Osteopathic gravity concept

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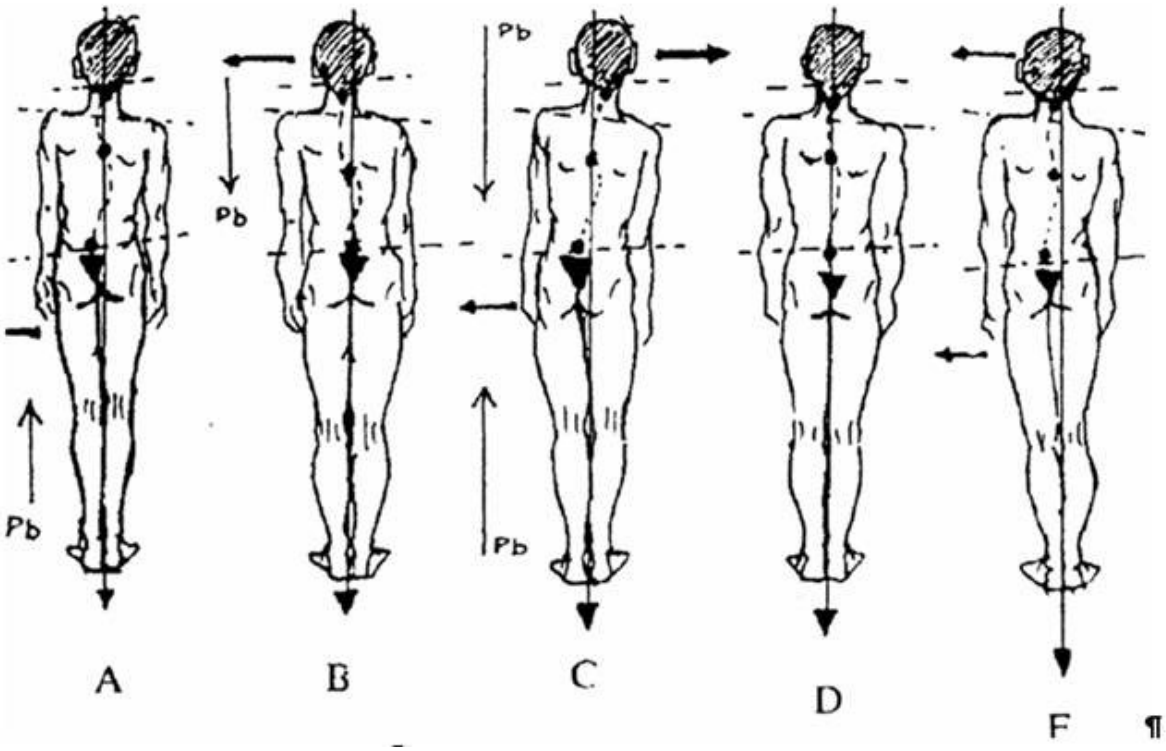
In recent decades, there has been a rapid development of a new medical specialty - posturology, or the doctrine of the vertical position of the human body and methods of holding it.This issue was first raised in 1679, when the Italian naturalist Borelli determined the location of the center of gravity of the human body. Further, biomechanics, the theory of the movement of the human body in space, the study of walking and lameness developed successfully. And finally, about 30 years ago, posturology appeared (from Latin, postura - posture, a certain posture) (Gaqey R.M., 1988, 1991; Assclair V., 1977; Gaqey R.M, Guillaume R., 1988; Toupet, 1991). The ability to maintain balance in an upright position is one of the most important conditions in the interaction of a person and the external environment.

Rice. 1

This is a difficult task, and for its implementation in the process of phylogenesis, a complex system of subtle automatic regulation of body position has been developed. Our body obeys the law of minimum energy absorption. That is, the skeletal system, balancing itself, minimizes the waste of energy, which increases its functionality and performance. The vertical position of the human body is normal, within

four degrees, supported only by tonic and tonic-phasic muscles. These are slow muscles, but they can be in tension for a long time, spending little energy.For other functions (movement in space, gripping objects, etc.) there is phasic-tonic and phasic-phasic muscles (polyarticular muscles). These muscles can withstand heavy loads for a short time, but they quickly become depleted. The balance of the human body is regulated by three main force vectors: anteroposterior force vector and two anteroposterior vectors. The connection of the ends of these vectors forms two triangles, which are called force triangles. Based on the analysis of these force vectors, it can be understood that violations in the upper force triangle will lead to a change in the position of the elements of the lower triangle (force adaptation).II, bodies ThIV and LIII, the pelvic floor, the middle of the perineum and projecting onto the supporting surface posterior to the line of the ankles (Littlejohn JM, 1956).

The task of all force vectors is to ensure the balance of the parts of the skeleton and the balance of the physiological pressures of the chest and abdominal cavities. The line of gravity of the body passes through the middle of the base of each force triangle. Three lines of force and two triangles maintain the balance of mechanical physiological tensions of the musculo-ligamentous apparatus and the balance of physiological pressures of the chest and abdominal cavities. The balance is regulated by impulses entering the central nervous system from endogenous and exogenous sensors. The works of Fukuda (1961, 1993) showed that disturbances in the activity of at least one of the sensors lead to a disturbance in postural tone with the development of functional pathology. Endogenous sensors include the oculomotor muscles and retina, the vestibular apparatus and receptors of the plantar surface of the feet, exogenous - spine sensors, hip, knee and ankle joints. If, for any reason, the impulses coming from any of the sensors of the postural system are disturbed, and the threat of imbalance, the phasic muscles of the back and lower back are switched on, which cannot withstand prolonged stress. Their overstrain can lead to imbalance and cause the development of lumboischialgia (Caporossi R., 1991). Studies by A. Schneibel (1988) showed that osteopathic mobilization of the sphenobasilar symphysis leads to changes in body position, which was further objectified by statokinesimetry (Caporossi R., 1996). The Wagge vertical makes it possible to highlight the problems of the postural system (Guillaume P., 1988), schematically indicated in Fig. 2. coming from any of the sensors of the postural system, and the threat of imbalance, the phasic muscles of the back and lower back are included in the work, which cannot withstand prolonged stress. Their overstrain can lead to imbalance and cause the development of lumboischialgia (Caporossi R., 1991). Studies by A. Schneibel (1988) showed that osteopathic mobilization of the sphenobasilar symphysis leads to changes in body position, which was further objectified by statokinesimetry (Caporossi R., 1996). The Wagge vertical makes it possible to highlight the problems of the postural system (Guillaume P., 1988), schematically indicated in Fig. 2. coming from any of the sensors of the postural system, and the threat of imbalance, the phasic muscles of the back and lower back are included in the work, which cannot withstand prolonged stress. Their overstrain can lead to imbalance and cause the development of lumboischialgia (Caporossi R., 1991). Studies by A. Schneibel (1988) showed that osteopathic mobilization of the sphenobasilar symphysis leads to changes in body position, which was further objectified by statokinesimetry (Caporossi R., 1996). The Wagge vertical makes it possible to highlight the problems of the postural system (Guillaume P., 1988), schematically indicated in Fig. 2. Their overstrain can lead to imbalance and cause the development of lumboischialgia (Caporossi R., 1991). Studies by A. Schneibel (1988) showed that osteopathic mobilization of the sphenobasilar symphysis leads to changes in body position, which was further objectified by statokinesimetry (Caporossi R., 1996). The Wagge vertical makes it possible to highlight the problems of the postural system (Guillaume P., 1988), schematically indicated in Fig. 2. Their overstrain can lead to imbalance and cause the development of lumboischialgia (Caporossi R., 1991). Studies by A. Schneibel (1988) showed that osteopathic mobilization of the sphenobasilar symphysis leads to changes in body position, which was further objectified by statokinesimetry (Caporossi R., 1996). The Wagge vertical makes it possible to highlight the problems of the postural system (Guillaume P., 1988), schematically indicated in Fig. 2. The Wagge vertical makes it possible to highlight the problems of the postural system (Guillaume P., 1988), schematically indicated in Fig. 2. The Wagge vertical makes it possible to highlight the problems of the postural system (Guillaume P., 1988), schematically indicated in Fig. 2.



Rice. 2. Types of balance disorders

Types of balance disorders:

A) Balance disorders coming from below: shortening of the leg, lumbodynia, sprains of the ankle, knee and hip joints, the consequences of injuries to the bones of the foot.

C) Balance disorders coming from above: cervicalgia, change in the position of the clavicle, shoulder, consequences of a neck injury, incorrectly centered glasses, subluxation of the temporomandibular joint.

C) Balance disorders A + B. D)

Compensated scoliosis.

E) Homolateral hypertonicity due to central or vestibular damage (damage such as "blow of the whip", post-emotional syndrome).

Osteopathic postural treatment will consist in performing joint techniques aimed at restoring proprioception of various structures of the human body, restoring occlusion, vestibular and oculomotor functions, and reducing the tension of scars and adhesions. The art of an osteopath lies in identifying the primary pathology and consequences, which allows him to significantly reduce the risk of complications and increase the efficiency of his work. An osteopath knows how to ask the body a question in its language, which makes it possible to choose the right technique of exposure.

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