

Hormone therapy may be best defense against knee osteoarthritis

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There is an ongoing debate regarding the relationship between knee osteoarthritis and hormone therapy (HT), with small-scale studies providing mixed results. A new large-scale study from Korea shows that women receiving HT had a significantly lower prevalence of symptomatic knee osteoarthritis compared with women who did not take hormones. Study results are published online in *Menopause*, the journal of The North American Menopause Society (NAMS).

Osteoarthritis is the most common musculoskeletal disorder in older persons and is the leading cause of pain and physical disability. Caused by degenerative changes in the joints, it affects more women than men, and its incidence is particularly elevated in menopause. Because estrogen has an anti-inflammatory effect at high concentrations, it has been hypothesized that hormone changes in women, especially decreasing estrogen levels, may lead to an increase in osteoarthritis after menopause.

Because the knee is the most commonly affected joint, [knee osteoarthritis](#) has been the focus of a number of studies relative to the effectiveness of HT. The most common treatments for knee osteoarthritis include surgery or nonsteroidal anti-inflammatory drugs, both of which are associated with risks such as surgical complications or gastrointestinal disorders.

Several small studies have shown that HT not only reduces histologic changes in the cartilage involved in osteoarthritis, but it also reduces the

chronic pain. To date, however, no large-scale studies have examined symptomatic knee osteoarthritis and HT. This latest study out of Korea is based on data from nearly 4,800 postmenopausal women. It concluded that the prevalence of knee osteoarthritis was significantly lower in participants using HT than those not taking hormones. The authors did note, however, that additional research is warranted to adjust for such other variables such as age and body mass index.

Study results appear in the article "[Knee osteoarthritis and menopausal hormone therapy in postmenopausal women](#): a nationwide cross-sectional study."

"Past and current users of hormone therapy had a lower prevalence of knee joint osteoarthritis, suggesting that hormone therapy may be protective against knee [osteoarthritis](#)," says Dr. JoAnn Pinkerton, NAMS executive director. "This study suggests that estrogen taken at menopause may inhibit cartilage damage and reduce [knee](#) deterioration seen on x-rays."

Provided by The North American Menopause Society

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