Table des matières

Sarcopenia

Sarcopenie

1. Systematic Reviews and Meta-Analysis

☆☆☆	Evidence for effectiveness and a specific effect of acupuncture
☆☆	Evidence for effectiveness of acupuncture
☆	Limited evidence for effectiveness of acupuncture
Ø	No evidence or insufficient evidence

1.1. Guo 2022

Guo CY, Ma YJ, Liu ST, Zhu RR, Xu XT, Li ZR, Fang L. Traditional Chinese Medicine and Sarcopenia: A Systematic Review. Front Aging Neurosci. 2022 May 13;14:872233.
https://doi.org/10.3389/fnagi.2022.872233

Background	Sarcopenia has become a key challenge for healthy aging in older adults. However, it remains unclear whether traditional Chinese medicine can effectively treat sarcopenia. This systematic review analyzes the current evidence for the effect of traditional Chinese medicine (TCM) on sarcopenia.
Methods	We searched for articles regarding sarcopenia treated by TCM in Cochrane library, PubMed, SinoMed, Web of Science, Embase, and the China National Knowledge Infrastructure (from inception until 10 December 2021). Two researchers independently screened the literature in accordance with the inclusion and exclusion criteria designed by PICOS principles. The risk of bias was assessed by the Cochrane Risk of Bias (ROB) tool. The quality of evidence was assessed by the grading of recommendations, assessment, development, and evaluation (GRADE). Participants' characteristics, interventions, and the relevant results of the included studies were extracted and synthesized in a narrative way.
Results	The total number of participants in the 21 included studies was 1,330. Most of the studies evaluated physical function (n = 20) and muscle strength (n = 18), and a small number of studies (n = 6) assessed muscle mass. Overall, it was found that TCM had a positive impact on muscle strength (grip strength, chair stand test) and physical function (6-m walking speed, timed up and go test, sit and reach) in patients with sarcopenia, inconsistent evidence of effects on muscle mass. However, the small sample size of the included studies led to imprecision in the results, and the presence of blinding of the studies, allocation concealment, and unreasonable problems with the control group design made the results low grade. Among these results, the quality of evidence for grip strength (n = 10) was of medium grade, and the quality of evidence related to the remaining indicators was of low grade.
Conclusions	This systematic review showed that traditional Chinese Qigong exercises and Chinese herbal medicine have a positive and important effect on physical performance and muscle strength in older adults with sarcopenia. Future high-quality multicenter randomized controlled trials (RCTs) with large samples are needed to determinate whether **acupuncture** and other therapies are effective in treating sarcopenia.

1.2. Negm 2022

Negm AM, Lee J, Hamidian R, Jones CA, Khadaroo RG. Management of Sarcopenia: A Network Meta-Analysis of Randomized Controlled Trials. J Am Med Dir Assoc. 2022 May;23(5):707-714. https://doi.org/10.1016/j.jamda.2022.01.057

Objective	This study aimed to determine the comparative effectiveness of interventions in treatment of sarcopenia. The primary outcome was the measure of treatment effect on muscle mass, and secondary outcomes were the treatment effect on muscle strength and physical performance.
Design	Systematic review and network meta-analysis (NMA).
Setting and participants	Participants with sarcopenia receiving interventions targeting sarcopenia in any setting.
Methods	Data sources: Relevant RCTs were identified by a systematic search of several electronic databases, including CINAHL, Embase, MEDLINE, and the Cochrane Central Registry of Controlled Trials (CENTRAL) from January 1995 to July 2019. Duplicate title and abstract and full-text screening, data extraction, and risk of bias assessment were performed.
Data extraction	All RCTs examining sarcopenia interventions [mixed exercise (combined aerobic and resistance exercise), aerobic exercise, resistance exercise, balance exercise, physical activity and protein or nutrition supplementation, **acupuncture**, whole-body vibration, protein supplement or interventions to increase protein intake, any nutritional intervention other than protein, and pharmacotherapy] were included. Comparators were standard care, placebo, or another intervention.
Data synthesis	We performed Bayesian NMA; continuous outcome data were pooled using the standardized mean difference effect size. Interventions were ranked using the surface under the cumulative ranking curve (SUCRA) for each outcome.
Results	A total of 59 RCTs were included after screening of 4315 citations and 313 full-text articles. Network meta-analysis of muscle mass outcome (including 46 RCTs, 3649 participants, 11 interventions) suggested that mixed exercise were the most effective intervention (SUCRA = 93.94%) to increase muscle mass. Physical activity and protein or nutrition supplementation, and aerobic exercise were the most effective interventions to improve muscle strength and physical performance, respectively. Overall, mixed exercise is the most effective intervention in increasing muscle mass and was one of the 3 most effective interventions in increasing muscle strength and physical performance.
Conclusions and implications	Mixed exercise and physical activity with nutritional supplementation are the most effective sarcopenia interventions. Most of the included studies have a high risk of bias. More robust RCTs are needed to increase the confidence of our NMA results and the quality of evidence.