CT SCAN: HISTORY, ADVANTAGES, USE NOWADAYS

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Research relevance: computer tomography is one of the best non-invasive diagnostic methods. CT has a wide range of uses and several advantages. However, CT takes only a few percent of the x-ray procedures performed. It is necessary not only to develop new diagnostic methods, but also to make them more accessible.

Objectives: to study the method of CT, areas of its use, advantages over other radiological methods. Familiarize with the peculiarities of the procedure and contraindications.

Materials and Methods: the study and analysis of modern literature and electronic informative resources, articles of foreign and Russian authors, analysis of scientific literature.

Results: CT is a method based on a layer-by-layer examination of the structure of object with the help of X-ray equipment combined with a computer stationThere are multi-slice, single-slice CT, CT with and without contrast, sequential CT, spiral and multilayer multispiral CT, as well as low-dose CT. CT is used to examine any parts of the body and organ systems. Contraindications for CT are: pregnancy, allergy to iodine-containing drugs, high degrees of obesity. Computed tomography with contrast is not carried out patients with severe diabetes, renal failure etc.

Conclusion: CT makes it possible to detect diseases at the earliest stages. At the same time, the radiation load is minimal. Important advantages are: the possibility of obtaining three-dimensional images of internal organs, the speed of the conduct, comfort of the patient. The history of CT has been around for almost 50 years, but the high cost of the procedure hinders its availability.

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THE RESEARCH OF STUDENTS' STRESS RESISTANCE

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Research relevance: stress is a feeling that people have when they are overloaded and struggling to cope with demands. Stress can be a motivator essential to survival. But when there are too many stressors at one time, it can undermine a person's mental and physical health and become harmful.

Objectives: to find out the difference between distress and eustress, to analyze the stress resistance of students and make recommendations on the matter.

Material and Methods: study and analysis of the modern and classic literature, scientific news; a special testing program.

Results: in the experiment 266 students of Saint-Petersburg State Pediatric Medicine University have been tested for the level of stress tolerance. It was found that the greatest number of subjects-72% equally in all courses has a middle level of resistance to stress. The smallest number of tested-10% has a low level of resistance to stress. The low level of stress resistance points out to difficulty in adapting to simplest tasks, daily routine. The half of them is the students of the 3d course. Stress-resistant people can easily adapt to any situation. 18% of the total number of the questioned students has a high level of stress tolerance. Besides, it was found out that the dominant percentages of them are the representatives of the 1–3 courses. During the research the dependence of stress resistance

on such factors as study, work as well as having time for sport exercises, walking and hobby has been analyzed. Students who do sports every day have a high and middle stress tolerance.

Conclusion: there is a difference between eustress, which is a term for positive stress and distress which refers to negative stress. Medical students should be able to alternate study with rest and exercise in order to maintain physical and mental health. A high degree of stress resistance is connected with less time spent on study during the day (8–10 hours), the lack of a strong stress factor — work, as well as positive stress factors: exercise during the week (1–2 hours / week), extracurricular activities (3–4 hours / week), daily walks.

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LES BÉBÉS PRÉMATURÉS

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Actuélité de l’étude: Aujourd’hui 15 millions d’enfants naissent prématurément dont beaucoup ne survivent pas et d’autres risquent d’avoir de graves pathologies. Pourtant la prise des mesures nécessaires peut augmenter leur survie de 50%.

Objectif de l’étude: Révéler les particularités du développement de certains pathologies des prematurés et faire la synthèse sur l’incidence et certains facteurs de risque de la prématurité.

Matériaux et méthodes: L’analyse des donnés statistiques et de la litérature spéciale sur les prématurés.

Résultats: Dans les pays à hauts revenus, l’augmentation de prématurés s’explique notamment par un plus grand nombre de femmes plus âgées ayant des enfants, les traitements de fertilité plus fréquents et les grossesses multiples qui en résultent. Dans nombre de pays en développement, des pathologies graves et un taux de grossesses élevé des adolescentes sont les principales causes des naissances prématurées.

Conclusions: Les bébés prématurés courent un risque de pathologies à vie. L’incidence de celles-ci sur leur vie dépend largement du degré de prématurité à la naissance, et de la qualité des soins à l’accouchement ainsi que dans les jours et les semaines qui suivent. Au niveau mondial, c’est l’une des principales causes de mortalité avant l’âge de 5 ans ainsi que de troubles du développement.

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