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-β-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

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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

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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

corresponding to the size of the granules. The secretion processes take place in turn in separate groups of glandular sections. Secretory granules are more common in the cells of the epithelium of the glandular ducts than in the terminal sections. The fetal of 20-25 weeks is marked by a further increase in the number of secretory departments. During this period they reach the extreme parts of the gland. The average size of their diameter increases. From the 29th week there has been a slight slowdown in the growth rate of the prostate gland. There is an in-depth specialization of tissues aimed at preparing for the performance of the organ-specific functions, although the growth processes continue. One of the features of epithelial cells of the prostate gland is the process of keratinization, which appears in fruits at the age of 29 weeks. Epithelial components of the prostatic gland of fruits of 27-29 weeks are prone to severe proliferative changes associated with the continuing specialization of glandular sections and excretory ducts. We can assume that certain phases of differentiation of the epithelium are accompanied by a change in the secretory processes. From the 29th week there has been a slight slowdown in the growth rate of the prostate gland. In the ultramicroscopic study, secretory clusters are represented as granules in the cytoplasm of cells and mucous clots in the lumen of the secretory and excretory divisions. Conclusions. Differentiation of epithelial tissue of the gland, first of all, is manifested in the appearance and gradual growth of the secretory activity of epithelial cells. The prostate gland in the embryonic period of ontogeny can be considered as one of the endocrine formations of the fetus.

PATHOHISTOLOGICAL CRITERIA FOR SERRATED POLYPS IN THE COLON

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Serrated polyps (SP) are divided into major subtypes: hyperplastic polyp (HP), sessile serrated adenoma/polyp(SSA/P) and traditional serrated adenoma (TSA).The method for differentiating of subgroups of SP is based on differences in the spread of proliferation zones. HP characterized by straight crypts with a slight extension in their upper third without significant distortion of their shape and tend to have small sizes (<5 mm). Zones of enhanced proliferation are observed at the base of the crypts, and the cells mature toward the outer surface, as it used tobe in normal glands. HP are histologically divided into microvesicular (MVHP),goblet cell-rich (GCHP) and mucin-poor (MPHP). Histologically SSA/P resemble HP with prolonged increase of proliferation and serrated changes which propagate to the basal segment of the crypts. SSA/P are characterized by dilatation of crypts and their branching horizontal growth with distorted crypt architecture, commonly with dilated, mucus-filled, L-shaped and T-shaped crypts with mature cells. The secretion of mucus is usually observed, and this leads to the fact that formation has adistinctive “cap” of mucus. Histologically TSA is characterized by the villiform structure with the prevalence of cells with elongated nuclei and eosinophilic cytoplasm, nuclear stratification in 2–3 lines and the formation of false ectopic crypts. A typical feature of the TSA is that ectopic proliferative crypts are perpendicular to the direction of growth villiform structures and is not in contact with the muscularis mucosae. It was noted, that carcinomas in the right parts of the colon arise from serrated formations, that’s why SP should be removed in a timely manner.

CARRDIOPTECTIVE EFFECTS OF MODULATORS OF THE ESTROGEN RECEPTORS IN THE CONDITIONS OF EXPERIMENTAL ACUTE MYOCARDIAL INFARCTION

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According to modern ideas, in myocardial infarction, a cascade of pathobiochemical reactions is triggered directly in the ischemic focus, leading to a disturbance in the metabolism of cardiomyocytes, the launch of "parasitral" energy-producing reactions, the development of mitochondrial dysfunction, the complete blockade of the synthesis of macroergens, and as a result,