conferenceseries.com

J Tissue Sci Eng 2017, 8:5(Suppl)
DOI: 10.4172/2157-7552-C1-043

THE EFFECT OF SHOE MODIFICATION ON WOUND CARE IN DIABETIC PATIENTS: A LITERATURE REVIEW

Monireh Ahmadi bani[a], Atefeh Aboutorabi[a] and **Mokhtar Arazpour[a]**
[a]University of Social Welfare and Rehabilitation Sciences, Iran

Introduction: shoe with rocker sole profiles have been announced as main modality of shoe outsole modification. Rocker sole profiles have been reported to improve plantar pressures parameters. Several studies have investigated the effect of rocker sole profiles on plantar pressure in healthy subjects and patients with diabetic foot. Since there was no literature review about the effect of the shoe with rocker sole profiles on plantar pressure and wound care, therefore this study was designed to evaluate the effect of rocker sole on foot pressure in patients with diabetic foot.

Method and material: The preferred reporting items for systematic reviews and meta-analyses (PRISMA) method was used by an experience researcher based on selected keywords and their composition and an electronic search was performed in well-known databases.

Results: 9articles were selected for final evaluation. Many were nonrandomized clinical trials, and two out of nine were randomized control trial. There were heterogeneities in included participants and intervention characteristics and measuring instruments between studies. The results of the analysis demonstrated that shoe with rocker sole decreased peak and mean pressure in heel, forefoot and first toe significantly in healthy and diabetic patients while there was no difference between peak pressure in midfoot with and without rocker sole profile. Although about other toes, there was controversy between studies in literatures.

Discussion and conclusion: shoes rocker sole profile can decrease heel, forefoot and first toe pressure in diabetic foot by offloading different regions of the forefoot during standing and walking specially in diabetic foot, which is important for diabetic wound care. However, more studies are needed to demonstrated efficacy of this shoe modification in high-risk patients. (1-5).