

# Reproductive, hormonal factors tied to knee OA in women

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(HealthDay)—Female reproductive and hormonal factors are associated

with incidence of knee osteoarthritis (OA), according to a study published in the July issue of *Arthritis & Rheumatology*.

Sultana Monira Hussain, M.B.B.S, M.P.H., Ph.D., from Monash University in Melbourne, Australia, and colleagues examined associations between female reproductive and hormonal factors (measured between 1990 and 1994) and incidence of [total knee arthroplasty](#) (TKA) for OA among 22,289 women participating in the Melbourne Collaborative Cohort Study. Analyses were adjusted for age, [body mass index](#) (BMI) at midlife, change in BMI from early reproductive age to midlife, country of birth, physical activity, smoking, and education level.

The researchers identified 1,208 TKAs for OA over 12.7 years. There was an increased risk of TKA among those ever having being pregnant (hazard ratio [HR], 1.32; 95 percent confidence interval [CI], 1.06 to 1.63). Parity also was associated with an increased risk of TKA. Oral contraceptive (OC) users had an increased risk of TKA versus non-users (OC use of less than five years: HR, 1.25 [95 percent CI, 1.08 to 1.45]; OC use of five or more years: HR, 1.17 [95 percent CI, 1.0 to 1.37]). There was a decrease in TKA risk for each one-year increase in menstruation (HR, 0.99; 95 percent CI, 0.97 to 0.99). However, with adjustments, these associations remained significant only for women of normal weight at early reproductive age. Users of [hormone replacement therapy](#) had an increased risk of TKA (HR, 1.37; 95 percent CI, 1.14 to 1.64), though this association was significant only for non-obese women at midlife.

"Reproductive and hormonal factors were associated with risk of knee OA," the authors write. "Further work is needed to understand the complex effect of these factors on [knee](#) OA."

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