

REACTIVE CHANGES OF ENDOCRINE CELLS IN THE MUCOSAL EPITHELIUM OF THE INTESTINE AFTER INJECTIONS OF MELATONIN OR DOXYLAMINE SUCCINATE: AN ELECTRON-MICROSCOPIC STUDY**M. L. Churkova****Mechnikov North-Western State Medical University, Saint-Petersburg, 195067 Russia***e-mail: mariya.churkova@szgmu.ru*

The ultrastructure of endocrine epithelial cells in the duodenal, colon and rectum mucosa of Wistar rats was studied after injections of melatonin or doxylamine succinate daily for a month. We found that 1 day after the last injection of the studied substances, morphological manifestations of an increase in functional activity of endocrine cells was observed in most of all types of endocrinocytes, which is accompanied by intracellular regeneration of some elements. The mitochondria of endocrinocytes are the first to undergo changes. In addition, large number of poorly differentiated endocrine cells was observed in the epithelium of the intestine in rats subjected to experimental influence, indicating activation of the epithelium cambial elements. In all cases studied, D1 cells were found most frequently in the epithelium, as compared with other types of endocrinocytes.

Keywords: intestine, epithelium, endocrinocytes, melatonin, doxylamine succinate, ultrastructure