

Colchicine cuts odds of new heart attack, stroke in heart attack survivors

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(Reuters Health) - The inflammation-fighting drug colchicine, already a treatment for gout, dramatically reduces the odds of future cardiovascular problems in people who have just survived a heart attack, a large new study has concluded.

While 7.1% of patients who took placebo pills died, had a second heart attack, a stroke or needed a stent or heart surgery over the next two years, the rate was reduced to 5.5% among volunteers who took a half-milligram colchicine pill every day.

The reduction in risk with colchicine was seen even though patients were receiving standard care with aspirin and cholesterol-lowering drugs.

“Not only did we reduce first events and recurrent events, the drug was well tolerated, the drug is well known, the safety profile is well known, it is inexpensive, and it’s widely available. So it’s only good news for patients,” chief author Dr. Jean-Claude Tardif of the Montreal Heart Institute told Reuters Health in a telephone interview.

The results of the COLCOT study were reported Saturday at the American Heart Association’s annual Scientific Sessions in Philadelphia and online in *The New England Journal of Medicine*.

The work also affirms earlier research showing that inflammation plays an important role in cardiovascular problems.

“Twenty five years ago, people would look at atherosclerosis as rust in the pipe,” said Tardif. “We’ve learned this is not rust in a pipe. This is a very dynamic disease.”

“This is exciting because it’s really telling us we have a major new direction to go in the treatment of heart disease that goes beyond cholesterol alone,” said Dr. Paul Ridker, director of the Center for Cardiovascular Disease Prevention at Brigham and Women’s Hospital, who has been studying inflammation for years but was not involved in COLCOT. “This will open up this whole field.”

He predicted in a phone interview, “We’re going to be giving patients very aggressive cholesterol-lowering and inflammation-lowering treatment in the future.”

Less clear is the value of giving colchicine to patients who haven’t had a first heart attack, even when they face a higher risk because they have high blood pressure, diabetes, high cholesterol or a family history of heart disease.

Tardif said a study would be done to examine that question. Ridker cautioned against giving the drug as a way to prevent that first heart attack.

The treatment “does come with some risk. It does have an increased risk of pneumonia,” said Ridker, noting that pneumonia appeared in 0.9% of colchicine patients versus 0.4% in the placebo group.

Colchicine is not prescribed for long-term use. “We have overwhelming proof colchicine is safe and effective,” in part because it is widely used, he said. “But right now we’re talking about secondary prevention where the patients are at such high risk we would accept the downsides. Colchicine’s use has to be limited unless we come up with a much safer drug.”

“Whether (doctors) will decide immediately to not even wait for another study and use it in primary prevention remains to be seen,” said Tardif, director of the Montreal Heart Institute Research Center and a professor of medicine at the University of Montreal.

The 4,745 volunteers, recruited at 167 medical centers in 12 countries, had experienced a heart attack within the previous 30 days. Patients with severe heart failure, a recent stroke, or several other medical conditions were excluded. Only 19% were women.

The once-a-day half-milligram pill trimmed the odds of death from any cardiovascular cause by 16%, reduced the likelihood of being resuscitated from a cardiac arrest by 17%, shaved the chance of subsequent heart attack by 9%, slashed the risk of being hospitalized for coronary bypass or a stent procedure in half, and cut the odds of a stroke by 74%. But only the last two outcomes were statistically significant.

Thus, the lower rate of strokes, and the reduced need to go to the emergency room to receive a stent or heart bypass surgery for chest pain, accounted for most of the benefit from colchicine.

Colchicine, derived from the autumn crocus, has been around for centuries and is cheap, at least outside the U.S.

List prices in the U.S. range from about \$4.50 to nearly \$7 a day, according to the website goodrx.com.

However, “If my patient has an episode of gout, in Montreal it is 27 cents per day,” said Tardif. “There is zero reason why anyone should pay \$5 or \$7 dollars a day for a drug like this.”

Both the drug and placebo groups had similar rates of side effects during the study, and side effects attributed to colchicine were few.

Besides the risk of pneumonia, nausea was a problem for 1.8% of patients taking colchicine versus 1.0% taking the placebo and flatulence was reported in 0.6% of the drug recipients compared with 0.2% among those on placebo.

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