

iCAHE JC Critical Appraisal Summary

Journal Club Details

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| Journal Club | Community Physiotherapy |
| JC Facilitator | Penny Brodribb |
| JC Discipline | Physiotherapy |

Clinical Scenario

What is the efficacy of pre-fabricated orthosis to treat lower limb problems such knee pain?

Review Question/PICO/PECO

- P** Patients with knee pain
- I** Pre-fabricated orthosis
- C** other treatment
- O** knee pain

Article/Paper

Barton CJ, Munteanu SE, Menz HB, Crossley KM 2010. The efficacy of foot orthoses in the treatment of individuals with Patellofemoral Pain Syndrome: A systematic review. *Sports Medicine*; 40 (5): 377-395.

Please note: due to copyright regulations CAHE is unable to supply a copy of the critically appraised paper/article. If you are an employee of the South Australian government you can obtain a copy of articles from the [DOHSA librarian](#).

Article Methodology: Systematic Review

Journal club meeting on: June 9, 2011



| Ques No. | Yes | Can't Tell | No | Comments |
|----------|-----|------------|----|--|
| 1 | ✓ | | | <p>Did the review ask a clearly-focused question?</p> <p>Yes. The review pointed out the aim in the abstract as well as in the background section of the study.</p> <p>This systematic review was conducted to summarize and critique the existing evidence for the efficacy of foot orthoses in individuals with patellofemoral pain syndrome (PFPS) and to provide guidance for future research evaluating foot orthoses in individuals with PFPS.</p> |
| 2 | ✓ | | | <p>Did the review include the right type of study?</p> <p>The review included all types of experimental studies except single participant and non peer reviewed studies.</p> <p>Is it worth continuing? YES</p> |
| 3 | ✓ | | | <p>Did the reviewers try to identify all relevant studies?</p> <p>The reviewers searched MEDLINE, EMBASE, CINAHL, Cochrane, Current Contents electronic database and PEDro using several search terms and combinations.</p> |
| 4 | ✓ | | | <p>Did the reviewers assess the quality of the included studies?</p> <p>The reviewers used a quality assessment scale which was taken and modified from Bizzini et al.(2003), details of which was provided in the appendix of the article</p> |
| 5 | | NA | | <p>If the results of the studies have been combined, was it reasonable to do so?</p> <p>The studies found were too heterogeneous to combine the results so the authors have analysed and discussed each study separately.</p> |
| 6 | | | | <p>How are the results presented and what is the main result?</p> <p>The main findings from each study are presented with their statistical analysis.</p> <p><i>Bottom line results</i></p> <ul style="list-style-type: none"> The review found limited evidence that prefabricated foot orthoses may reduce the range of transverse plane knee rotation and provide greater short-term improvements in individuals with PFPS compared with flat inserts. Findings also indicated that combining physiotherapy with prefabricated foot orthoses may be superior to prefabricated foot orthoses alone. |

CONTACTS
www.unisa.edu.au/cahe
 karen.grimmer-somers
[@unisa.edu.au](mailto:karen.grimmer-somers@unisa.edu.au)
 Telephone (08) 8302 2769
 Facsimile (08) 8302 2766

University of South Australia
 GPO Box 2471
 Adelaide SA 5001
 Australia

CRICOS Provider Number
 001218



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| 7 | | <p>How precise are these results?</p> <p>The results should be taken with caution as the studies had a fair amount of methodological flaws and most didn't do a power calculation. In addition applicability of findings from these studies is limited to a population demonstrating excessively pronated foot structure or function as measured by the chosen assessment technique for each study. Thus this limits its relevance to other populations of individuals.</p> |
| 8 | Journal Club to answer | <p>Can the results be applied to the local population?</p> <p>Were all important outcomes considered?</p> <p>Should policy or practice change as a result of the evidence contained in this review?</p> |
| <p><u>Summary of search strategy</u></p> <p>Key words Concept 1: orthotic OR orthosis OR orthoses Concept 2: knee pain</p> <p>Databases Medline, EMBASE, CINAHL, Academic Search Premiere, PubMed, Allied and Complementary medicine, BioMed Central Gateway, ProQuest family health, Health and Medical Complete, Sports Discuss and Google</p> <p>Limiters English articles only, published in the past 10 years</p> | | |

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www.unisa.edu.au/cahe
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