

FPIN's Clinical Inquiries

Tai Chi for Fibromyalgia

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Clinical Question

Does tai chi improve quality of life in patients with fibromyalgia?

Evidence-Based Answer

The practice of Yang-style tai chi for one hour twice weekly for 12 to 24 weeks is moderately effective in improving quality of life in patients with fibromyalgia. (Strength of Recommendation [SOR]: B, based on a small meta-analysis and randomized controlled trial [RCT].) No significant adverse effects have been reported in patients with fibromyalgia who perform tai chi. (SOR: B, based on a small meta-analysis and RCT.) Most of the study participants were women, and these results may not be generalizable to men.

Summary

A 2013 systematic review investigated complementary treatments for fibromyalgia.¹ In a subgroup of five trials ($n = 242$), the mean pre- and postintervention Fibromyalgia Impact Questionnaire (FIQ) scores were compared in patients who practiced Yang-style tai chi (the most popular of the five types). Results from all five studies favored tai chi. The overall standardized mean difference (SMD) was 1.14 ($P < .000$). (SMDs greater than 0.8 are generally considered a large effect.) No

serious adverse effects were reported. Three of the trials were open label, and two trials were also not controlled. One study included only men; the four others were 85% to 94% female.

A 2018 prospective, single-blind, comparative effectiveness trial enrolled 226 adults with fibromyalgia for 52 weeks.² Patients were randomly distributed to five supervised treatment groups in intention-to-treat analysis to examine whether tai chi is more effective than aerobic exercise in patients with fibromyalgia. Patients in four groups participated in classic Yang-style tai chi once or twice per week for 12 or 24 weeks. The fifth group participated in aerobic exercise twice weekly for 24 weeks. The primary outcome was change in the Revised Fibromyalgia Impact Questionnaire (FIQR) score over 24 weeks, with other outcome measures collected for 52 weeks. The most benefit of tai chi was observed with a twice-weekly program for 24 weeks, which resulted in a mean difference of 16.2 points on the FIQR in the tai chi group vs. the aerobic exercise group (95% CI, 8.7 to 23.6; $P < .0001$). Twelve weeks of once-weekly tai chi did not significantly improve FIQR scores more than aerobic exercise. At 52 weeks, the group that practiced twice-weekly tai chi for 24 weeks had a mean difference of 11.1 ($P < .01$) compared with the aerobic exercise group. All reviewed trials used the American College of Rheumatology diagnostic criteria for fibromyalgia.³ Outcomes were based on the FIQ and the FIQR, which contain quality-of-life measures (e.g., functional limitations, feeling overwhelmed by symptoms).⁴ Both questionnaires include 21 questions, and scores range from 0 (lowest impact) to 100 (highest impact).

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