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«Actual Problems Of Clinical And Theoretical Medicine»

BIOMEDICAL SCIENCES

particular lobules and some parts, intraorganic vascular network of cortical part acquires certain isolation.

The capillaries of adrenal glands of fetus and newborn do not have an independent form, presented by slits that repeat space between cells, their walls are extremely thin. With age capillaries of adrenal glands becomes clear outline and compactness.

Capillary network of adrenal glands in adult becomes less dense and it is not marked independent capillary networks corresponding to different zones of cortical substance.

In fetus and newborn is only one way of outflow from the gland - central vein. In adult except central vein on surface of organ there are several thin veins, their number and caliber is not constant.

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INFLUENCE OF MILD EMOTIONAL STRESS ON THE HEART RATE

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Relevance. Emotional stress is a state of explicit emotional experiences of sudden difficulties of life, the inclusion of non-specific adaptive mechanisms due to the pathogenic effects of the environment, extreme force or prolonged negative emotions (Isaev D. N.) It is of great importance, because it is the basis of many physiological coping responses, which allow to overcome conflicts, personal fears and anxieties. It is also important that the manifestations of stress in students (fear of exam, etc.) can have a crucial effect on all body systems: nervous, immune, cardiovascular and others. Therefore, the study and the knowledge of changes of the sympathetic and parasympathetic nervous systems during emotional stress are required. The circulatory system has a high reactivity and plays a crucial role in the adaptation reconstructions of the physiological state of the organism.(Tkachev V. I., Nadezhkina E. Yu., Filimonov O., 2015) Increase of heart rate during emotional stress is due to the influence of the sympathetic nervous system. The decrease of heart rate during emotional stress is due to the action of the parasympathetic nervous system (Y. V. Shcherbatykh, 2000)

Aim. The determination of the influence of mild emotional stress on the heart rate among the students.

Method. We undertook a study of 56 students in 4 groups of 4 faculties. To assess the reactivity of the autonomic regulation the pulse rate was measured at the radial artery for 1 minute, while sitting, at rest, before emotional stress and after it. The creation of a mild emotional stress in the form of assignments of licensing examination "KROK-1" for last semester was a stress factor.

Results of research. In groups with good progress the pulse rose from 70 % of students: less than 5 beats per minute in 23%, 5-12 beats/minute - 40% and by more than 12 beats a minute in 7%. The heart rate decreased from 30% of students: less than 5 beats per minute in 15%, and 5 to 12 beats per minute also 15%. In groups with low performance the heart rate is elevated in 50% of people. In less than 5 beats/minute heart rate was increased in 15%, on 5-12 beats - 7%, heart rate was increased by more than 12 beats per minute in 30%. The pulse rate dropped in 30% of students in 5-12 times per minute, and 20% remained unchanged.

Conclusions. The studies have found that during mild emotional stress there are changes in the direction of strengthening of sympathetic influences, to a greater extent among students with high academic performance(70%). This is due to the stronger emotional stress in students who have a responsible attitude to the educational process.