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**LYMPHOCYTE CYTOCHROME P-450 ACTIVITY AS THE CHERNOBYL ACCIDENT
CONSEQUENCES CLEAN UP PARTICIPANTS HEALTH STATUS INDEX**

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The structure-functional properties of peripheral blood lymphocytes were studied in Chernobyl NPP accident consequences clean-up participants (ChNPP ACCP) for health status estimation. The cytochrome P-450 activity, lymphocytes structural properties, lipid peroxidation activity value both with antioxidant enzymes activity in serum of ACCP suffering the neurocirculatory dystonia. The ChNPP ACCP who worked in 1986-1987 within ChNPP 30-km exclusion zone. The two groups of patients were divided. The cardiovascular system function moderate deviations were registered in the first study group. The symptoms of postradiation encephalopathy followed with autonomous nervous system-vascular dystonia and endocrine disorders were observed in the second study group. The various structure-functional changes were revealed in lymphocytes and erythrocytes of two ChNPP ACCP groups; the changes correlated with clinical symptoms severity. The cytochrome P-450 activity increase for 48% was observed in peripheral blood lymphocytes of first study group of patients. The catalase activity was decreased for 64%. The content value of malonic dialdehyde (MDA) as secondary product of lipid peroxydation activity (LPA) increased for 55% that was followed with superoxyddismutase activity (SOD) for 63%. The LPA value growth leads to erythrocyte membranes structural organization changes: the microviscosity of proteine-lipid contacts zones studied with fluorescent probe-pyren grew for 21%. The more expressed changes of the studied parameters were observed in the second group of patients. The cytochrome P-450 activity in lymphocytes grew for 93%. The SOD inhibition for 50% with LPA substantial intensification was registered in erythrocytes. The MDA content grew for 104%. The lipid bilayer microviscosity value decrease for 34% and protein-lipid contacts zones microviscosity growth for 63% was observed indicating membrane structural properties profound disorders presence. So the cytochrome P-450 activity, free-radical processes intensity and membrane structural properties are the informative test-system for ChNPP ACCP health status estimation.