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The Physiological Significance Of The Formation And Maintenance Of Correct Posture.

Makhov AS, and Medvedev IN*.

Russian State Social University, st. V. Pika, 4, Moscow, Russia, 129226

ABSTRACT

The normal functioning of the body depends on the state of various organs. Of great importance are the functional features of the nervous, muscular and supporting systems. Their interaction is able to determine the position of body parts relative to each other in space. In this regard, their posture depends on their interaction. It is customarily defined as the position of the body that is most familiar to a person, which he takes while sitting, standing and walking. In normal posture, the most favorable conditions are created for the activity of all internal organs, which ensures high performance and supports a feeling of cheerfulness and confidence. Proper posture should be considered as a certain skill and as a motor skill. The basis of the formation of posture skills is the mechanism of conditioned-reflex connections. Proper posture is characterized by a symmetrical development of the right and left parts of the body, while the cervical and lumbar spine is slightly bent forward, the thoracic - back. These natural curves of the spine are moderately pronounced, the shoulder blades are arranged symmetrically, the shoulders are at the same level and slightly turned, the stomach is tucked up. The correct posture of a person is ensured by several factors at once. These include the optimum state of the spine, the normal tone of the muscles of the body and the balance of the processes of activation and inhibition in the nervous system. In the event of a violation of posture, negative changes can occur in the spine and internal organs, which can be very persistent. Posture disorders can be corrected with the help of various effects on the body. The central place among them is dosed physical exercise. Their use optimizes muscle tone and ensures the restoration of the spatial arrangement of body parts among themselves. Often, physical exercise can be successfully supplemented with posture correction with other non-drug effects.

Keywords: posture, physiology, spine, muscular activity, physical activity.

Corresponding author

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INTRODUCTION

Normal functioning of the body depends on the status of its various systems [1]. Great importance played by functional features of nerve, muscle and supporting systems [2,3]. Their interaction can determine the position of body parts relative to each other in space [4,5]. In this context depends on their cooperation, the posture of man. It is commonly defined as the position of the body, the most familiar to humans, which he takes sitting, standing and while walking [6,7].

Normal posture - the ability to maintain the correct body position. This creates the most favorable, most favorable conditions for the activity of the cardiovascular, respiratory and nervous systems, for internal organs, for higher efficiency. Good posture contributes to maintaining a sense of cheerfulness and confidence [8]. Proper posture should be considered as a certain skill and as a motor skill. The basis of the formation of posture skills is the mechanism of conditioned-reflex connections [9]. Proper posture is ensured by the symmetrical development of the right and left parts of the body, while the cervical and lumbar spine have a slight forward bend, and the thoracic - a small backward. The natural curves of the spine are moderately pronounced, the shoulder blades are arranged symmetrically, the shoulders are at the same level and slightly turned, the stomach is always tucked up [10]. Moreover, in such a person, the muscles are prominent, all joints are mobile. Given the complexity of the problem of physiologically optimal posture, the goal is set in the work: to consider the available information on the formation and maintenance of posture in humans.

Posture is formed in the process of life from the moment of birth of a person. The development of a person's posture depends on three fundamental factors - the angle of inclination of the pelvis, muscle strength and the shape of the vertebral column, which, when properly maintained, should have three distinct bends [11,12]. The most active formation of posture occurs in infancy, preschool and school periods. It is known that a child is born with a straight spine [13]. His spine is not yet prepared for upright walking. The child instinctively "knocks" his legs, strengthening the ligamentous apparatus of the spine and back muscles [14]. By the age of two months, when the baby begins to lie on the tummy and tries to hold its head, the formation of the cervical spinal curvature begins. The next stage in the development of the spine is crawling, and when it begins to sit down it forms - the pectoral curve. The lumbar bend begins to appear when the child makes his first attempts to get up [15].

Simultaneously with the development of the bends of the spine and muscles, a certain position of the head and shoulders is formed. Clearly the character of posture is already visible by 6-7 years. However, it finally formed by 18-20 years.

Violations of posture, especially during growth, can cause persistent deformities of the bone skeleton, disorder of nervous activity, the musculoskeletal system, headaches, increased fatigue and impaired activity of all organs and body systems. When violations of the posture of the skeleton is deformed, the load on the joints, ligaments, muscles are distributed incorrectly, causing the entire musculoskeletal system to suffer and the spring function of the spine to deteriorate. The decrease in the spring function of the spine leads to permanent microtraumas of the brain and spinal cord during walking, jogging and other movements, which adversely affects the higher nervous activity, accompanied by a decrease in efficiency. In addition, if there are defects in posture, internal organs may deviate from the normal position and experience mechanical effects from other organs and tissues. When the position of the spine is disturbed, the spinal nerves are clamped and the circulation of the spinal fluid is disturbed [16,17].

This may be accompanied by disorders of the internal organs. First of all, the cardiovascular and respiratory systems, the gastrointestinal tract are affected, the metabolism decreases, fatigue occurs, appetite decreases, leading to a decrease in their physiological reserves and disturbing the adaptive capacity of the organism. The arising weakness of the muscles of the abdomen and back, the permanently bent position causes a pronounced disturbance of the intestinal motility and biliary tract [18].

In children, some diseases can often contribute to a violation of posture. First of all, it is rickets, hypotrophy, obesity, flat feet, infectious diseases. Irrational mode and malnutrition, improperly chosen furniture at home and at school, non-physiological carrying of a portfolio [19,20] also contribute greatly to poor posture.

However, the main reason for the development of poor posture is insufficient motor activity, which leads to a decrease in the level of physical development of people, deterioration of the internal organs and a gradual decrease in body resistance [21,22]. These people tend to have poorly developed back and abdominal muscles [23,24]. This leads to impaired posture and progression of scoliosis. Therefore, the violation of posture should not be regarded as harmless deformation that does not require correction [25,26].

CONCLUSION

The correct posture of a person is ensured by several factors at once. These include the optimum state of the spine, the normal tone of the muscles of the body and the balance of the processes of activation and inhibition in the nervous system. In the event of a violation of posture, negative changes can occur in the spine and internal organs, which can be very persistent. Posture disorders can be corrected by various effects on the body, the central place among which is occupied by metered exercise. Their use optimizes muscle tone and ensures the restoration of the spatial arrangement of body parts among themselves. Often, physical exercise can be successfully supplemented with posture correction with other non-drug effects.

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