

Original Paper

Immediate effect of silicon insole on plantar pressure distribution in subjects with heel spur

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Abstract

Background and Objective: Heel spur is a common rearfoot syndrome in more than 45 aged people which accompanied with pain. This study was done to assess the effect of silicon insole on plantar pressure distribution in subjects with heel spur.

Methods: In this quasi-experimental study, 12 female and 3 male with heel spur were recruited. Plantar pressure in five areas of foot was measured by Pedar-X insole when wearing standard shoe only; shoe with foot orthosis immediately after 9 meter walking.

Results: Silicon insole reduced pressure in medial forefoot ($P<0.05$) and heel ($P>0.05$). Silicon insole increased force ($P<0.05$), contact area ($P<0.05$) and pressure time integral (PTI) ($P<0.05$) in medial midfoot and reduced PTI in medial forefoot ($P<0.05$).

Conclusion: Silicon insole reduced mean peak pressure in medial forefoot and mean peak pressure in five area of foot.

Keywords: Heel Spur, Silicon insole, Heel pain, Arch support, Pedar system, Plantar pressure

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