P-Q section was demonstrated by compound V. The mechanism of antiarrhythmic action is probably due to several mechanisms, which involve the suppression of heterogeneous foci of excitation, inhibition of Na+/Ca2+ exchange and the blockade of fast sodium channels of cardiomyocytes. The influence of investigated compounds on ECG components suggests that activity of compound V is similar to class 1A anti-arrhythmic compounds according to Voughan-Williams classification of antiarrhythmic drugs, because of prolongation of P-Q and Q-T intervals and extension of QRS complex. The findings suggest about expediency of further investigation in a row of 8-substituted of 7- $\beta$ -hydroxypropyl xanthines for the purpose of the search for effective and low-toxic antiarrhythmic agents.

## THE STROMAL-PARENCHYMAL RELATIONSHIPS IN THYROID GLAND UNDER THE PRENATAL ANTIGENIC INFLUENCE

Fesenko E.O., Fedosieieva O.V. Scientific adviser: Associate Professor, PhD Fedosieieva O.V. Zaporozhye State Medical University Department of Histology, Cytology and Embryology

Aim: to establish morphological features of organization of the thyroid gland of rats in postnatal ontogenesis in norm and after intrauterine action of staphylococcal antitoxin. Materials and methods: as a material for the research was thyroid glands of Wistar rats aged 1 to 45 days of postnatal development (126 animals). Studied three groups of animals at 1, 3, 7, 11, 14, 21, 45 days old: I group - intact animals (normal): 42 rats; II group - control, animals which were intrafetal injected by 0.9% solution of NaCl; III - experimental, animals which were intrafetal injected by staphylococcal toxoid adsorbed purified liquid (10-14 units in 1 ml binding diluted 10 times) on 18 days of pregnancy. Research methods: histological and histochemical. Statistical analysis of the data - standard package "Statistica 6.1". Results: The study found that thyroid parenchyma and stroma presented all the structural elements, which are typical for this body of both the control and experimental animals. There were all groups of follicles (large, medium, small) filled with dense, homogeneous, colloid oxyphilic in the thyroid of the control animals. In individual follicles we observed edge and central colloid vacuolation. But there is a prevalence of large follicles throughout the thyroid after intrauterine action of staphylococcal antitoxin. Visualized desquamated cells in the cavity of follicles in colloid. The capillaries were expanded and filled with blood. The population of mast cells near capillaries revealed marked polymorphism. Identified morphometric adjustment (increase in the number of large follicles throughout the volume of the body, increase the relative amount of colloid and stromal components and reducing the height and diameter nuclei of thyrocytes) suggest adaptive-compensatory condition of an organ. Conclusions: 1. Intrafetal prenatal injections of staphylococcal toxoid led to the formation in animals in early postnatal ontogenesis more pronounced structure as elements of the parenchyma and stroma, leading to the presence of morphological picture hypofunction state of the body on 1-14 days postnatal ontogeny. 2. Quantitative indicators of thyroid mast cell populations change during suckling age as at animal control and experimental groups, but these are not identical. The density and size, and morphometric parameters of mast cells grow most rapidly during the first month of postnatal development and to stabilize animals with antigen closer to that of the control group, since puberty.

## ULTRASTRUCTURAL FEATURES OF THE EPITHELIAL COMPONENT OF THE HUMAN PROSTATE IN THE PRENATAL PERIOD OF ONTOGENESIS

Kluchko S.S.

Supervisor: Syrtsov V.K., Yevtushenko V.M. Zaporozhye state medical university Department of Histology, Cytology and Embryology

Objective. Study of ultrastructural features of the epithelium of the human prostate gland in the prenatal period of ontogenesis. Material and Methods. For the study selected 35 prostate glands of human aged 8 - 39 weeks of embryogenesis. Pieces of the prostate gland for electron microscopic studies were fixed according to a conventional method. Results. In 18-week-old fetuses in the epithelium of the prostatic part of the urethra and in some cells of the epithelium of the secretory departments, secretion granules turn out to be. In cells there are colorless vacuoles