

Abstract:

Chronic low back pain is an increasing phenomenon in highly developed countries. More and more people suffer from back pain and the age limit is decreasing. The search for an efficient preventive method and therapy is therefore crucial. With deeper understanding of human physiology, especially regarding the central nervous system, neurophysiological approaches come into interest. One of them is called sensorymotor stimulation, commonly known as stability training. It addresses the afferent system of human organism and by that influences cerebral centres of motor control, which optimize the function of deep stabilization muscles. The main function of these muscles is segmental stabilization of the spine column at rest and during dynamical activities. When these muscles aren't functioning properly, the spine column and surrounding structures suffer from overload, which results in back pain. Sensorymotor stimulation represents an efficient way of dealing with chronic back pains. Therefore, in this work I have been addressing the use of stability training in patients with chronic low back pain.