

**Lee SY, McKeon P, Hertel J . Does the use of orthoses improve self-reported pain and function measures in patients with plantar fasciitis? A meta-analysis. Phys Ther Sport 2009;10(1):12-18.**

Design: Meta-analysis of controlled trials

Study question: In patients with plantar fasciitis, do orthotic devices reduce pain and improve function?

Reasons not to cite as evidence:

- There are considerable difficulties with designating the elements of a meta-analysis for the PICOS
  - o Patient population is adequate: presenting with plantar fasciitis at the time of recruitment
  - o The requirement of searching more than one database is met
  - o Intervention/Comparison may be too diverse to attempt to combine in a meaningful way
    - Winemiller 2003 compared non-magnetized with magnetized cushioned insoles
    - Roos 2006 compared a custom-made foot orthosis with a night splint
    - Landorf 2006 compared prefabricated with a customized orthosis
    - Rome 2004 Compared an accommodative (but not a custom) orthosis with a functional orthosis
  - o Outcomes on different scales were all converted into a percentage of the total possible score for pain and function, rather than being combined in a standardized mean difference, which is the optimum way of combining potentially diverse outcomes
  - o Study types were combined without due attention to control of bias
    - Besides the four studies mentioned above, two other studies which were included in the meta-analysis were not randomized and ordinarily should be excluded
    - It is not clear whether more than one author assessed the studies for quality; this may have been done but cannot be assumed
- The method of meta-analysis is not adequately explained, but it appears from Figures 2 and 3 that Roos 2006, which had a night splint as a control group, was used as some sort of reference category to which pooling of the other studies was compared

Assessment: inadequate to use as evidence for or against the effectiveness of orthotic devices for control of pain or improvement of function for plantar fasciitis