Abstract

Title

The effect of wearing high heel shoes on pelvis motion

Aim of the thesis

The main aim of this thesis is the verification of the influence of wearing high heel shoes on pelvis motion in the sagittal plane, while walking on high heel shoes and walking on heel less shoes. After then, we want to monitori the impact of walking in these shoes on the trajectory of pelvis motion.

Methods

Objectification method was 3D record of human gait (= kinematic analysis), which was performed using the Qualisys Track Manager. In our thesis we used the method of comparison. The aim of the study is the comparison of parameters measured in different types of shoes (high heeled shoes, high heeled less shoes with barefoot gait) and the influence on pelvis motion in the sagittal plane. Measurements were carried out in the gym at the Faculty of Physical Education and Sport at ten probands.

Results

Pelvis tilt to retroversion was more significant when walking on heel less shoes compared with high heel shoes and barefooted walking, also an angle of the trunk and pelvis were most significantly diminished when walking on heel less shoes compared to barefooted walking and high heel shoes. Objectively, a larger deflection of pelvis trajectory while walking on high heel shoes was not confirmed compared to walking on heel less shoes. The average length of steps was most reduced when walking on high heel shoes, a little less when walking on HHL compared to barefoot walking.

Keywords

Gait, shoes, heel less shoes, high heel shoes, 3D kinematic analysis.