

Abstract: The spine is a pillar of good physical, energetic and emotional health. It is the most important component of the musculoskeletal system of the human body, which provides us with the necessary flexibility and acts as a shock absorber, absorbing all the daily stress loads we are subjected to. It functions as an information "highway" along which countless nerve impulses pass. This is the reason why we constantly monitor his condition, due to his frequent susceptibility to deformations and injuries. The modern way of life in modern society does not support the health of the spine, due to the sedentary lifestyle and unnatural postures we assume every day. The veins of the spinal column have a more specific structure, so blood stagnation often occurs due to long standing or sitting in one place, in the same position. A person who spends all day in front of a computer and stretches the back muscles for a long time is at risk of developing blood clots. Such incorrect posture and the standing position in the so-called "vicious posture" is a prerequisite for the already imposed modern diagnosis "computer neck". The abnormal condition of the spine, which leads to the inappropriate position when sitting in the chair or the incorrect position at the work desk, can turn into a serious complication, which often affects people who are engaged in mental work. Correct posture is essential in an active and dynamic lifestyle. To achieve all this, it is necessary to practice upright posture, to do basic strengthening exercises every day. **Disc herniation:** Disc herniation is a condition that affects the spinal column, during which there is a rupture of the outer fibrous ring (annulus fibrosus) of the intervertebral discs, so that the soft central part (nucleus pulposus) is deformed and penetrates into the spinal canal, causing compression of the structures. in it. **Clinical picture and symptoms:** Symptoms vary depending on the location and size of the herniated disc. If the herniated disc is not pressing on a nerve, it is possible for the "herniated disc" to present itself only with back pain or no pain at all. When a nerve is pinched, there may be pain, numbness, or weakness in the area of the body innervated by the corresponding nerve. Disc herniations occur most often between the ages of 30 and 50 when the nucleus pulposus is still a gelatinous substance. Over the years, the consistency of the nucleus pulposus changes ("dries") and the risk of hernia is much lower. In the case of disc herniation, the nerve roots can be pressed and neurological symptoms can appear, such as changes in sensitivity or in movement (motor) activity. **Research methods:** The research activity was carried out in the Clinical Hospital - Stip, in the Departments of Physical Therapy and Kinesitherapy. The research includes 22 patients diagnosed with disc herniation of the spine, of which 14 patients are male, and 8 patients are female. Patients are divided into two groups. For patients from the Control group, medication treatment, physical medicine and kinesitherapy are applied. In addition to Physical Medicine and Kinesitherapy, Functional Magnetic Stimulation is also included in the patients from the Experimental Group. The aim of the research is: to study the effectiveness of the treatment with Functional Magnetic Stimulation, Physical Rehabilitation and Kinesitherapy in patients with spinal disc herniation. **Disc herniation treatment:** Disc herniation treatment with Functional Magnetic Stimulation (FMS) is non-invasive, painless and without side effects. The therapeutic program is determined individually for each patient, depending on the symptoms and diagnosis. It takes 15 to 20 minutes and is applied every other day for 2 to 3 weeks. The improvement can be felt after the first few treatments. **Results:** After the completion of the treatment for the patients with disc herniation, the achieved effects of the application of Functional Magnetic Stimulation, Physical Rehabilitation and Kinesitherapy in the subjects from the Control and Experimental groups are summarized, the research results were processed and the achieved changes were compared. The obtained results show a visible improvement in the condition of the patients from both groups, but significantly faster and better results were achieved for the patients from the Experimental group. **Conclusion:** The advantages of disc herniation treatment with functional magnetic stimulation (FMS) compared to physical medicine, other types of electrotherapy and kinesitherapy are the effective stimulation of deep muscle structures and nerves without direct contact with the skin, through an alternating magnetic field.

Key words: disc herniation, pain, physical medicine, kinesitherapy, functional magnetic stimulation;

Field: Medical Sciences