регуляции жизненно важных систем (дыхательной, кровеносной, пищеварительной), приводит к серьёзному ухудшению самочувствия. Если переболевший ковидом человек имел хронические заболевания, пусть даже в состоянии ремиссии, вирус делает течение большинства из них более тяжёлым. Выработка цитокинов в острой фазе болезни помогает справиться с инфекцией, но при этом угнетает центральную нервную систему, приводя к мышечной слабости и депрессивным расстройствам. Чтобы справиться с депрессией надпочечники усиленно выделяют гормон стресса – кортизол, негативно влияющий на иммунную систему.

Пандемия коронавируса — серьёзный вызов для врачей – дерматовенерологов. COVID-19 вызывает различные внешние проявления, которые требуют детального изучения. В некоторых случаях это не только первый сигнал заражения SARS-CoV-2, но и проявление “постковидного синдрома”, поэтому дерматологам необходимо особенно внимательно относиться к своим пациентам в период пандемии. Кроме того, более серьёзные кожные проявления отмечаются при тяжёлом течении болезни, что можно использовать и для диагностики стадии заболевания.

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Key features of phenylephrine administration against the background of If-current blockade on rat cardiovascular indicators in postnatal ontogenesis

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Abstract

The results of the studying expand views on the mechanisms of regulatory influences of the sympathetic part of the autonomic nervous system on the chronotropic function of the rat heart in postnatal ontogenesis, the results of experiments indicate the determining value of currents activated during hyperpolarization (If) in the adrenergic regulation of heart rhythm.

Keywords: regulation of heart function, If-currents, performance indicators of cardiac activity, sympathetic innervation of heart.

Аннотация

Результаты исследования расширяют представления о механизмах регуляторных влияний симпатического отдела вегетативной нервной системы (ВНС) на хронотропную функцию сердца крыс в постнатальном онтогенезе, результаты экспериментов

свидетельствуют об определяющем значении токов, активируемых при гиперполяризации (If) в адренергической регуляции ритма сердца.

Ключевые слова: регуляция работы сердца, If-токи, показатели работы сердечной деятельности, симпатическая иннервация сердца.

Aims. Studying of the effect of phenylephrine (FE) against the background of blockade of If-currents on the cardiac activity of rats of different ages.

Materials and methods. White non-fertile rats of 1-, 3-, 6-, 20 weeks of age in the amount of 35 individuals participated in the experiment. At the age of week 1, rats do not have sympathetic heart innervation. In 3-week-old rats, sympathetic innervation of the heart develops. The 6th week of postnatal development is the age of puberty, and the regulation system of the heart becomes unbalanced. 20-week-old animals have a fully established cardiovascular system. Use in experiments of both females and males was based on data showing no sex differences in the heart rate of male and female white rats between the ages of 1 and 24 months. For animal anesthesia, a 25% urethane solution was used, which was administered intraperitoneally at a dose of 800 mg/kg animal body weight. If ZD 7288 blocker (Sigma) 0.07 mg/kg, non-selective agonist α -AP FE (Sigma) 0.1 mg/kg was injected into the right femoral vein. Throughout the experiment, computer processing of the ECG and the indicators of the variation pulsogram was carried out.

Results. Administration of FE against the background of the action of the If ZD-7288 blocker causes a reliable reduction in cardiac activity of 6 and 20-week-old rats. In adult rats, α -AP agonist was administered against the background of ZD-7288 action, a two-phase cardiac rhythm gain was observed. In 3 and 1-week-old rats, no change in heart rate after FE administration was observed against the background of If blocker action.

Conclusions. The results allow expanding ideas about the mechanisms of regulation of heart function. Blockade of If in adult animals had no effect on the stimulation effect of α -AP. In 3 and 1-week-old rats, the If blockade removed the bradycardic effect of FE. The data confirm the presence of synthesis of HCN4 channels as the equivalent of If currents long before the formation of a full-fledged sympathetic innervation of the heart.

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The using of ursodezoxicholic acid in treatment of acne rosacea

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Abstract

Under clinical observation were 30 patients with different clinical forms of acne rosacea. A lot of patients have functional and organic disturbances of hepatobiliaric system, which were confirm by laboratorical tests. The using of ursodezoxicholic acid leads to regress of clinical signs and normalization of labolatoric analyses.

Keywords: rosacea, ursodezoxicholic acid, ultrasonic research, liver enzymes, lipid fractions.