

How Much Exercise for Knee Osteoarthritis?

Both “high-dose” and “low-dose” exercises were beneficial.

Although exercise has been a longstanding guideline-recommended therapy for patients with osteoarthritis (OA), whether higher “dosing” of therapy (by duration and intensity) can yield incremental improvements in symptoms, function, or quality of life (QOL) is unknown. Scandinavian researchers randomized 189 patients (average age, 62) with symptomatic knee OA to receive either high-dose (11 exercises over 70–90 minutes) or low-dose (5 exercises over 20–30 minutes) exercise therapy thrice weekly for 12 weeks; all sessions were supervised by physiotherapists.

At the end of the 3-month intervention and after 6 and 12 additional months of follow-up, both groups achieved similar improvements in knee-pain scores and activities of daily living. Patients who received high-dose exercises attained significantly greater function related to sports and recreational activities at the end of therapy and at 6-month follow-up and significantly greater QOL benefit at 6-month follow-up. Those incremental gains (over low-dose exercises) waned by 12 months.

COMMENT

This study did not include a placebo group, and some placebo-effect benefits might have occurred. It also incorporated a professional physiotherapist for the exercise training, which might not be generalizable to many patients outside the study. Nonetheless, most people with knee OA should be encouraged that even low-dose (i.e., 20–30 minutes, thrice weekly) exercises can confer relevant symptom and function improvements, and more-active individuals benefit from extended exercise sessions.

— **Daniel D. Dressler, MD, MSc, MHM, FACP**

Dr. Dressler is Director of Internal Medicine Teaching Services at Emory University Hospital; Associate Program Director of the J Willis Hurst Internal Medicine Residency Program; and Professor of Medicine at Emory University School of Medicine, Atlanta.

Torstensen TA et al. High- versus low-dose exercise therapy for knee osteoarthritis: A randomized controlled multicenter trial. Ann Intern Med 2023 Jan 24; [e-pub]. (<https://doi.org/10.7326/M22-2348>)