STRUCTURAL STATE OF RATS SMALL INTESTINE ENTEROCYTES APICAL MEMBRANE AT IONIZING RADIATION

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The structural state of small intestine enterocytes apical membrane at one-time action of ionizing radiation in doses 0,1, 0,4, 1,0, 2,0, 3,0 and 6,0 Gy in 24 hour is investigated. The development of small intestine pathological conditions connected with the occurrence of ultrastructure disturbance of small intestine cellular elements, which intensify with the increase of ionizing radiation dose, is detected. The ionizing radiation causes decrease of phospholipids and cholesterol quantity in 24 hour after the irradiation. The decreases of membrane microviscosity and increase of protein triptophanil fluorescence intensity is shown of ionizing radiation. The structural modifications can result in the detected rise permeability of membrane for ions, disturbance of enzymes functioning.