

# Short term use of painkillers could be dangerous to heart patients

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Even short-term use of some painkillers could be dangerous for people who've had a heart attack, according to research published in *Circulation: Journal of the American Heart Association*.

Researchers analyzed the duration of prescription [non-steroidal anti-inflammatory drugs](#) (NSAIDs) treatment and cardiovascular risk in a nationwide Danish cohort of patients with prior [heart attack](#). They found the use of NSAIDs was associated with a 45 percent [increased risk](#) of death or recurrent heart attack within as little as one week of treatment, and a 55 percent increased risk if treatment extended to three months.

The study was limited by its observational nature and the lack of clinical parameters, researchers said.

NSAIDs are commonly used by the general population and are associated with increased cardiovascular risk in people with [heart disease](#) or those at high risk.

In a 2007 statement, the American Heart Association advised physicians about the risks of NSAID use among [heart patients](#) and provided a stepped care approach. In addition, the statement advised extra caution for when NSAIDs might be used, noting that they should "be limited to patients for whom there are not appropriate alternatives, and then, only in the lowest dose and for the shortest duration necessary."

In the current study, researchers undertook the first time-to-event analysis of a nationwide group and investigated if the duration of

prescription NSAID treatment influenced the cardiovascular risk among heart patients. Among 83,697 heart attack survivors (average age 68; 63 percent men), 42.3 percent had a least one prescription for an NSAID.

The most common NSAIDs prescribed were ibuprofen (23 percent) and diclofenac (13.4 percent). Selective [COX-2 inhibitors](#) — rofecoxib (4.7 percent) and celecoxib (4.8 percent) — were also used.

The non-selective NSAID diclofenac was associated with early onset risk similar to the selective COX-2 inhibitor rofecoxib.

All NSAIDs were associated with an increased risk of death or recurrent heart attack, with diclofenac having the highest risk (nearly three times). "Overall, NSAID treatment was associated with a statistically significant increased risk of death," said Anne-Marie Schjerning Olsen, M.B., lead author of the study and research fellow at Copenhagen University in Hellerup, Denmark. "Our results indicate that there is no apparent safe therapeutic window for NSAIDs in patients with prior heart attack."

The NSAID naproxen was not associated with an increased risk of death or recurrent heart attack. However, previous studies found increased gastrointestinal bleeding with naproxen.

Olsen said "a very conservative approach to use NSAIDs in patients with prior heart attack is warranted.

"If NSAID therapy is necessary for patients with known heart attack, the doctors should choose an NSAID less selective for COX-2 and a minimum for the shortest period."

Low-dose ibuprofen was the only available over-the-counter NSAID available in Denmark and was only dispensed in limited quantities (100 tablets at a time). So over-the-counter use of NSAIDs was unlikely to

have had a major effect on the study results, researchers said.

In some countries, diclofenac is available as an over-the-counter drug without warnings about potential side effects. Recently, the U.S. Food and Drug Administration issued a warning that diclofenac should not be used by patients recovering from heart surgery.

But "the accumulating evidence suggests that we must limit NSAID use to the absolute minimum in patients with established cardiovascular disease," researchers said. Further study is warranted to establish the cardiovascular safety of NSAIDs, they said.

"The American Heart Association applauds this research that adds to our knowledge about the adverse effects of NSAID use in patients with coronary artery disease," said Elliott Antman, M.D., lead author 2007 NSAIDs advisory. "The authors further confirm our prior practical advice that NSAID use should be avoided and if unavoidable should be used at the smallest doses for the shortest time possible. Naproxen has not been shown to have an increased [cardiovascular risk](#) and may be safer than other [NSAIDs](#)."

Provided by American Heart Association

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