Suspension systems are now widely used in restorative treatment, as well as in the training process. Suspension therapy or cling-therapy is a method of physical rehabilitation with the use of various systems of the suspension of the whole body or limbs. These suspensions provide joints unloading and support of body during exercise. The suspension is unstable support for the body in a horizontal plane, and this is another feature of the sling therapy. This unstable support activates the coordination of movements and promotes quality of equilibrium restoration by eliminating the imbalance in muscle tone in the right and left half of the body, as well as in the antagonist muscles. Vast majority of exercises performed in suspension systems are associated with the activation of the spine stabilizing muscles. The main attention is paid to the transverse abdominal muscles as an important stabilizer of the spine in the abdominal part.

These suspensions provide unloading of joints and body support during exercise.

A variety of limbs’ suspensions make it possible to exclude strong muscles from the exercise, involving in the work only those muscle groups that need training, and to create new, more stable patterns of movement. In addition to this, suspension systems treatment can diagnose the "weak link" in the musculoskeletal system and effectively eliminate it during training, launching mechanisms of sanogenesis. One of the major factors limiting the rehabilitation process is pain during exercise or movement. The use of system allows you to create a condition in which the patient will not feel pain. The above mentioned features of sling therapy determine the wide range of indications for the use of this method, such as diagnosis of "weak link" of the musculoskeletal chain; correction of revealed asymmetries in muscle tone; improvement of movement coordination; relieving of pain occurring while movements or efforts. The listed indications for use of suspension systems are not limited and may be significantly expanded. The important feature of the suspension therapy is its comfort for patient. Sling therapy can be used individually or in small-group formats in hospital or rehabilitation centers, and in sports clubs or fitness centers. The suspension systems can be used independently at home after the preliminary instruction of specialist. Numerous clinical studies have shown the effectiveness of the method
of the suspension therapy in various diseases and dysfunctions of the musculoskeletal system, such as lower back pain, the consequences of sports and ballet traumas, knee injury, pelvic pain after childbirth, fibromyalgia, chronic musculoskeletal pain and other conditions. Sling therapy has been successfully used to stabilize the cervical spine and shoulder girdle. In pediatrics suspension systems are widely used to treat children with cerebral palsy. The number of patients’ applications with the syndrome of back pain is increasing. Most of these patients require activation of spine stabilizing muscles and functional training.

Suspension systems are widely used in sport exercises, particularly in sports requiring precision and coordination of movements. Two versions of suspension systems are currently used in the training process. These are functional and loops TRX Redcord mini (Terapi master, Ekzarta mini). The advantages of these systems are their compactness and relative cheapness. Sports suspension systems are sufficiently mobile and do not require, as a rule, specific stationary fastening. For example, the system Redcord mini can be easily fasten even on the door. It is also can be mounted on the wall bars, and even on a bed equipped with a Balkan frame. Sports suspension systems have initially limited functionality and are designed primarily to improve motor skills, rather than to promote their recovery. Sports suspension systems are not provided with additional elastic suspensions. Modification of these systems can increase their efficiency in rehabilitation process. The possible modification of the sports suspension systems lays in the use of elastic suspensions. The use of elastic suspension during the exercise, as our experience shows, greatly increases variety of the exercises and their efficiency. The use of elastic suspensions makes it possible to strengthen the weaker muscle groups by alternating performance of dynamic and static exercises. In this case the doctor is able to prevent participation of other, stronger muscle groups, in the motion. In some cases, only the use of elastic suspensions makes it possible to perform certain movements. Elastic suspensions permit to perform dynamic work and resistant overcoming exercises. Another feature of the elastic suspensions is facilitation of movement in patients with reduced force of specific muscle groups.
The specific stiffness spring or belt expanders can be used as elastic supplements to the sports suspension systems. Involvement of compensatory muscle in movement is a signal for finish of exercises or for changing the conditions of their performing. By this way it is possible to form and train the right motor pattern in a patient without much effort. The use of elastic supplements makes it possible to increase or decrease the load without changing the number of repetitions of exercises and, accordingly.