

Neither Vigorous Activity nor Sedentary Behavior Is Associated with Risk for Knee Osteoarthritis

Low-to-moderate physical activity might be protective.

Patients and some clinicians still are concerned that physical activity, particularly vigorous physical activity, might be associated with excess risk for knee osteoarthritis (OA), despite considerable evidence to the contrary. Researchers revisited the issue in a prospective cohort of 1194 adults (mean age, 58; mean body-mass index [BMI], 27 kg/m²) who were at high risk for developing knee OA based on weight, history of knee injury or knee surgery, lack of confidence in knee stability, and modified lifestyle due to concerns about knee damage.

Patients were classified by physical activity trajectory and sitting behavior, which were measured at baseline and at least twice during the subsequent 8 years. Physical activity trajectories were: persistently none, low at baseline with slight improvement, moderate at baseline but declining, high at baseline and increasing; sitting patterns were low, moderate, or high.

About 13% of patients developed incident knee OA during as long as 10 years of follow-up. In analyses adjusted for age, sex, and BMI, no physical activity trajectory or sitting pattern was associated significantly with knee OA. Patients classified as having low-to-moderate physical activity, compared with those who undertook no exercise, had a nearly significant lower risk for knee OA.

COMMENT

Clinicians should be comfortable encouraging patients to pursue at least low-to-moderate levels of physical activity for its known metabolic and cardiovascular benefits, without concern about excess risk for knee OA. Such activity might even provide protection against knee OA.

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Chang AH et al. Association of long-term strenuous physical activity and extensive sitting with incident radiographic knee osteoarthritis. JAMA Netw Open 2020 May 4; 3:e204049. (<https://doi.org/10.1001/jamanetworkopen.2020.4049>)