

Abstract

Introduction: The aim of this thesis is to answer a question if it is possible to influence ventilation parameters with an application of Vojta's reflex locomotion, which is one of the neurophysiologic techniques. The thesis confronts actual knowledge and relation between respiratory and postural function of „respiratory“ muscles and the diaphragm and possibility of its reflex affection.

Methods: With a spirometry we assess the impact of short-time activation of Reflex locomotion on the lung functions in a group of 21 healthy subjects in age 18 – 33 years. The study evaluates the effect of activation in two situations. First, it is instantaneous effect of Vojta's method on lung function. Second situation is the assessment of the time duration of evoked effect of activation and make out, if the changes are seen also after 25 minutes over the end of Vojta's stimulation.

Results: Based on the interpretation of the both monitored situations, we set up an observation that short time activation of Vojta's reflex therapy has an effect on respiratory mechanics and thus on the spirometric values. At the other side we realize that not all of the changes were significant and some of them were unadvisable. Moreover all of them had very short persistency, after 25 minute none of the observed changes of lung functions was significant and negative shifts, induced by stimulation, were again more or less normal.

Conclusion: Short-period activation of the muscles of thorax and trunk to physiological respiratory and postural function and affected respiratory motor function with Vojta's reflex locomotion has an effect on lung function and spirometric values. Changes in lung functions have short-time duration and not all of them are significant and positive.