

Regular paracetamol use linked to higher blood pressure, study finds

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Tylenol 500 mg capsules. Credit: Wikipedia

Long-term paracetamol use could increase the risk of heart disease and strokes in people with high blood pressure, a study suggests.

Patients who have a long-term prescription for the painkiller, usually used for the treatment of [chronic pain](#), should opt for the lowest

effective dose for the shortest possible time, researchers say.

The University of Edinburgh study, published in the scientific journal *Circulation*, is the first large randomized clinical trial to address this question and complements earlier work in observational studies.

Paracetamol was often suggested as a safer alternative to another class of painkillers called non-steroidal anti-inflammatory drugs (NSAIDs), which are known to increase [blood pressure](#) and risk of heart disease.

In the latest study, 110 patients with a history of high blood [pressure](#) were prescribed one gram of [paracetamol](#) four times a day—a routinely prescribed dose in patients with chronic [pain](#)—or a matched placebo for two weeks. All patients received both treatments, with the order randomized and blinded.

Those prescribed paracetamol saw a significant increase in their blood pressure, compared with those taking the placebo.

This rise was similar to that seen with NSAIDs, and might be expected to increase the risk of heart disease or stroke by around 20 percent, experts say.

The research team says the findings should lead to a review of long-term paracetamol prescriptions to patients—particularly those with high blood pressure, or those at particular risk of heart disease or stroke.

Lead Investigator Dr. Iain MacIntyre, Consultant in Clinical Pharmacology and Nephrology at NHS Lothian, said: "This is not about short-term use of paracetamol for headaches or fever, which is, of course, fine—but it does indicate a newly discovered risk for people who take it regularly over the longer term, usually for chronic pain."

Professor James Dear, Personal Chair of Clinical Pharmacology at the University of Edinburgh, said: "This study clearly shows that paracetamol—the world's most used drug—increases blood pressure, one of the most important risk factors for heart attacks and strokes. Doctors and patients together should consider the risks versus the benefits of long-term paracetamol prescription, especially in patients at risk of cardiovascular disease."

Principal Investigator Professor David Webb, Chair of Therapeutics and Clinical Pharmacology at the University of Edinburgh, also said: "We would recommend that clinicians start with a low dose of paracetamol, and increase the dose in stages, going no higher than needed to control pain. Given the substantial rises in blood pressure seen in some of our patients, there may be a benefit for clinicians to keep a closer eye on blood pressure in people with [high blood pressure](#) who newly start paracetamol for chronic pain."

Professor Sir Nilesh Samani, Medical Director at the British Heart Foundation, who funded the study, said: "This research shows how quickly regular use of paracetamol can increase [blood](#) pressure in people with hypertension who are already at increased risk of [heart](#) attacks and strokes. It emphasizes why doctors and patients should regularly review whether there is an ongoing need to take any medication, even something that may seem relatively harmless like paracetamol, and always weigh up the benefits and risks. However, if you take paracetamol occasionally to manage an isolated headache or very short bouts of pain, these research findings should not cause unnecessary concern."

Provided by University of Edinburgh

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