Physical activity as a risk factor for osteoarthritis of the knee.

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Abstract
A case-control study was conducted to evaluate the association between knee osteoarthritis (OA) and physical activity (PA) among a community group aged 40 years and older. Case patients (85 males, 154 females) had radiologically confirmed knee OA with grade 2+ changes, according to Kellgren and Lawrence criteria. Control subjects (85 males, 154 females) had no radiologic evidence of knee OA. A statistically significant positive association between high PA level and knee OA was observed for women, with an age-adjusted odds ratio (OR) of 1.66 and 95% confidence interval (CI) of 1.01 to 2.72. In men no association was observed (OR = 0.95; 95% CI, 0.49 to 1.83). These associations persisted when controlling simultaneously for potential confounders including age, obesity, history of knee injury, and socioeconomic status, indicating that the OA-PA association is limited to women. One possible explanation is that risk factors for knee OA are influenced by hormones.

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