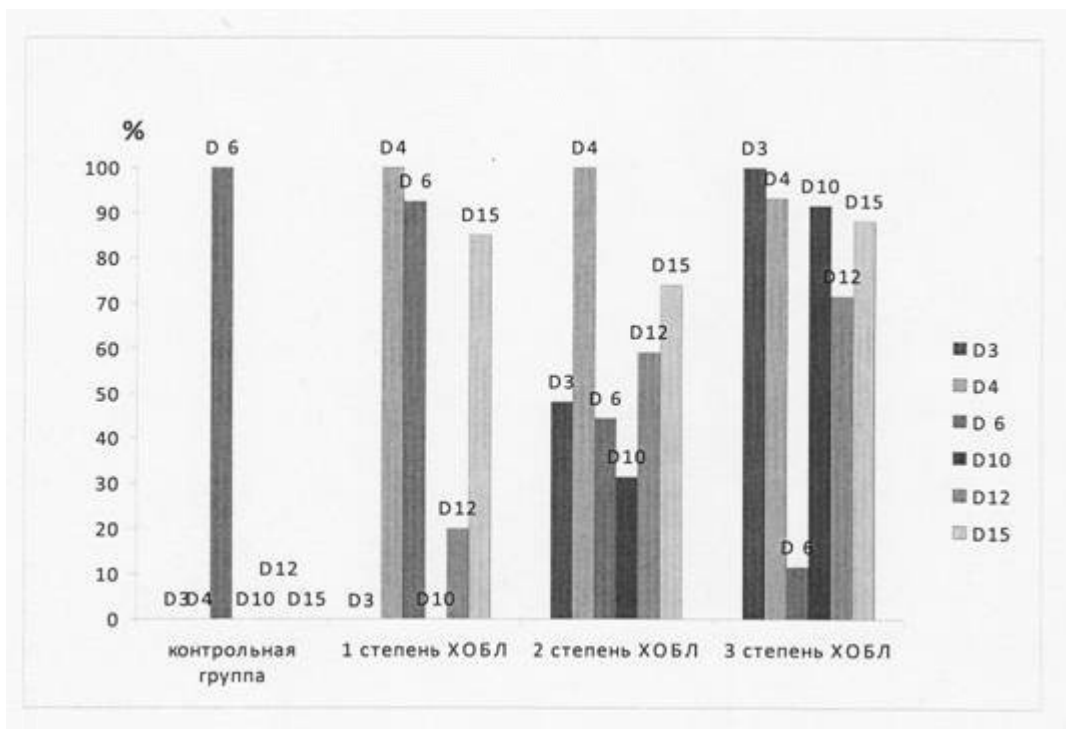




Rice. 2. The share of positive test results for OP br. depending on the severity of COPD

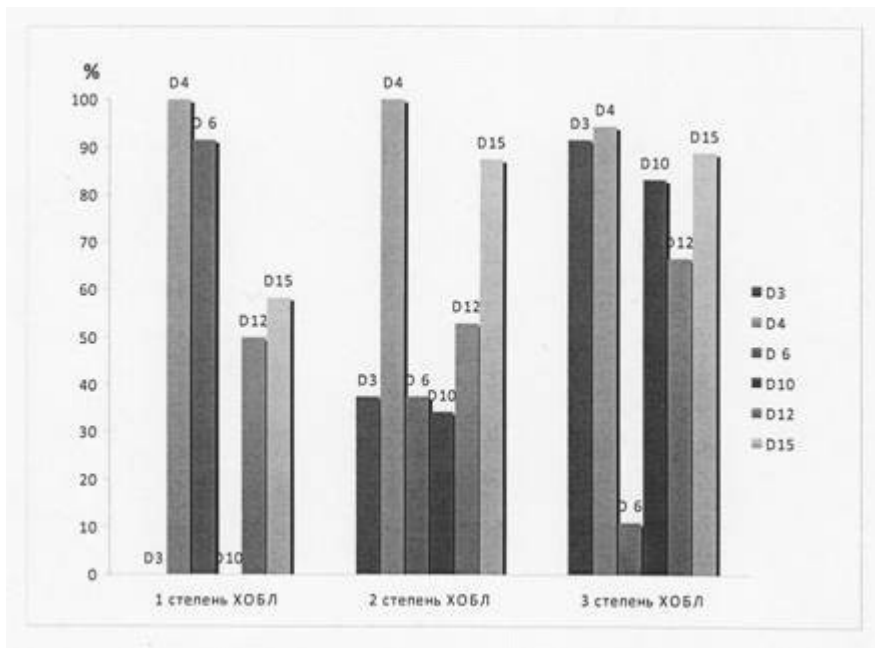
In fig. 3 shows the proportion of positive results of testing for OP I, depending on the severity of COPD. There were significant differences in the OP I D6 test between the control group and subgroups with moderate and severe COPD, the differences in OP I D6 between the control and mild COPD groups were insignificant. Differences between the OPL test in potency D4 were significant with the control group, but indistinguishable between the subgroups in terms of the severity of COPD. The frequency of occurrence of OP I D3 and OP I D10 significantly increases with the severity of the process, but is indistinguishable between the control group and the group of mild severity. There is a tendency to an increase in the proportion of positive test results for OP I D12 with an aggravation of the disease, the differences with the control group are significant in all subgroups, however, there were no significant differences in the increase in the incidence of OP I D12 in patients with moderate and severe COPD. Differences in the frequency of occurrence of the test "OP I D15" between the subgroups are insignificant, but significant in comparison with the control group.

Thus, the change in the frequency of occurrence of the electrophysiological test of OP I, depending on the severity of COPD, is significant in potencies D3, D10 (direct correlation) and D6 (inverse correlation). OPL in potencies D4 and D15 occurs with almost the same frequency at any severity of the disease.

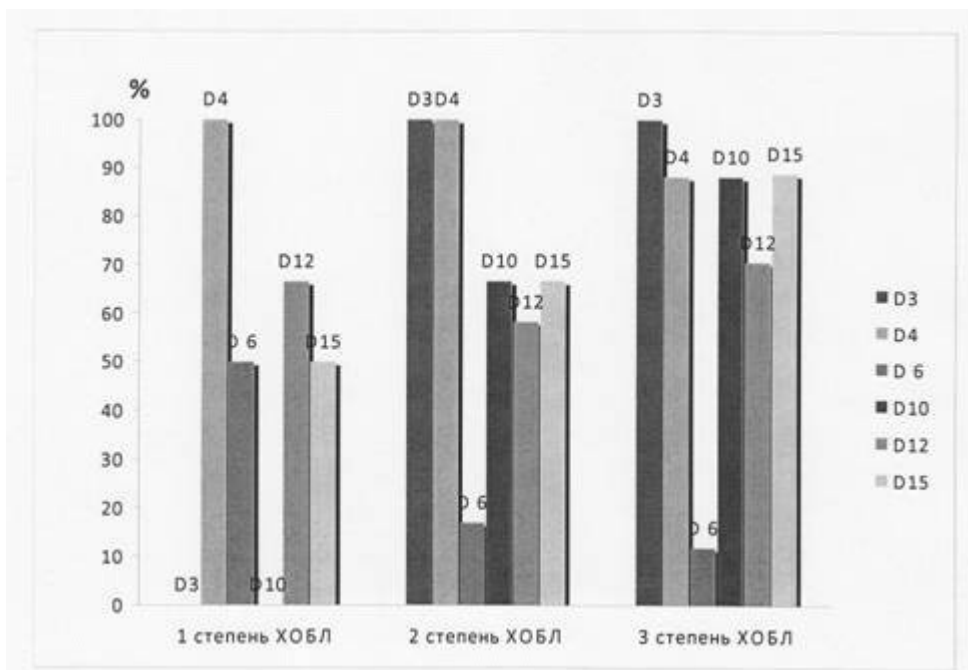


Rice. 3. The proportion of positive test results for OP I depending on the severity of COPD

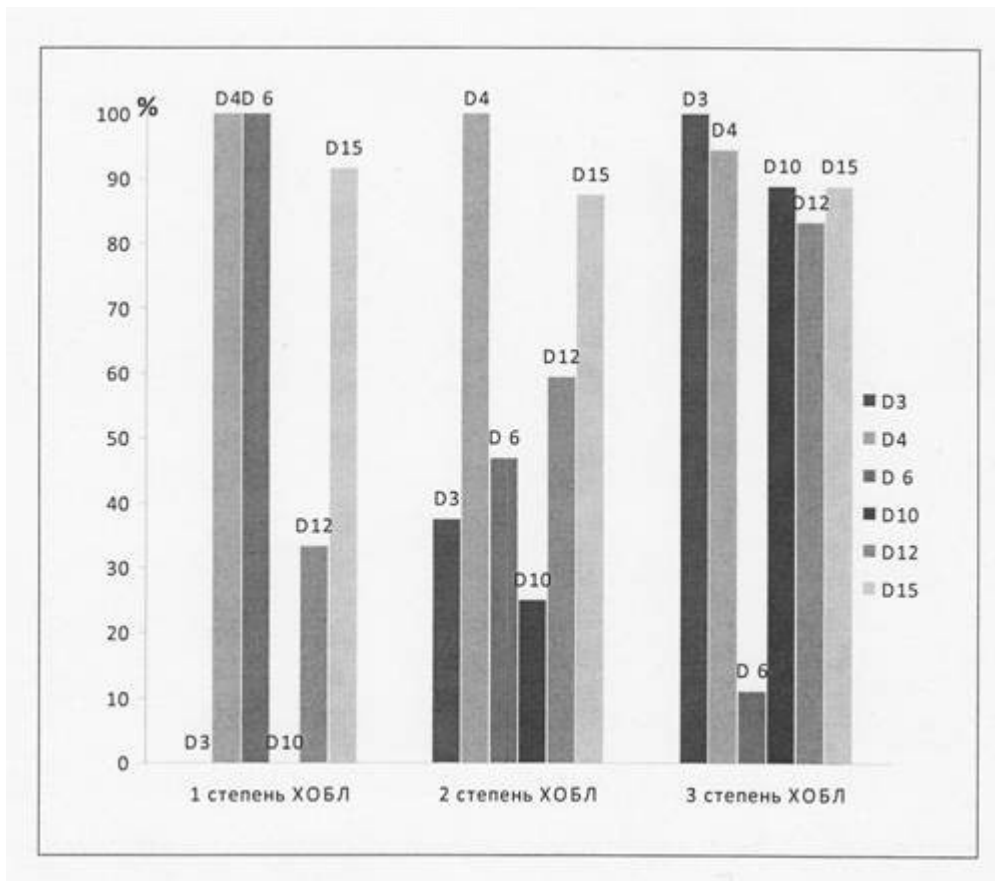
We also studied the dependence of the studied indicators on age (Fig. 4-7). Thus, the direction of changes was almost repeated when testing organopreparations in potencies D3, D4, D10, D12. There was a low proportion of positive results of testing the organopreparation of the bronchi in potency D15 in patients of moderate severity compared with patients of I and III severity. A retrospective analysis of the material under study showed that when we examined patients immediately after admission to the hospital, i.e. in the phase of exacerbation of the disease, the proportion of positive test results organopreparation of bronchi in potency D15 increased. If carried out therapy, then, as expected, the testability of D15 decreased. We hope that further study of this problem will make it possible to develop algorithms for monitoring the effectiveness of the treatment.



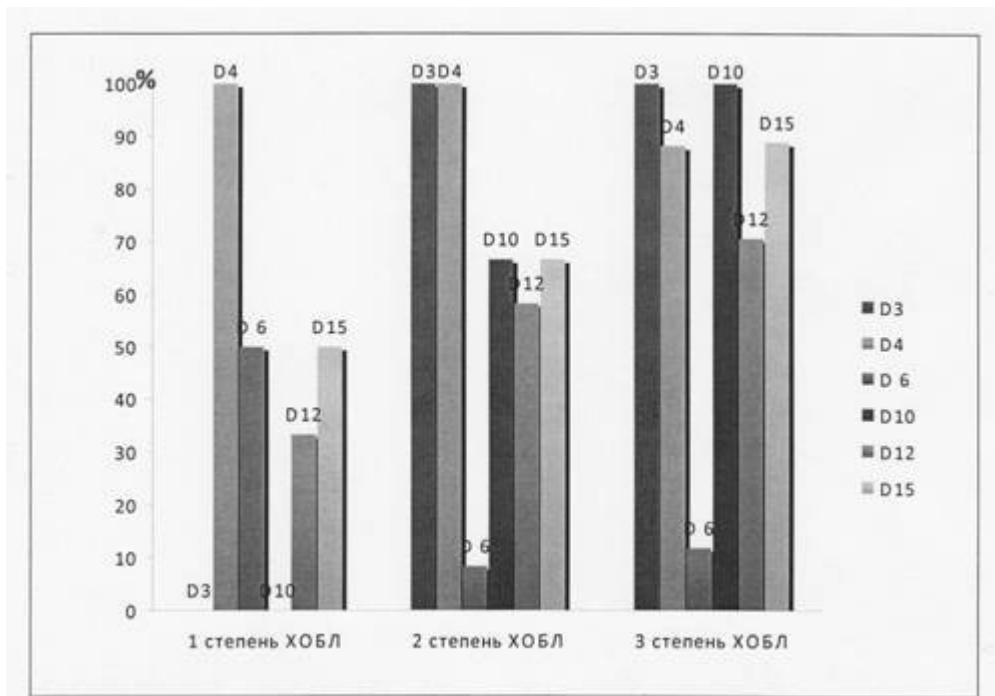
Rice. 4. The proportion of positive results of testing for OP br in patients from 46 to 65 years old



Rice. five. The proportion of positive results of testing OP br in patients over 65 years of age



Rice. 6.The proportion of positive results of testing for OP I in patients from 46 to 65 years old



Rice. 7.The proportion of positive results of testing for OP I in patients over 65 years of age

Patients over 65 years old have a relatively low proportion of testing drugs in the D6 potency, a high proportion of D3.

In parallel with the study of bronchi with organopreparations in the same patients, the results of the study with organopreparations of the lungs were analyzed depending on age. The results are shown in Fig. 6 and 7. In the control group, the organopreparation of the lungs in potency D4 is not tested. Most likely, this is due to the fact that the bronchi are more often confirmed by the harmful influences of the external environment and are more damaged. The severity and direction of changes in other indicators practically do not differ from the indicators of testing organopreparations of the bronchi. That is, in parallel with the aggravation of the condition, the proportion of positive D6 testing decreases, diametrically test indicators D3, D10, D12 change oppositely. Apparently, due to the above stated reason, there is a high testability of D15, which does not correlate with the severity of COPD.

Patients over 65 years of age are characterized by a decrease in the proportion of testability D6 and an increase in D3.

The results of the cross-correlation of the bronchial organopreparation and spirometry data showed a statistically significant dependence of testing the bronchial organopreparation and such spirometry indicators as VC, RO vt., FZHEL, OFVone, FEVone/VC, SOS 25-75 and etc.

Factorial analysis of the ART EP data was carried out using method for the selection of the main components. After rotation of the factors in space by the varimax method, variables (ART measurements) with loads of 0.7 and more were selected, the greatest variance was identified by factor 1 ( $S = 9.357$  - 36% of the total variance), which combined the indicators of the bronchial organopreparation ( $r = 0.891$ ), which indicates the importance of these tests among all those carried out.

So way, received results are presented US promising in terms of the use of organopreparations and EP ART in the diagnosis of pulmonological diseases and allow us to draw the following conclusions:

1. The aggravation of the disease does not affect the electrophysiological tests "OP br D12", "OP br D15", "OP br D4". "OP br D3" and "OP br D10" did not occur in patients with mild COPD severity. The frequency of occurrence of the test "OP br D6" decreases with the severity of the condition.

2. Found cross-correlation and organopreparations of the bronchi and lungs with volumetric indicators of spirometry.

3. Testing of organopreparations of the bronchi in various potencies allows to characterize the severity of COPD, regardless of the age of the studied patients.

4. The results of the research carried out can be used in clinical practice when it is impossible to use spirometry for one reason or another.

#### Literature

1. Grippy M.A. Lung pathophysiology, ed. 2nd rev. / Translation from English doct. honey. Sciences, prof. Yu.M. Shapkaytsa. Edited by Acad. Yu.V. Natochina. - M., St. Petersburg: ZAO Publishing House BINOM, 1999. - 344 p.
2. Borovikov V.P., Borovikov I.P. STATISTICA: statistical analysis and data processing in Windows environment. - M.: "Filin", 1997. - 276 p.
3. Sepetliev D. A. Statistical methods in scientific medical



research. - M., 1968 .-- 420 p.

4. Islamov B.I., Shilina M.V., Gotovsky M.Yu.  
biological indices (BI) for assessing the severity of patients with chronic obstructive  
pulmonary disease // Abstracts and reports. XVI  
International conference "Theoretical and clinical aspects  
application of bioresonance and multiresonant therapy: Part I. - M. :  
IMEDIS, 2010. - pp. 3-11.

---

B.I. Islamov, M.V. Shilina, M. Yu. Gotovsky The use of potentiated organopreparations to assess  
the functional state of the broncho-pulmonary system in patients with chronic obstructive  
pulmonary disease // XVII

"IMEDIS", 2011, v.1 - p.28-39