

# Gout could increase heart disease risk

August 17 2018

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Having a type of inflammatory arthritis called gout may worsen heart-related outcomes for people being treated for coronary artery disease, according to new research.

The study, published Aug. 17 in *The Journal of the American Heart Association*, sought to clarify older research on the link between cardiovascular disease and [gout](#), which occurs in people with high levels of uric acid in the blood.

In the U.S., gout affects nearly 6 million men and 2 million women, or about 4 percent of the population, according to the Arthritis Foundation. The buildup of uric acid can form needle-like crystals in a joint and cause sudden pain, tenderness, redness, warmth and swelling, often in the big toe. But it's also associated with a greater risk of kidney disease, diabetes, cancer and sleep apnea.

Researchers from Duke University studied data from more than 17,000 [patients](#), including 1,406 who had gout at the start of the study and were being treated for cardiovascular risk factors. After following patients for an average of 6.4 years, researchers found that "in spite of aggressive medical therapy," the gout was linked to worse outcomes and death.

"Among patients who had gout at the beginning of the study or who developed it during follow-up, their risk of either dying of cardiovascular disease or having a heart attack or stroke was 15 percent higher than patients who never developed gout," said the study's lead author, Dr. Neha Pagidipati, a cardiologist and assistant professor at Duke University School of Medicine in Durham, N.C.

Patients who had gout at any point during the study had a twofold increased risk of heart failure death compared to people who never developed gout.

While past research showed people with gout have an increased risk of cardiovascular disease, "a lot of those studies were done decades ago, before modern preventative therapy like statins became extremely common," Pagidipati said. "We wanted to take a more contemporary

look at the relationship between gout and future heart disease in patients with known [coronary artery disease](#)."

Many patients don't even realize a link exists between gout and heart problems, she said, and the new findings show the need for patients to talk to their physicians about added risks.

"Also, from a physician's perspective, it's important to consider that patients with gout may be at increased risk for cardiovascular disease even if they're already treating them with all the standard therapies. It's something to have on their radar," Pagidipati said.

Although it's unclear why gout might increase the risk of cardiovascular disease, she said possible reasons include increased oxidative stress and inflammation.

"We know that people who have a high level of inflammation are at an increased risk for [cardiovascular disease](#), and we also know gout is characterized by periods of acute inflammation: The link may have to do with that," she said.

Dr. Jasvinder Singh, who was not involved in the study, said the new research may help the public understand how insidious gout can be.

"Gout is not just a disease of the joints: It's a [disease](#) that causes inflammation in the joints and in the body. It's not just a pain in the toe, it affects other organs, too, including the heart," said Singh, a gout researcher and professor of medicine and epidemiology at the University of Alabama at Birmingham.

Singh said the new study underscores the potential dangers of ignoring even occasional episodes of gout.

"Patients may say, 'I have an attack every two years, so shouldn't I wait (for treatment) until it becomes more frequent?' But in light of studies such as this one," he said, "patients might want to take that into account and know that leaving gout untreated might be affecting their cardiovascular health."

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