



Clinical Weekly - 181st Edition

#JOURNALTUESDAY - by Abi Peck

Efficacy of foot orthoses for the treatment of plantar heel pain: a systematic review and meta-analysis. [Download here](#)

1. Did the review address a clearly focused question?

Yes is foot orthoses effective for treating plantar fascia. Systematic review comparing use of orthoses to other management (sham, conservative measures and no intervention).

2. Did the authors look for the right type of papers?

Yes, RCT (control vs orthoses) and outcomes of pain, function or recovery

3. Do you think all the important, relevant studies were included?

Included studies from a number of different search engines and different countries.

4. Did the review's authors do enough to assess the quality of the included studies?

Risk of bias was assessed by two independent reviewers, any disagreements were reviewed by a third author.

5. If the results of the review have been combined, was it reasonable to do so?

The results from different studies were clear, studies were separated based on intervention and methods used vs orthoses. Studies that were pooled were appropriate due to similarities.

6. What are the overall results of the review?

Orthoses are not superior compared to sham or conservative measures for plantar heel pain.

7. How precise are the results?

Results in the studies were discussed and analysed based on confidence intervals/ statistical significance within the studies used. (Please look at individual results paragraphs for more details).

8. Can the results be applied to the local population?

Yes, no limitations on age or onset of symptoms. A large proportion of people seen in clinic with foot pathologies are likely to have plantar heel pain.

9. Were all important outcomes considered?

Yes outcomes assessed were pain, function and recovery times.

10. Are the benefits worth the harms and costs?

No harms were reported. Benefits of the study show that orthoses aren't as important as what was previously believed in the management of plantar heel pain.





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#NEWSOFTHEWEEK - by Liz Wright

1. Ultrasound-guided hydrodissection decreases gliding resistance of the median nerve within the carpal tunnel

This study aimed to assess alterations in median nerve biomechanics within the carpal tunnel following a ultrasound-guided hydrodissection in a cadaveric model. 12 (6 of which were controls) human cadaver hands were used; median nerve gliding resistance was measured at baseline and post injection, by pulling the nerve proximally and then returning it to the origin. In the hydrodissection group there was a significant reduction in mean peak gliding resistance between baseline and immediately post injection. No significant reduction between baseline and the second cycle occurred in the control group. It must be noted that these wrists were unaffected by carpal tunnel syndrome. Sample size was small so generalisability of findings is likely to be lacking. Nonetheless a clinical trial of hydrodissection in the future seems justified as it was found hydrodissection can decrease the gliding resistance of the MN within the carpal tunnel, at least in wrists without carpal tunnel syndrome.

<https://bit.ly/2qnAXKw>

2. Reliability of the shoulder symptom modification procedure (SSMP) and association of within-session and between-session changes with functional outcomes. OPEN ACCESS.

This single-centre reliability study examines the interclinician reliability of the SSMP and the association of within-session and between-session changes on clinical outcomes. 26 shoulder pain patients – an initial SSMP-based assessment was performed and then a second examination was performed by a second physiotherapist (blinded to the results of the first). Clinical outcomes were recorded at one week, 1 month and 3 months. Inter-reliability of the SSMP was moderate. Association of within-session changes ranged from fair (short-term) and poor (mid-term). The association of between-session changes ranged from substantial to moderate in the short-term, but only slight in the mid-term. On these study's findings, there is insufficient evidence to recommend the SSMP as a reliable/validated evidence tool for the examination of shoulder pain patients. Between session changes in pain seem strongly associated with outcome in the short-term, but diminish in the mid-term.

<https://bit.ly/2qoQoSF>

3. Psychological factors not strength deficits are associated with severity of gluteal tendinopathy: A cross-sectional study

Gluteal tendinopathy is the most common lower limb tendinopathy presenting to general practice. High prevalence rates amongst middle-aged women are evident. The aim was to compare physical and psychological characteristics between subgroups of severity of pain and disability. There were significantly higher pain catastrophizing and depression scores in the more severe subgroups. Lower pain self-efficacy scores were found in the severe group compared to the moderate and mild groups. Greater waist girth and BMI, lower activity levels and poorer QOL were reported in the severe group compared to the mild group. Hip abductor muscle strength and hip circumference did not differ between subgroups of severity. Individuals with severe gluteal tendinopathy present with psychological distress, poorer quality of life, greater BMI and waist girth. Given the features which the individuals with severe gluteal tendinopathy presented with, the consideration of psychological factors in more severe patients may be important to optimise patient outcomes.

<https://bit.ly/2GRrgLI>





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#FRACTUREFRIDAY BY SCOTT ROWBOTHAM

Bosworth fracture

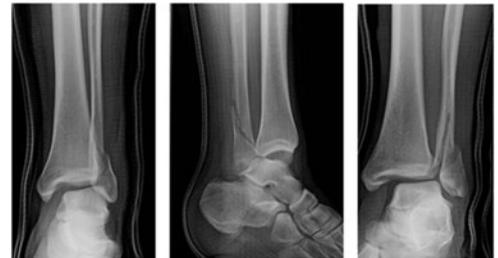
An obsolete term used to describe a type of fracture-dislocation of the ankle. It is more commonly known anatomically and involves a fracture of the fibula and posterior dislocation of the talus. The fracture is very rare; less than 100 having been documented since the type was first classified.

Mechanism of Injury

There does not seem to be a specific mechanism of injury to cause a predilection to this type of fracture-dislocation.

Imaging

If radiologically misdiagnosed it can lead to severe disability due to malunion and often arthrodesis eventually for correction.



Some Orthopaedic surgeons state an x-ray including the knee can help differentiate between fracture-dislocations of the ankle; types that can be relocated and the fracture-dislocations that can't.

Thin cut CT scans that are then reconstructed in to a 3D image will provide evidence of the proximal fibula portion having migrated behind the tibia.

Complications

Bosworth ankle fracture-dislocation is a rare yet severe injury. Due to the proximal aspect of the distal fibula fracture portion moving posteriorly behind the tibia it cannot be treated using closed reduction attempts. It must be operated on using open reduction and internal fixation

Rehabilitation

Physiotherapy involvement will be guided orthopaedically depending on fracture fragments, union post-surgery and metalwork involved.

References

<https://radiopaedia.org/articles/bosworth-fracture>

<http://www2.aoao.org/members/news/2014/winter/casereport2.html>

