

STRUCTURAL CHANGES IN LUNG AND FUNCTIONAL STATE OF LUNG MACROPHAGES IN THE DYNAMICS OF DECOMPRESSION PERIOD OF EXPERIMENTAL CRUSH SYNDROME

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In the dynamics of decompression period of Crush syndrome (CS), structural changes in the lungs of rats are characterized by congestion of vessels, leukostasis, edema, combined with lymphostasis, fibrinoid swelling, infiltration of lymphatic-macrophage cells with the elements of the interalveolar septa of fibrous transformation. Structural changes in the lungs of rats accompanied by increased numbers of lung macrophages (Mph) with activation of their phagocytosis and oxidation-metabolic functions. Against the background of selective blockade of Kupffer Cells by gadolinium chloride (GdCl₃) structural changes of lungs and the functioning of interstitial and alveolar Mph were more pronounced than in the group of rats with CS. These results confirm the strong interrelation between liver and lungs through "macrophage channel", which ensures the maintenance of homeostatic at various "emergency" situations in one of these organs.

Key words: reactive oxygen metabolites, broncho-alveolar fluid, lung macrophages, phagocytosis, lung, Crush syndrome, multiple organ failure.

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