Study: Vitamin D Won’t Derail Osteoarthritis

Taking daily vitamin D doesn’t keep knee pain from getting worse or slow the loss of cartilage for people with osteoarthritis, according to a new study.

Previous research suggested that among people with the joint disorder, those with higher levels of vitamin D in their blood tended to have a slower progression of symptoms. But whether that meant taking more in supplement form would also have a protective effect was unclear.

“It looked compelling at that point,” said lead author Timothy McAlindon, from Tufts Medical Center in Boston.

For the new study, he and his colleagues randomly assigned 146 of their patients with knee osteoarthritis to take a daily dose of vitamin D or a vitamin-free placebo for two years.

None of the participants knew which type of supplement they were assigned to take. The vitamin D doses started at 2,000 international units (IU) per day and were increased to as high as 8,000 IU daily in some patients. (For most adults, the recommended daily allowance of vitamin D is 600 to 800 IU.)

The vitamin D group started out slightly worse off than their comparisons on measures of knee pain and function.

However, the vitamin didn’t seem to offer clear relief: on a 0-to-20-point pain scale, people taking vitamin D saw a decrease during the two years, compared to a decrease among those taking placebos. That small difference could have been due to chance, the researchers wrote Tuesday in the Journal of the American Medical Association.

Changes in knee cartilage volume – a measure of the

progression of osteoarthritis – and knee function were also similar among the two groups during and after the study period.

Osteoarthritis is typically treated with over-the-counter pain medications or steroid injections along with moderate exercise including physical therapy. For people who are overweight or obese, weight loss is recommended to take pressure off the joints.

Results Differ

Dr. Robert Heaney, who has studied vitamin D at Creighton University School of Medicine in Omaha, Nebraska, said he wasn't surprised the study didn't find a beneficial effect on knee pain across all patients.

"It's almost certain that vitamin D's effects are different from person to person," Heaney, who wasn't involved in the new research, told Reuters Health. "It's very important for some people, but may not make any difference for others."

That may have to do with genetics or other factors that doctors aren't yet able to test for before they prescribe vitamin D, Heaney added.

But because vitamin D may have other small health benefits—and virtually no side effects at these doses—he said it's still worth a try for people with osteoarthritis.

McAlindon disagreed, however.

"It doesn't look like knee osteoarthritis is in itself an indication to take vitamin D," he told Reuters Health.

Vitamin D can be bought over-the-counter for $25 to $50 for a year's supply.

The researchers said it's possible that higher doses of vitamin D supplements, leading to higher levels in the blood,

would have a beneficial effect on knee pain – but so far the results don’t support that idea.

“Vitamin D broadly is the vitamin of the moment,” McAlindon said. “There are hopes that it will have wide health benefits.”

But, he added, this study shows that each of those claims needs to be checked out carefully—and they may always not hold up with rigorous trials.