INFLUENCE OF C_{60}-FULLERENE AQUEOUS COLLOID SOLUTION ON LIVER AND Pancreas morphological state and blood aminotransferases of rats with experienced acute cholangitis

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Aim of the work was to investigate the suspended C_{60}-fullerene effect on liver and pancreas state under intraperitoneal and intragastrial administration on rat experimental cholangitis model. Acute cholangitis was simulated by a single ingestion of α-naphthyl isothiocyanate — ANIT. C_{60}-fullerene aqueous colloid solution (C_{60}FAS, 0.15 mg/ml) was administered to animals at a volume containing C_{60}-fullerenes at a dose of 0.5 mg/kg body weight in 24 and 48 h after ANIT administration. After 72 h of the experiment, the animals were euthanized. Blood serum ALT and AST activities were measured, the liver and pancreas states were analyzed by light-microscopy level. It was found that intragastrial and intraperitoneal administration of C_{60}FAS contributes to the correction of negative effects in the liver and pancreas caused by the induction of acute cholangitis. This was proved by the normalization of ALT activity, reduction of pancreatic parenchymal edema and liver fibrosis, and increased blood flow in these organs. Application of C_{60}FAS could improve the state of the liver and pancreas under acute cholangitis in rats.

Key words: C_{60}-fullerene, acute cholangitis.

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