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Functional foot correction is the basis of any therapy

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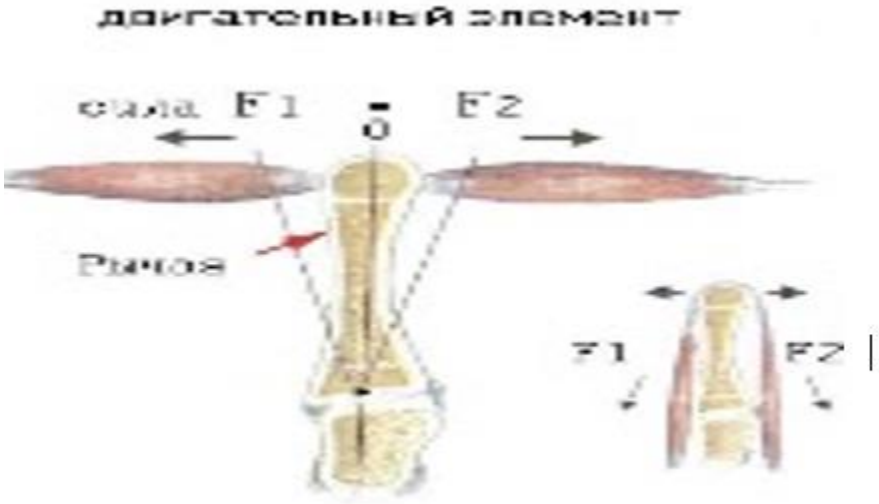
Abstract

The main drive that supports lymph and blood circulation in the body - the processes of cell metabolism - are the musculoskeletal structures. This is indicated by human physiology, but this is not taken into account in the treatment - rehabilitation of the body.

Keywords: venous-muscular pumps; Deformations.

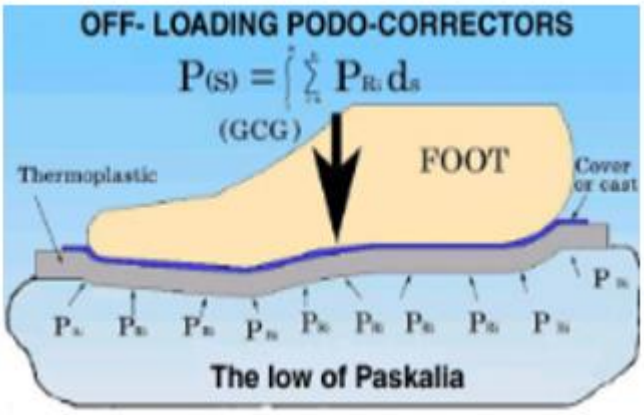
Introduction:

The main drive that supports lymph and blood circulation in the body - the processes of cell metabolism - are the musculoskeletal structures. This is indicated by human physiology, but this is not taken into account in the treatment - rehabilitation of the body. The skeleton must be considered not only as a system of levers and muscles that form our posture, but also as a set of movements that are laid down by nature to maintain the functioning of the lymphatic and venous-muscular pumps. Paired muscles hold the bones of the joints in the so-called neutral position. This achieves the relative stability of the body, in which the General Center of Gravity of the body constantly oscillates in the X-Y planes within 2-4 cm from its neutral position. So, in a state of relative rest, the nutrition of the cells is continuously maintained, and the products of their decay are removed. Without muscle contraction, the system of respiration, digestion, and thermoregulation would not work.



Two-thirds of all energy the body spends on maintaining the work of the musculoskeletal system. Hence, it can be argued that the work of all organs is aimed at the development and maintenance of muscle performance. Two-thirds of the blood is in the venous system. The rise of lymph and blood from the feet to the heart is carried out due to the synchronously connected work of the lymphatic and venous-muscular pumps, which is determined by the biomechanics of walking, by the sequence in which the muscles of the feet, hips and abdominals contract. The muscle mass of a physically developed person is 55-67% of body weight. Mental development of a person, recharging of brain cells is also considered in conjunction with the state of the muscles. But for some reason, those who do not have knowledge in the field of biomechanics are engaged in this main function of the

musculoskeletal frame of the body. Here is the reason for such a rapid increase in the percentage of deformities of the feet and spine, diseases of the body. Deformations in the structures of the skeleton today began to be observed already in childhood. Medicine only says that diseases have become younger, but does not give an explanation for this.



Any movement begins with a displacement of the GCG of the body or a separate part of it: arms, torso or head. The resulting bending, twisting and other moments of force are compensated by the muscles in an effort to return the body to a stable position. This state is controlled by the vestibular apparatus and the Central Nervous System, which acts on the muscles of the spine, bending it to bring the head, the vestibular apparatus into a vertical position. This is how the C-shaped or S-shaped spine is formed, which is related to the position of the sacroiliac joints, which are located at different heights for each of us due to the formed functional and anatomical difference in the lengths of the legs. By eliminating the functional component of shortening: - deformities of the arches of the feet, deviations of the calcaneus, ankle and knee joints, it is possible to compensate for the anatomical difference in the lengths of the legs. When the GCG of the body is brought to the CG of the supporting triangle of the feet, then the spine will align. To do all this work without special equipment is beyond the power of any specialist. Especially when it comes to bringing the arches of the feet to a neutral position. If the load on the arches of the foot is directed from top to bottom, then it can only be compensated by an oppositely directed force, that is, in a standing position, but not in a sitting or lying position, which is done today by the hydraulic system when taking footprints. In this case, the GCG of the body will be projected into the area of the reference triangle of the feet. Performing, thus, the correction of the feet and the spine, the conclusion suggests itself: the process of correcting the feet should not be carried out by a specialist with a narrow focus. If one specialist makes insoles and other deals with the spine without taking into account the relationship between them, then a positive result cannot be achieved. A holistic system is characterized precisely by the fact that without normalizing one of the parameters, all other characteristics will not be normal. Without eliminating the deformation of the skeleton, it is impossible to normalize the metabolism of cells and the functioning of internal organs.

With deformities, when a displacement of the bones of the skeleton from a neutral position is observed, then one of the paired muscles will be weakened, and the opposing muscle to it will be excessively stretched and it cannot contract. The question was how to quickly relax it and thereby help the spine align when the patient stood on the device. This is important because when the same load on the feet is reached, the device will compensate and measure the existing anatomical component of the difference in leg lengths, the pelvis and spine will take a natural anatomical position. Thus, a muscle relaxation technique was developed, which allows achieving the desired results in 30-40 minutes. They can be explained by the fact that in a stretched muscle, the ion channels of cell membranes have changed their shape to such an extent that elementary particles that contribute to its contraction cannot enter the cell. It is possible to restore the structure, shape of a cell, like any other substance.

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