## THU0751-HPR

## EFFECTIVENESS OF FOOT ORTHOSIS IN PATIENTS WITH RHEUMATOID ARTHRITIS RELATED TO QUALITY OF LIFE AND PAIN. A SYSTEMATIC REVIEW AND META-ANALYSIS.

G. Gijon-Nogueron<sup>1,\*</sup>, L. Ramos-Petersen<sup>1</sup>, S. Garcia-Mayor<sup>1</sup>, J. M. Morales-Asencio<sup>1</sup> <sup>1</sup>Nursing and Podiatry, UNIVERSITY OF MALAGA, Malaga, Spain

**Background:** Foot pain and deformity is almost ubiquitous in RA and results in considerable physical and psychosocial impairment [1]. Epidemiological studies consistently suggest a 90% prevalence of foot pain despite advances in pharmacological therapy[2]. Mechanical and other non-pharmacological interventions such as orthoses and footwear, have an important role in managing foot pathology in patients with their systemic disease controlled [1,3]. The effectiveness of treatment with insoles, especially in early periods, was studied in a randomized controlled trial, which results suggested an immediate clinical improvement, reducing foot pain, disability and limited functionality.[1]

**Objectives:** The aim of this study is the effectiveness of foot orthosis in patients with rheumatoid arthritis in terms of quality of life and pain.

Methods: A systematic review and meta-analysis was conducted of randomized controlled trials.

*Participants*: Patients with rheumatoid arthritis were included. The criteria of exclusion were Juvenile Rheumatoid Arthritis, analysis of gait,

Intervention: Studies had to compare foot orthosis

Comparison: Other type of treatments, other type of foot orthosis, sham

*Outcomes:* Evaluation of Pain or Quality of life with any tool that measure this outcomes

The search was conducted in Cochrane, CINAHL, PubMed, EMBASE, LILACS, and Cuiden. An independent peer review was carried out. The Mesh term and fields used were foot, ankle, joint, rheumatoid arthritis, foot, orthosis, insole, foot orthosis.

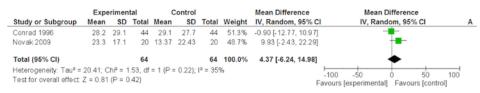
**Results:** After the analysis of 71 studies, 4 were included for the systematic review. The 4 studies enrolled 285 participants. Follow-up periods varied from 6 to 30 months.

Only two studies were included in the meta-analysis[4,5], both of them with pain (measured with Foot Function Index) as the selected outcome.

A meta-analysis of the two trials showed that use of FO resulted in a non-significant improvement in disability compared with control (MD (95% CI): 4.37 (-6.24, 14.98); N=64) (Figure 1).

## Image/graph:

1.2 Foot pain (FFI)- 6 months



**Conclusions:** Foot orthoses showed improvements in pain and disability/quality of life, but no significant differences between groups were found. Future research needs to increase the number of RCTs in this topic because results are not conclusive.

**References:** 1. Woodburn J, Barker S, Helliwell PS. A randomized controlled trial of foot orthoses in rheumatoid arthritis. J Rheumatol. 2002;29:1377–83.

Otter SJ, Lucas K, Springett K, Moore A, Davies K, Young A, et al. Comparison of foot pain and foot care among rheumatoid arthritis patients taking and not taking anti-TNFalpha therapy: an epidemiological study. Rheumatol Int. 2011;31:1515–9.
Hennessy K, Woodburn J, Steultjens MPM. Custom foot orthoses for rheumatoid arthritis: A systematic review. Arthritis Care Res (Hoboken). 2012;64:311–20.

4. Conrad KJ, Budiman-Mak E, Roach KE, Hedeker D, Caraballada R, Burks D, Moore H. Impacts of foot orthoses on pain and disability in rheumatoid arthritics. J Clin Epidemiol. 1996 Jan;49(1):1-7

5. Novak P, Burger H, Tomsic M, Marincek C, Vidmar G. Influence of foot orthoses on plantar pressures, foot pain and walking ability of rheumatoid arthritis patients--a randomised controlled study. Disabil Rehabil. 2009;31(8):638-45.

## Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.2739