

Materials of Conferences

**THE PHENIBUT INFLUENCE
ON THE PHAGOCYTOSIS INDICES
UNDER THE IMMUNE
STRESS CONDITIONS**

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The phenibut phagocytosis – correcting activity study has been the main target of the present research on the lypopolysaccharide – induced immune stress model.

The present research has been carried out on the «Wistar» line 30 rats of the both sex, at the age of 5–6 months. The animals have been distributed into the groups (e.g. $n = 10$): the control 1 (e.g. the animals, having received the physiological solution, as «the placebo»); the control 2 (e.g. the animals with the immune stress, having induced by the *Pseudomonas aeruginosa* lypopoly-

saccharide (LPS) intraperitoneal introduction in the dose of 100 mkg/kg); the experimental group (e.g. the animals with the immune stress, having received the phenibut intraperitoneally in the dose of 25 mg/kg during 120 hours or 5 days). The latex test has been used for the phenibut influence study upon the neutrophils' phagocytal activity of the peripheric blood; the phagocytal index (PHI) and the phagocytal number (PHN) have already been defined.

As it can be seen from the results, having presented in the Table 1, the LPS – induced immune stress formation is being accompanied by the phagocytal number and the phagocytal index increase more, than for 30 %, in comparison with the control 1 (e.g. $p < 0,05$). The neutrophils' phagocytal activity restoration is being observed, under the animals' phenibut influence with the immune stress in the experimental group: the indices, having reflected the phagocytosis intensity (PHI) and the cells' number, having taken their part in the phagocytosis (PHY), are being decreased (e.g. $p < 0,05$), having achieved the background values in the control 1.

Table 1
The Phenibut Influence upon the Phagocytosis Indices on the LPS – Induced Immune Stress Model

The Experimental Groups	The Control 1: «placebo»	The Control 2: LPS. <i>Pseudomonas aeruginosa</i> (100 mgk/kg)	The Test: The Phenibut (25 mg/kg) + LPS. <i>Pseudomonas aeruginosa</i> (100 mgk/kg)
Phagocytal Index, %	55,9 ± 3,1	72,9 ± 3,6Δ	59,4 ± 3,6*
The Phagocytal Number	4,5 ± 0,2	6,7 ± 0,3Δ	4,0 ± 0,3*

The Reliability Degree, Concerning the Control 1 – Δ – $p < 0,05$; the Control 2 – * – $p < 0,05$.

Thus, the results, having received during the experimental work, are being testified on the phenibut ability to be removed the immune system non – specific component disorders, having appeared under the LPS – induced immune stress conditions.

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