

Specific Question:

In adults with ankle osteoarthritis (OA) is conservative management (excluding injections) / rehabilitation / exercise better than no treatment for pain / swelling / quality of life / function / delaying or preventing surgery?

Clinical Bottom Line

There is no published literature to answer the specific question

Due to the lack of clear evidence for benefits and harms of conservative management for adults with ankle OA, it would be sensible to recommend audits of current clinical practice within local/regional services/pathways to help inform practice guidelines.

Why is this important?

This question was selected due to the lack of standardized treatment for ankle OA. Having established in a previous CAT question that there is no evidence to compare conservative treatment versus surgery, it is then sensible to compare conservative management against no treatment.

Search timeframe (e.g. 2006-2017)

Inclusion Criteria

	Description	Search terms
Population and Setting	Adults with ankle OA within any care setting	Adults, OA, osteoarthritis, lower limb, talocrural joint, joint pain
Intervention or Exposure	physiotherapy, exercise and conservative management, including advice leaflets etc	Physiotherapy, exercise, conservative management, advice, leaflets, education, heat, ice, cryotherapy, hands-on, manual therapy, stretches, strengthening, weight loss, NSAIDS, pain killers,

Getting Evidence into Clinical Practice:
Musculoskeletal Research Facilitation Group (CAT Group)
Date: October 2018

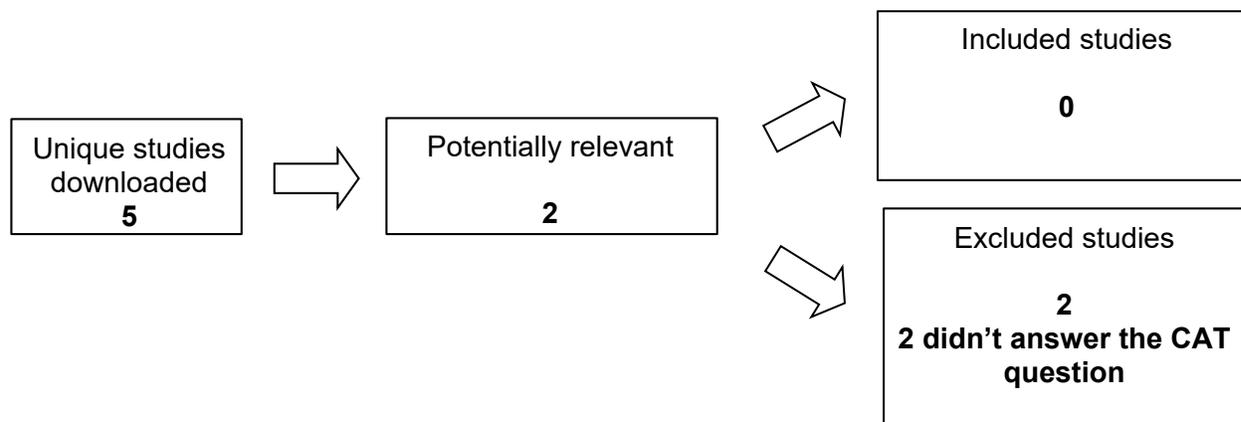
		acupuncture, insoles, brace, rocker sole
Comparison, if any	Surgical interventions	surgery, surgical, arthrodesis, ankle fusion, ankle replacement, osteotomy
Outcomes of interest	Visual analogue scale, ROM, quality of life, function, AOS, AOFAS	Pain, visual analogue scale, quality of life, ROM, function, return to work
Types of studies	RCT and SR	RCT and SR

Routine Databases Searched

Clinical Knowledge Summaries, PEDro, BMJ Updates, Clinical Evidence, TRIP, Database, NICE, HTA, Bandolier, The Cochrane Library, Medline, Cinahl, Embase, PsycInfo, Professional websites. Joanna Briggs Institute, Web of science, Sports discus and Pub med

Date of search- November 2017

Results of the search



Summary

Ankle OA has significant different pathogenesis compared to hip and knee OA. Previous bone trauma to the ankle contributes to nearly 80% of all ankle OA cases, compared to 9.8% and 1.6% of knee and hip OA patients respectively (Chang et al. 2013).

Patients with ankle OA are on average younger than typically seen in OA populations, occurring in the middle-aged years for most patients. Patients with ankle OA suffer an accelerated functional decline with progression to end stage ankle OA is 10-20 years (Chang et al. 2013).

Several studies have published positive results for knee and hip OA conservative management and include weight reduction, physiotherapy and occupational therapy. Conservative management for ankle OA is clinically based on general OA guidelines (NICE Osteoarthritis Management, 2018), however no studies have been identified to support the use on non-surgical treatment with adults with ankle OA (Witteveen et al. 2015).

Implications for practice/research

At present there is no evidence for the benefit or harm of conservative management (excluding hyaluronic acid injections, see previous CAT:

- [https://www.keele.ac.uk/media/keeleuniversity/ri/primarycare/CAT%20-%20hyaluronic%20injections%20KS%20THB%20OB%20\(1\).pdf](https://www.keele.ac.uk/media/keeleuniversity/ri/primarycare/CAT%20-%20hyaluronic%20injections%20KS%20THB%20OB%20(1).pdf)

Despite the different pathogenesis and aetiology of adult ankle OA it is sensible to continue applying general OA guidelines to a patients' management. Previous trauma accounts for 80% of ankle OA cases. Therefore, clinicians should be highly suspicious of ankle OA in the absence of a diagnosis confirmed with radiograph techniques should the patient have a history of previous trauma to the ankle.

Surgical complication rates vary up to 44%. Due to the high risk of short and long term surgical complications, clinicians should avoid onward referral to orthopedic specialists for patients with low grade ankle OA.

Further high quality, large RCT's are required to improve and develop best practice conservative management guidelines.

What would you tweet about your CAT?

'No studies are available to answer whether conservative management is beneficial over no treatment for patients with ankle OA.'

References

Bloch B, Srinivasan S, Mangwana J. (2015) Concepts in the Management of Ankle Osteoarthritis: A Systemic Review. *The Journal of Foot and Ankle Surgery*; **54**: 932 - 939

Chang K, Hsiao M, Chen W, Wang T, Chien K (2013) Effectiveness of Intra-Articular Hyaluronic Acid for Ankle Osteoarthritis Treatment: A Systemic Review and Meta-Analysis. *Archives of Physical Medicine and Rehabilitation*; **94**: 951 - 960

National Institutes for Health and Care Excellence (2018) Management of Osteoarthritis; <http://pathways.nice.org.uk/pathways/osteoarthritis>

Schmid T, Krause FG (2013) Conservative treatment of asymmetric ankle osteoarthritis. *Foot and Ankle Clinics*; **18** (no.3): 437-448

Witteveen A, Hofstad C, Kerkhoffs G (2015) Hyaluronic acid and other conservative treatment options for osteoarthritis of the ankle. *Cochrane Database of Systemic Reviews*; **10**