SUBMICROSCOPIC STRUCTURE OF SUPERFICIAL EPITHELIUM OF CHICKENS OESOPHAGEAL TONSIL

V. Khomich, N. Dyshlyuk

National University of Life and Environmental Sciences of Ukraine, Kyiv, Ukraine
dushlyuk@ukr.net

The aim of our research was to evaluate cell content of superficial epithelium of mucous membrane in chicken esophageal tonsil and determine the features of its submicroscopic structure. Common electron-microscopic methods were used during investigation.

We found that the surface epithelium of the mucous membrane of chickens esophageal tonsil is squamous stratified partially keratinized. Its cells form a basal, spinous and superficial layers. Cell content of layers of surface epithelium varies. Epithelial cells are widespread. The basal cell layer is located on the basement membrane, which is built with a homogeneous basic substance and delicate network of fibers. This layer is formed by basal epithelial cells, isolated lymphocytes, immunoblasts and Langerhans cells. Spinous layer of surface epithelium formed by 9-16 rows of epithelial cells. There are also rare proplasma cell, plasma cells, M-cells, lymphocytes and Langerhans cells. The superficial layer of epithelium is presented mainly by nuclear-free flat elongated epithelial cells that are arranged in 4-6 rows. The cells of all three layers of the surface epithelium have different submicroscopic structure

Chickens, electron microscopy, surface epithelium, esophageal tonsil, epithelial cells, lymphocytes, immunoblasts, Langerhans cells, proplasma cells, plasma cells, M-cells