Methotrexate beneficial for reducing pain, stiffness in knee osteoarthritis

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For patients with knee osteoarthritis (KOA), methotrexate added to usual medication is associated with a significant reduction in pain and improvement in stiffness and function at six months, according to a study published online July 30 in the *Annals of Internal Medicine*. 
Sarah R. Kingsbury, Ph.D., from the University of Leeds in the United Kingdom, and colleagues conducted a multicenter randomized, double-blind, placebo-controlled trial to examine symptomatic benefits of methotrexate among 207 patients with symptomatic, radiographic KOA and knee pain. Overall, 155 patients were randomly assigned to once-weekly methotrexate or placebo once weekly over 12 months and continued usual analgesia (77 and 78, respectively). At six months, 66 and 68 patients were followed up.

The researchers observed a decrease in mean knee pain from baseline to six months, from 6.4 to 5.1 and from 6.8 to 6.2 in the methotrexate and placebo groups, respectively. A significant pain reduction of 0.79 numerical rating scale points in favor of methotrexate was seen in the primary intention-to-treat analysis.

Significant treatment group differences in favor of methotrexate were also seen for Western Ontario and McMaster Universities Osteoarthritis Index stiffness and function at six months (0.60 and 5.01 points, respectively). A dose-response effect was supported by a treatment adherence analysis.

"Further work is required to understand adequate methotrexate dosing, whether benefits are greater in those with elevated systemic inflammation levels, and to consider cost-effectiveness before introducing this therapy for a potentially large population," the authors write.


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