

141,1±5,98 units, GP in plasma -0,97±0,04 units, GR in erythrocytes- 141,1±5,98 units, GR in plasma -1,69±0,06 units, content of MDA 3,46±1,08 nmole/ml, UA - 0,29±0,01 mmole/l.

In patients with neurodystrophic form of lumbar ischialgia it was detected in blood serum: increased activity G (p<0,05), PNP (p<0,001), XO (p<0,001), GP in plasma (p<0,001), decreased activity ADA (p<0,001), AMPDA (p<0,001), SOD in erythrocytes (p<0,05), SOD in plasma (p<0,05), GR in plasma (p<0,01), increased content of MDA (p<0,05) and UA (p<0,05). Progredient type of course was characterized by the increase of activity in blood serum of G (p<0,05), PNP (p<0,001), XO (p<0,001), content of MDA (p<0,05), UA (p<0,05), in blood serum decrease of activity ADA (p<0,001), AMPDA (p<0,001), XDH (p<0,05), SOD in erythrocytes (p<0,01) and GR in plasma (p<0,01). In stable course activity ADA (p<0,001), AMPDA (p<0,05), GR in plasma (p<0,05) is lower in comparison to healthy ones and activity PNP (p<0,001), XO (p<0,001), GP in plasma (p<0,001) is higher. In regredient course only activity XDH in blood serum was higher (p<0,05). In patients with progredient course activity in blood serum ADA (p<0,001), AMPDA (p<0,001), SOD in erythrocytes (p<0,001) and GR in plasma (p<0,05) was lower in comparison to stable course, but activity PNP (p<0,001), XO (p<0,001), MDA level (p<0,001), UA (p<0,01) was higher. In comparison to regredient course activity in blood serum G (p<0,05), PNP (p<0,001), XO (p<0,01), MDA level (p<0,001), UA (p<0,001) was higher, activity ADA (p<0,001), AMPDA (p<0,001), SOD in erythrocytes (p<0,001), SOD in plasma (p<0,05) and GR in plasma (p<0,05) was lower. In patients with stable course activity in blood serum G (p<0,05), PNP (p<0,01), was higher in comparison to regredient, but activity ADA (p<0,01), AMPDA (p<0,001), XDH was lower.

Conclusion. The undertaken research of patients with neurodystrophic form of lumbar ischialgia detected the decreased activity of enzymes of antioxidant blood system, strengthening of the lipid peroxidation process, catabolism of purine bases and activity increase of proinflammatory enzyme – XO, conducting to hyperproduction of superoxide radical that may be one of the pathogenetic mechanisms of osteochondrosis of lumbar spine. The studied enzyme blood data conduce to specification of the character of disease course and ordering suitable therapy.

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## PERIVASCULAR LYMPHOID NODULES IN MESENTERY

Petrenko V.

*The St.-Petersburg State Medical Academy named  
after I.I. Mechnikov  
St.-Petersburg, Russia*

Pervascular lymphoid nodules (PVLN) do not comprise of any microdistrict of mesentery hemolymph microvasculature (HLMV). Their quantity, sizes, forms, structure and topography are very variable. PVLN surround gathering venule and its tributaries. PVLN can be dissipated all around the microdistrict, not approaching the edge (main arteriola and venule) or concentrate boundaries (prenodules) or formed, are often specified around postcapillary venule. All listed lymphadenoids can be in one microdistrict – stages of PVLN morphogenesis when functional load increase and proper alteration of HLMV. PVLN is situated between terminal arteriola and gathering venule, and all together with their branches and tributaries compose a complex, “immune” module of HLMV. PVLN may function as counterflow system: antigens come through interstitially channels or lymph capillary with endothelial walls without basal membrane and lymphocytes from postcapillary venule. Inflow of their great quantity in these venules with antigen stimulation may be through arteriola-venule anastomosis, by-passing capillary net with stenopaic. Increase of blood inflow to forming PVLN brings to local growth and magistralization of HLMV.

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## CITROCARD INFLUENCE ON NEUTROPHIL PHAGOCYTOSIS OF PERIPHERAL BLOOD

Samotrueva M.<sup>1</sup>, Tyurenkov I.<sup>2</sup>, Teply D.<sup>3</sup>,  
Serezhnikova T.<sup>1</sup>, Kuleshevskaya N.<sup>4</sup>  
and Bakhtiyarova S.<sup>4</sup>

<sup>1</sup> *The Astrakhan State Medical Academy,  
Astrakhan, Russia;*

<sup>2</sup> *The Volgograd State Medical University,  
Volgograd, Russia;*

<sup>3</sup> *The Astrakhan State University, Astrakhan, Russia;*

<sup>4</sup> *The Non-government Healthcare Organization  
“Clinic”, Astrakhan, Russia*

Taking into consideration an important role of immune disorders in genesis of different pathological processes from the side of central immune system, pharmacological research of psychotropic medication, showing immune modulating properties becomes up to date. Citrocard prepared on the basis of phenibut, is of interest as a psychoimmunomodifier.

Objective of the work is experimental learning of Citrocard influence on neutrophil phagocytosis activity of peripheral blood.

The experiment is conducted in 40 mice with SVA line of both genders 3-4 months old. The neutrophil phagocytosis activity was latex tested. The ani-

mals were taken out of the experiment a day after a single intraperitoneal introduction of the test substance. All manipulations with animals were conducted keeping international principals of Declaration of Helsinki. The results were statistically processed using Student t-test.

**Table.** Citrocard influence on neutrophil phagocytosis activity

Experiment groups (n=10)	Phagocytic index, M±m, %	Phagocytic number, M±m
control (physiological saline)	35,9 ± 1,7	6,5 ± 0,5
Citrocard (15 mg/kg)	44,3 ± 3,2*	9,4 ± 0,4*
Citrocard (75 mg/kg)	39,5 ± 3,2	8,2 ± 0,6
Citrocard (375 mg/kg)	49,0 ± 3,5*	9,5 ± 0,4*

Degree of credibility concerning control (\* -  $p_1 < 0,05$ )

It is established in the course of the experiment that Citrocard in all used doses has a stimulating effect on non-specific link of immunogenesis: in doses 15 mg/kg and 375 mg/kg the medication enables positive increase of neutrophils, able for phagocytosis, and also of latex elements, phagocytosed by neutrophils, dose 75 mg/kg is less effective, but also causes positive changes of phagocytosis index in comparison to control group results.

Based on the obtained data it has been concluded that Citrocard has phagocytosis stimulating characteristics which can be the basis of the following development of the medication as an immunomodifier.

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### CLINIC APPEARANCES OF THE SEVERE ACUTE COMMUNITY-ACQUIRED PNEUMONIA

Trusov V., Dimov A. and Volkova O.  
The Izhevsk State Medical Academy  
Izhevsk, Russia

In order to obtain actual clinic image of severe acute pneumonia an analysis of 185 hospital patients of age 18–87 years with pneumonia has been carried out. Among them – 136 men (73,5%) and 49 women (26,5%). Average age – 52,7 years. Among the patients 38 of them were ones of middle acuteness and 147 of hard acuteness, 85 of those – with fatal outcome. The verification diagnose was carried out in accordance with the criterions of Russian respiratory society. The results of the research has shown that the situation in lungs with acute pneumonia in average was displayed in: double-sided process in 55,4%, lobar, polilobar pneumonia in 10,8%, destructive process in 44,2%, lungs abscess in 3,9%, pleurisy in

29,9%, and pleura empyema in 4,1% of cases. In a number of fatal outcomes the part of focal pneumonia was 33,8%. The concomitant diseases that predispose to acute pneumonia were: COPD in 66%, IHD in 23%, chronic alcohol intoxication in 50,3%, insular diabetes in 6,8%, renal impairment in 10,2% of cases.

The following clinic displays has been registered with acute pneumonia (in parts): infection-toxic shock in 21,8%, hyperthermia in 38,2%, disturbances of arterial pressure in 65,5% (among those hypotension in 40,3%), cardiotropic index increase in 83,7%, acute respiratory shortage in 85,1%, diuresis decrease in 86,7% (among those – oliguria of less than 500ml a day in 28,8%), tachycardia in 85,3% of cases. Other reliable parameter alterations that reflect the complicity of other systems (blood-making (erithropenia), excretory (azotemia), hepatobiliary (bilirubinemia), endocrine (hyperglycemia), central nervous system (consciousness disturbances) etc.) were exposed. The cardiac failure preceded pneumonia within 62,7% of patients, in the course of pneumonia it was revealed in the small circle within 62,7% of patients, and within 100% of those with fatal outcome and in cases of inner organs dystrophy or edema, including lungs and brain.

Laboratory facts at the day of hospitalization were certainly different between the pneumonia of middle and hard acuteness in: the number of leukocyte -  $12,06 \pm 0,79$  and  $14,7 \pm 0,69$ ; the value of leucopenia -  $4,93 \pm 0,36$  и  $3,51 \pm 0,24$ ; index of stab shift -  $5,63 \pm 1,07\%$  и  $15,95 \pm 1,61\%$ ; the measure of leukocytal index of intoxication (LII) -  $2,15 \pm 0,37$  и  $6,45 \pm 0,66$ , and indexes of asparate aminotransferase -  $32,65 \pm 7,1$  u/L. и  $102,95 \pm 15,9$  u/L. and analine aminotransferase -  $26,8 \pm 3,9$  u/L. и  $58,24 \pm 6,33$  u/L.; thrombocytopenia -  $106,44 \pm 7,94 \cdot 10^9$  and  $146,33 \pm 12,26 \cdot 10^9$ .

The predictors of the pneumonia progress were outlined as: male sex, age over 40, mainly physical activity, lack of higher education. Specifically the