

ABSTRACT

Respiratory insufficiency and the need of mechanical ventilation together represent a big problem for physiotherapeutic rehabilitation in patients on the intensive care units.

The main objective of this thesis is to confirm the effect of Vojta reflex locomotion on increasing tidal volume and respiratory rate. A secondary objective of this thesis is to track the changes in blood pressure and heart rate and determine their direction of change. The final objective is to confirm the use of Vojta reflex locomotion as a method of early mobilization of patients.

Methods: This study involves 7 probands aged from 42 to 73 years, who were undergoing mechanical ventilation in spontaneous mode. All 7 of these probands were hospitalized in KAR FNKV. Every patient underwent a therapy of Vojta reflex locomotion in the starting position of reflex turning I. with the stimulation of chest zone for the duration of 5 minutes on each side.

Results: Based on the results of Wilcoxon pair test we can confirm that the tidal volume increased one hour after therapy in comparison to the values collected immediately before therapy (p-value 0,018). Also the values of respiratory rate increased immediately after therapy (p-value 0,028) and one hour after therapy (p-value 0,037). There were no significant changes in the values of blood pressure and heart rate.

Conclusion: This thesis confirms the increase in tidal volume and respiratory rate after the Vojta reflex locomotion therapy. It is possible to use this method in early mobilization of mechanically ventilated patients.

Key words: Vojta reflex locomotion, reflex stimulation, mechanical ventilation, tidal volume, respiratory rate