

Abstract

Title: Influence of whole body vibration training on postural stability in selected sporting population

Objectives: The aim of this study is to compare the influence of whole body vibration training on the stability of the human body and assessing the possibility of using this training method to improve postural stability in selected sporting population.

Methods: 15 mainly beach volleyball players (athletes) were randomly assigned into two groups. Experimental group (n 8) in addition to their own training practiced twice a week on the Power Plate, while the control group (n 7) to continue the current practice of beach volleyball. The experimental group participated in a total of twelve units during the six-week exercise intervention. We reviewed the standard deviation and average values of COP displacements in the anteroposterior, mediolateral and overall direction of the COP path. For this purpose, we used pressure platform Footscan.

Results: The results indicate a clear trend to improve postural stability at the beach volleyball player after a six-week intervention, whole body vibration training. Improvement was most noticeable in tests Flamengo (standing on one leg), in which the total COP path decreased for all probands at the right lower extremity and in six of the eight probands in the left lower extremity.

Keywords: postural stability, proprioception, whole body vibration training, Power Plate