

Powerful Antacids Boost Chances of Hip Fracture

December 26, 2006 08:40:37 PM PST

By Steven Reinberg

HealthDay Reporter

TUESDAY, Dec. 26 (HealthDay News) -- People taking powerful antacid drugs called proton pump inhibitors face an increased risk of hip fracture, University of Pennsylvania researchers report.

Common proton pump inhibitors include Aciphex, Nexium, Prevacid, Prilosec and Protonix; they are often prescribed for stomach conditions such as gastroesophageal reflux disease (GERD). The report is published in the Dec. 27 issue of the *Journal of the American Medical Association*.

"If you take acid-suppression medications on a chronic basis and you are 50 or older, your hip fracture risk is even higher than usual," said study author Dr. Yu-Xiao Yang, an assistant professor of medicine and epidemiology.

"In addition, if you are one of the few patients who requires high doses, then your risk is even higher," Yang added.

In the study, Yang's team collected data on 13,556 people with hip fractures and 135,386 healthy people, all aged 50 or older. These people were listed in the General Practice Research Database from 1987 to 2003. This database contains information on patients in the United Kingdom.

The researchers found that taking a proton pump inhibitor for more than one year increased the risk of hip fracture by **44 percent**, compared with people not taking these medications.

In addition, the risk was 2.6 times higher among people who took high doses over a long period. The risk of hip fracture increased with both the dosage and the duration of proton pump inhibitor therapy, Yang's group found.

Yang speculated that these drugs hinder calcium absorption in some people. Stomach acid is needed to help the body absorb calcium, and proton pump inhibitors work by slowing the production of stomach acid.

Among the elderly, hip fractures have a death rate of 20 percent during the first year after the fracture. For those who survive this period, one in five requires nursing home care, an emergency department visit, hospitalization, surgery and rehabilitation, all with huge health-care costs.

Yang said he thinks these drugs are prescribed too often. "Not everybody is on this medicine for good reasons," he said. "Proton pump inhibitors have been on the market for 15 years, and the general feeling is that they are safe to be taken on a chronic basis. So, they are given often without having a clear indication or without making sure the patient is benefiting from the medication."

Moreover, Yang thinks that both men and women taking prescription proton pump inhibitors should also take a calcium supplement to insure that they maintain their bone mass and lower their risk of hip fracture.

One expert thinks that people should not be overly concerned with this finding unless it is confirmed by other studies.

"This is a new observation," said Dr. Lawrence Brandt, chief of the Division of Gastroenterology at Montefiore Medical Center, in New York City. "It's exciting on the one hand, and alarming on the other hand. People should be aware that there are some data that show that there may be a higher risk of fracture."

Although Brandt agreed that these drugs are prescribed too often and used by some people for too long a time, he noted the findings shouldn't change clinical practice yet.

"If someone doesn't need proton pump inhibitors, they shouldn't be on the drug," he said. "Proton pump inhibitors are probably one of the most abused classes of drugs in the world. So, there are a lot of people on this medication who shouldn't be on this medication."

In addition, people should only take these medications for as long as necessary to treat the condition it's been prescribed for, Brandt said. "If you have to take it for a long time, then you should also have your bone density followed once a year," he added.

Brandt is not concerned with the safety of the over-the-counter versions of these drugs. "Most people who take drugs over-the-counter don't take them in a rigorous fashion," he said. "They take them when they need them, and their dose regimen is not going to be sufficiently compulsive and regimented that this is going to be a problem."

More information

The U.S. National Institute of Diabetes and Digestive and Kidney Diseases can tell you more about [GERD](#).

Study Links Heartburn Drugs, Broken Hip

[The Associated Press](#)

By CARLA K. JOHNSON

December 26, 2006

“

Taking such popular heartburn drugs as Nexium, Prevacid or Prilosec for a year or more can raise the risk of a broken hip markedly in people over 50, a large study in Britain found.

The study raises questions about the safety of some of the most widely used and heavily promoted prescription drugs on the market, taken by millions of people.

The researchers speculated that when the drugs reduce acid in the stomach, they also make it more difficult for the body to absorb bone-building calcium. That can lead to weaker bones and fractures.

Hip fractures in the elderly often lead to life-threatening complications. As a result, doctors should make sure patients have good reason to stay on heartburn drugs long term, said study co-author Dr. Yu-Xiao Yang of the University of Pennsylvania School of Medicine.

'The general perception is they are relatively harmless,' Yang said. 'They often are used without a clear or justified indication for the treatment.'

Some people find relief from heartburn with over-the-counter antacids such as Tums, Roloids and Maalox. But for others, those medicines do not work well. Moreover, heartburn can be more than a source of discomfort. People with chronic heartburn can develop painful ulcers in the esophagus, and in rare cases, some can end up with damage that can lead to esophageal cancer.

Dr. Sandra Dial of McGill University in Montreal, who was not involved in the study but has done similar research, said patients should discuss the risks and benefits with their doctors and taper off their use of these medicines if they can.

Nexium, Prevacid and Prilosec are members of a class of drugs known as proton pump inhibitors. The study found a similar but smaller risk of hip fractures for another class of acid-fighting drugs called H2 blockers. Those drugs include Tagamet and Pepcid.

The study, published in Wednesday's Journal of the American Medical Association, looked at medical records of more than 145,000 patients in England, where a large electronic database of records is available for research. The average age of the patients was 77.

The patients who used proton pump inhibitors for more than a year had a **44 percent higher risk of hip fracture than nonusers**. The longer the patients took the drugs, the higher their risk.

The biggest risk was seen in people who took high doses of the drugs for more than a year. That group had a **2 1/2 times greater risk of hip fractures than nonusers**.

Yang said that for every 1,262 elderly patients treated with the drugs for more than a year, there would be one additional hip fracture a year attributable to the drugs. For every 336 elderly patients treated for more than a year with high doses, there would be one extra hip fracture a year attributable to the drugs.

Dr. Doug Levine of AstraZeneca PLC, which makes Nexium and Prilosec, said the study does not prove that proton pump inhibitors cause hip fractures. It merely suggests a potential association, he said. Doctors need to monitor their patients for proper dosage and watch how long they take the drugs, Levine said.

Julia Ellwanger, a spokeswoman for TAP Pharmaceutical Products Inc., which markets Prevacid, said proton pump inhibitors' safety has been well-established by rigorous studies, and the new study does not prove or disprove a connection to hip fractures.

Dr. Alan Buchman of Northwestern University, who was not involved in the research, said the study should not change medical practice, since doctors already should be monitoring the bone density of elderly people taking the drugs and recommending calcium-rich diets to all patients.

'Most people are not taking enough calcium to start with,' he said. He also wondered if a similar result would have been found in a sunny climate, because vitamin D from sunshine helps with calcium absorption. Also, Buchman said it not known whether the acid-fighting drugs prevent esophageal cancer. He said the risk of esophageal cancer has been exaggerated in the marketing of these drugs. 'I think the risk has been overplayed and scared the community,' Buchman said.

Heartburn medicines are heavily are advertised in 'Ask your doctor about ...' commercials in this country, particularly during the evening news. Nexium is the third biggest selling drug in the world, behind the cholesterol medicine Lipitor and blood thinner Plavix, with global sales totaling \$5.7 billion last year, according to IMS Health, which tracks drug sales.