



Bezeha Yevhenii

OSTEOCHONDROSIS - A CONSEQUENCE OF HYPODYNAMIA?

Ukraine, Kharkiv

Kharkiv National Medical University

Department of Hygiene and Ecology No. 2

Scientific advisor: assis. Litovchenko O.L.

Topicality. Hypodynamia and hypokinesia are functional features with limited locomotor activity leading to reducing the strength of muscle contraction. Unfortunately, this motor activity is as a consequence of modern urban life. The most revealing pathogenetic properties of this situation are energetic and plastic bending, affecting the skeletal-created system and the spine firstly. Osteochondrosis develops due to the maintaining the uncharacteristic anatomical and functional positions of the spine for a long time. The purpose of the research is to estimate the influence of the sedentary image of life at the anatomically-functional state of the spine as an environmental and social problem.

Results. A sedentary lifestyle is very dangerous because of the location of the shins, which are located with respect to the thighs at an angle of 90° , what leads to violation of the anatomical position of the spine. At the anatomical and physical level, the hip joints stop rotating ealready after the shins are at an angle of 60° to the thighs. To lower the remaining 30° , the muscles of the back of the thighs pull the pelvic bones on themselves, and thus tilting it back leading to a gradual "erasure" of the lumbar spine, due to which it loses its normal S-shape. In this case, the most dangerous movements are rotations of the upper body around its axis with a fixed pelvis, pressure on the vertebrae, rearward facing, when moving heavy objects and single bending of the spinal column since the spinal ligaments can remain dangerously relaxed for 20 minutes afterwards for a person stands up, which increases the risk of injury. All this over time leads to premature aging of the bone and joint apparatus and as a result, to pain. In 2010, WHO listed this issue as a Top 10 Disease and Injury List which cause an increase in DALY (number of years of disability). This problem is compounded by the fact that diagnostics are difficult, since the incidence of pain episodes reaches high numbers from the age of 18, and symptoms tend to recur.



Conclusions. A sedentary lifestyle adversely affects the development and functioning of the spinal trunk because of the unusual permanent position of the shins with respect to the thighs, which further leads to premature pathology of the spine namely the gradual "erasure" of lumbar curvature due to which it loses its normal S-shape. There is a way out of this situation - it is additional physical activity. Adults 65 years of age and older should spend at least 150 minutes a week in medium intensity aerobics classes or at least 75 minutes a week of high-intensity aerobics classes. Each class should last at least 10 minutes. Strength exercises where major muscle groups are involved, should be dedicated 2 or more days per week on WHO recommendations.

Kikosh Kseniia, Yakushev Yehor

INFLUENCE OF GEOMAGNETIC ACTIVITY AND ATMOSPHERIC PRESSURE ON THE QUALITY OF SLEEP OF MEDICAL STUDENTS

Ukraine, Kharkiv

Kharkiv National Medical University

Department of Internal Medicine No.3 and Endocrinology

Scientific advisor: assoc. prof. Moiseenko Tetiana

Relevance. In numerous countries, the problem of sleep deprivation - insomnia - becomes more and more acute each year. This coincides with the increased risk of pathology of the central nervous and cardiovascular systems. Sleep disorders significantly reduce the quality of life, negatively affect mental and physical performance, contribute to the reduction of cognitive motivation in students and teachers, which leads to the emergence of emotional burnout syndrome.

Aim of the study. Identification of the influence of geomagnetic activity and atmospheric pressure on the degree of meteorological dependence among young people, who are affected by these factors.

Materials and techniques. In the course of the study, we conducted a survey among 84 students aged 17 to 21 years. The survey was conducted on the eve and on days 1 and 2 of meteorological changes. The questionnaires included the following questions: presence of anxiety or fear while falling asleep, inability to fall asleep for 30 minutes, night awaking should with headache, nightmare, sleepwalk, bruxism, night sweat, early