Chronic Low Back Pain: Yoga vs. PT

Authors: David McVay DO, Matthew Acker MD

In His Image Family Medicine Residency, Tulsa OK

Question

In patients with low back pain, does yoga or home exercise improve pain or hasten return to normal function better than physical therapy?

Evidence-Based Answer

In patients with low back pain, weekly yoga sessions result in similar improvements in function compared to other weekly supervised exercises (SOR: A, meta-analysis of RCTs and single RCT). Yoga may reduce pain more than other supervised exercises at 6 months after treatment (SOR: C, inconsistent meta-analysis of RCTs and single RCT). Daily yoga sessions may improve function more than other daily supervised exercises (SOR: C, small RCT).

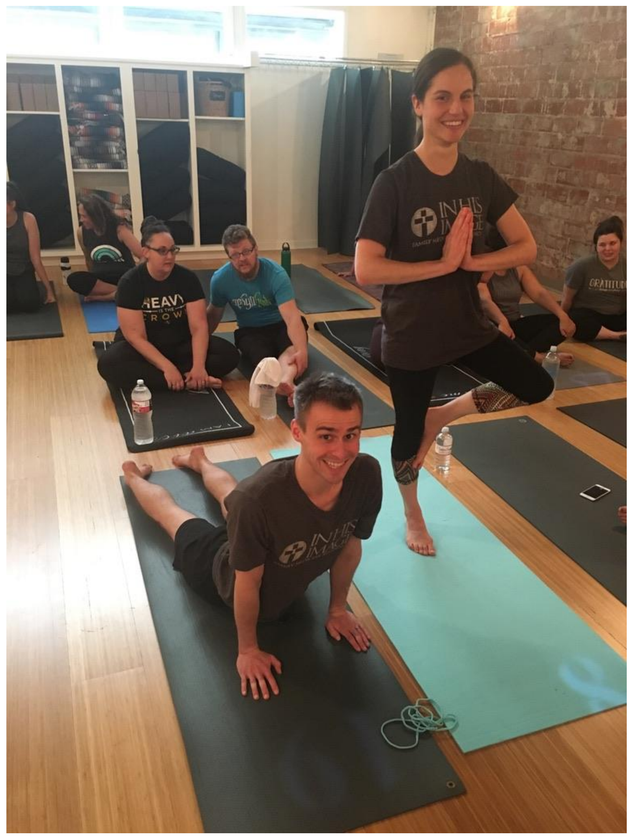
Data Review

A 2017 systematic review of four RCTs (n=469) evaluated nonspecific chronic LBP in adults, comparing supervised yoga vs supervised non-yoga exercise. Functional ability was measured via the Roland Morris Disability Questionnaire (RMDQ) and the Oswestry Disability Index. Pain was assessed on a 0 (no pain) to 100 (most severe) scale with a 15-point change defined as clinically significant. Patients experienced improved function with intensive daily yoga compared to non-yoga exercise after 1 week of treatment (1 trial, n=80, SMD –1.3; 95% CI, –1.7 to –0.77) but with weekly sessions, there was no difference between yoga or non-yoga exercise at three months (2 trials, N=249; SMD –0.22; 95% CI, –0.65 to 0.2) or at six months (2 trials, N=249; SMD –0.20; 95% CI, –0.59 to 0.19). However, patients in yoga had significant improvement in pain compared to non-yoga exercise at one month (1 trial, n=54; MD 15; 95% CI, 10–20) and seven months (MD 20; 95% CI, 15–26).

A 2017 single-blinded RCT (n=320) compared the effects of education, yoga, and physical therapy for chronic low back pain. Yoga and physical therapy both had improvements in function on the RMDQ at 12 weeks (–3.8 vs –3.5) and the differences between groups was not significant (MD 0,26; 95% CI, –infinity to 0.83). Similarly, at 12 weeks, yoga and physical therapy both improved pain scores from baseline (–1.7 vs –2.3) and there was no difference between groups (MD 0.51; 95% CI, –infinity to 0.97). Of note, yoga and physical therapy participants were 21% and 22%, respectively, less likely than education participants to use pain medication during the treatment phase.

Summary

According to five RCTs in 2017 (n=789), for patients with chronic low back pain, there is no significant difference between supervised yoga, non-yoga exercise, or physical therapy; however, these do improve function and pain more than education with non-supervised exercise alone.



References

1. Wieland L, Skoetz N, Pilkington K, et al. Yoga treatment for chronic non-specific low back pain. Cochrane Database Syst. Rev. 2017 Jan; CD010671. [STEP 1]

2. Saper RB, Lemaster C, Delitto A, et al. Yoga, Physical Therapy, or Education for Chronic Low Back Pain: A Randomized Noninferiority Trial. Ann Intern Med. 2017 July; PMID: 28631003. [STEP 2]