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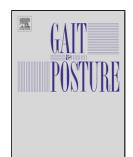
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Effects of high heeled shoes on gait. A review.

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Abstract

Background

Walking in high heels (HH) may alter gait in various ways, which may be of importance to designers and physicians.

Research question

How does walking in high heels alter gait and how can this be explained from a biomechanical and control point of view.

Methods

Relevant literature has been collected in which high heeled walking was studied, after which the results were bundled and interpreted in a framework of biomechanics and control.

Results

Major changes were found in the rollover function of the feet, the ankle and knee joints and the lower back, while step length and balance were compromised. An increase in heel height forces the foot in an increased plantar flexion, which in its turn increases knee flexion and lordosis of the lower back. All changes can be related with each other in a plausible pattern of movement and control.

Keywords: shoes, footwear, walking, high heels, gait.

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