CORRECTION OF THE POST-IRRADIATION CHANGES OF THE LIPIDS PEROXIDATION IN THE RATS' LIVER BY THE LASER IRRADIATION

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The influence of low doses of x-ray and laser irradiation and their combined impact on the antioxidative system parameters and lipid peroxidation processes in the rats' liver was investigated. Fractionated 30-day X-ray irradiation in a total dose of 23,3 mKl/kg had caused a lipid peroxidation (LPO) intensity decrease: malondialdehyde (MDA), DK, a superoxide dismutase (SOD) activity, catalase, Glutathione Peroxidase (GPO), the glutathione (reduced form: GSH). Laser irradiation had caused the MDA, the SOD, catalase and GPO decrease. The GSH contents had been increasing. In 20-days of irradiation the LPO processes intensity of liver homogenate remained lower from the test figures. The SOD, catalase activities, GSH contents had increased. The GPO activity kept decreased. The combined impact of laser and X-ray irradiation caused the LPO processes intensity decrease. The SOD and catalase activity, GSH contents didn't differ from the test ones. The GPO activity had increased in 20 days of irradiation. Also an adequate influence of laser irradiation against X-ray's to the studied indices was demonstrated.