Table des matières

Achilles Tendinopathy

Tendinite achilléenne : évaluation de l'acupuncture

1. Systematic Reviews and Meta-Analysis

☆☆☆	Evidence for effectiveness and a specific effect of acupuncture.
☆☆	Evidence for effectiveness of acupuncture.
☆	Evidence for effectiveness of acupuncture mais limitées qualitativement et/ou quantitativement.
Ø	No evidence or insufficient evidence.

1.1. Generic Acupuncture

1.1.1. Trinh K 2021 ☆

Trinh K, Belski N, Zhou F, Kuhad A, Luk D, Youn E. The Efficacy of Acupuncture on Foot and Ankle for Pain Intensity, Functional Status, and General Quality of Life in Adults: A Systematic Review. Med Acupunct. 2021 Dec 1;33(6):386-395. doi

Objective	To assess the effect of acupuncture on foot and ankle pain intensity, functional status, quality of life, and incidence of adverse events in adults.
Methods	Randomized controlled trials (RCTs) were obtained from a systematic search of 6 major English databases, and a manual search of relevant systematic reviews using Google Scholar. RCTs that compared acupuncture with various forms of sham acupuncture, nonactive and waitlist controls for pain intensity, functional status, and general quality of life were included. Study screening, data extraction, risk of bias assessment, and quality assessment were all performed independently. A narrative synthesis was performed when quantitative pooling was inappropriate.
Results	**Four RCTs** were included, encompassing a total of **211 participants**. Due to clinical heterogeneity for all outcomes, quantitative analysis was not appropriate. Our Grades of Recommendation, Assessment, Development and Evaluation rated all outcomes to have either low or very low quality of evidence. With low-quality evidence, acupuncture was shown to be efficacious for participants with plantar fasciitis for pain relief and functional status improvement at short- and intermediate-term follow-ups. Acupuncture was also shown to be efficacious for participants with **Achilles tendinopathy** for pain relief at short- and intermediate-term follow-ups. No adverse events were reported.
Conclusion	There is some evidence to suggest acupuncture to be a safe and efficacious treatment for relieving pain and improving functional status for the foot and ankle. The results of this systematic review should be interpreted with caution due to the limited evidence. Future research should

1.1.2. Rhim 2020 ☆

Rhim HC, Kim MS, Choi S, Tenforde AS. Comparative Efficacy and Tolerability of Nonsurgical Therapies for the Treatment of Midportion Achilles Tendinopathy: A Systematic Review With Network Meta-analysis. Orthop J Sports Med. 2020;8(7). [212480]. doi

Background	Achilles tendinopathy (AT) is a common cause of overuse injury in both athletes and nonactive individuals, especially at older ages. Due to the limited number of direct comparisons among interventions, determining the best treatment option can be difficult.
Purpose	To evaluate the comparative efficacy and tolerability of nonsurgical therapies for midportion AT. Study design: Systematic review; Level of evidence, 1.
Methods	PubMed, MEDLINE, EMBASE, and Google Scholar were searched from database inception through June 20, 2019. Randomized controlled trials investigating the effect of nonsurgical therapies for midportion AT using the Victorian Institute of Sports Assessment-Achilles (VISA-A) assessment were eligible for inclusion. Primary outcome was mean change in VISA-A score from baseline. Comparisons between interventions were made through use of random-effects network meta-analysis over the short term (≤3 months) and longer term (>3 to <12 months). A safety profile was defined for each intervention by rate of all-cause discontinuation (dropout) during follow-up. Relative ranking of therapies was assessed by the surface-under-the-cumulative ranking possibilities.
Results	A total of 22 studies with 978 patients met the inclusion criteria. In short-term studies, high-volume injection with corticosteroid (HVI+C) along with eccentric exercise (ECC) significantly improved the change of VISA-A score compared with that of ECC alone (standardized mean difference [SMD], 1.08; 95% CI, 0.58-1.58). Compared with ECC, **acupuncture** showed benefits over both the short term (SMD, 1.57; 95% CI, 1.00-2.13) and longer term (SMD, 1.23; 95% CI, 0.69-1.76). In longer-term studies, the wait-and-see approach resulted in unfavorable outcomes compared with ECC (SMD, -1.51; 95% CI, -2.02 to -1.01). Improvement was higher when ECC was combined with HVI+C (SMD, 0.53; 95% CI, 0.05-1.02) and extracorporeal shockwave therapy (ESWT) (SMD, 0.99; 95% CI, 0.48-1.49). All interventions had a similar safety profile.
Conclusion	From available high-level studies, HVIþC and ESWT may be possible interventions to add along with ECC to improve longer-term outcomes.

1.1.3. Van der Vlist 2019 (network meta-analysis) ☆

Van der Vlist AC, Winters M, Weir A, et al. Which treatment is most effective for patients with Achilles tendinopathy? A living systematic review with network meta-analysis of 29 randomised controlled trials. Br J Sports Med. 2019:101872. [211878]. doi

Objective	To provide a consistently updated overview of the comparative effectiveness of treatments for Achilles tendinopathy.
Design	Living systematic review and network meta-analysis. Data sources: Multiple databases including grey literature sources were searched up to February 2019. Study eligibility criteria: Randomised controlled trials examining the effectiveness of any treatment in patients with both insertional and/or midportion Achilles tendinopathy. We excluded trials with 10 or fewer participants per treatment arm or trials investigating tendon ruptures. Data extraction and synthesis: Reviewers independently extracted data and assessed the risk of bias. We used the Grading of Recommendations Assessment, Development and Evaluation to appraise the certainty of evidence. Primary outcome measure: The validated patient-reported Victorian Institute of Sport Assessment-Achilles questionnaire.

Results	29 trials investigating 42 different treatments were included. 22 trials (76%) were at high risk of bias and 7 (24%) had some concerns. Most trials included patients with midportion tendinopathy (86%). Any treatment class seemed superior to wait-and-see for midportion Achilles tendinopathy at 3 months (very low to low certainty of evidence). At 12 months, exercise therapy, exercise+injection therapy and exercise+night splint therapy were all comparable with injection therapy for midportion tendinopathy (very low to low certainty). No network meta-analysis could be performed for insertional Achilles tendinopathy.
Summary/conclusion	In our living network meta-analysis no trials were at low risk of bias and there was large uncertainty in the comparative estimates. For midportion Achilles tendinopathy, wait-and-see is not recommended as all active treatments seemed superior at 3-month follow-up. There seems to be no clinically relevant difference in effectiveness between different active treatments at either 3-month or 12-month follow-up. As exercise therapy is easy to prescribe, can be of low cost and has few harms, clinicians could consider starting treatment with a calf-muscle exercise programme.
Acupuncture	acupuncture therapy (mean difference VISA-A score 35 points, CrI 25 to 45 points) Acupuncture therapy seemed superior to placebo injection therapy (16 points, 4 to 30 points), injection therapy (13 points, 0 to 25 points), exercise therapy (15 points, 11 to 19 points), shockwave therapy (20 points, 9 to 31 points), exercise+injection therapy (13 points, 2 to 25 points), exercise+night splint therapy (14 points, −1 to 30 points) and mucopolysaccharides supplement+exercise therapy (7 points, −3 to 19 points), but not to exercise+shockwave therapy (1 point, −9 to 11 points).

2. Clinical Practice Guidelines

⊕ positive recommendation (regardless of the level of evidence reported)
Ø negative recommendation (or lack of evidence)

2.1. American College of Occupational and Environmental Medicine (ACOEM, USA) 2015 Ø

Ankle and Foot Disorders. American College of Occupational and Environmental Medicine. 2015. 453P. [180844].

- Recommendation. Acupuncture for Acute, Subacute, Chronic, or Post-operative **Achilles Tendinopathy**. There is no recommendation for or against the use of acupuncture for the treatment of acute, subacute, chronic, or post-operative Achilles tendinopathy. Strength of Evidence - No Recommendation, Insufficient Evidence (I). Level of Confidence – Low.
- Recommendation. Dry Needling for Acute, Subacute, or Chronic **Achilles Tendinopathy**. Dry needling is not recommended for treatment of acute, subacute, or chronic Achilles tendinopathy. Strength of Evidence - Not Recommended, Insufficient Evidence (I). Level of Confidence – Moderate.

3. Randomized Controled Trials / Essais contrôlés randomisés

3.1. Sources

1. Acudoc2: RCTs identified in the Acudoc2 database but not included in the cited SRs.
2. Trinh 2021: Trinh K, Belski N, Zhou F, Kuhad A, Luk D, Youn E. The Efficacy of Acupuncture on Foot and Ankle for Pain Intensity, Functional Status, and General Quality of Life in Adults: A Systematic Review. Med Acupunct. 2021 Dec 1;33(6):386-395. doi
3. Rhim 2020: Rhim HC, Kim MS, Choi S, Tenforde AS. Comparative Efficacy and Tolerability of Nonsurgical Therapies for the Treatment of Midportion Achilles Tendinopathy: A Systematic Review With Network Meta-analysis. Orthop J Sports Med. 2020;8(7). [212480]. doi
4. Van der Vlist 2019: Van der Vlist AC, Winters M, Weir A, et al. Which treatment is most effective for patients with Achilles tendinopathy? A living systematic review with network meta-analysis of 29 randomised controlled trials. Br J Sports Med. 2019:101872. [211878]. doi

3.2. List

	RCT	Sources
2019	Kishmishian B, Richards J, Selfe J. A randomised feasibility study using an acupuncture protocol to the Achilles tendon in Achilles tendinopathy. Physiother Pract Res. 2019;40(1): 59–67.	Trinh 2021
2015	Yu Hong-li, Xu Lin-lin, Ma Tie-ming. Therapeutic effect of electro-acupuncture in the treatment of Achilles tendonitis. World Journal of Acupuncture-Moxibustion. 2015;25(2):17. [189348].	Acudoc2
2013	Zhang Bi-Meng, Zhong Li-Wei, Xu Si-Wei, Jiang Hui-Ru and Shen Jian. Acupuncture for chronic achilles tendinopathy: A randomized controlled study. Chinese Journal of Integrative Medicine. 2013;19:900-4. [147341]. doi	Rhim 2020, Van der Vlist 2019
2007	Jie JR, Jie JL. [Observations on the efficacy of oblique acupuncture plus massotherapy for treating traumatic peritenonitis of achilles tendon in 35 cases]. Shanghai Journal of Acupuncture and Moxibustion. 2007;26(9):18. [146931].	Acudoc2