

## Statins plus certain antibiotics may set off toxic reaction, study says

June 17 2013, by Steven Reinberg, Healthday Reporter

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Harmful effects in older patients include muscle, kidney damage, researchers say.

(HealthDay)—Doctors should avoid ordering certain antibiotics for older patients who take cholesterol-lowering statin drugs, such as Lipitor, Canadian researchers say.

Statins, which are taken by many millions of people, don't mix well with the antibiotics clarithromycin or erythromycin, according to a study, published in the June 18 issue of the *Annals of Internal Medicine*.

These two commonly used antibiotics inhibit the metabolism of statins and increase statin concentration in the blood, which can cause muscle or [kidney damage](#), and even death, the researchers said.

"These drugs do interact and cause difficulties for patients," said lead

researcher Dr. Amit Garg, a professor in the department of epidemiology and biostatistics at the University of Western Ontario in London, Ontario.

These adverse reactions are rare, Garg added. "Most people will be fine," he said. "But at a [population level](#), hundreds of preventable hospitalizations are occurring."

For someone taking a statin, the study suggests that substituting a different antibiotic—[azithromycin](#)—is safer because it doesn't interfere with the metabolism of statins.

Another strategy is to stop the statin until the antibiotic course is finished, Garg said.

The study of more than 144,000 statin users over the age of 65 compared those prescribed clarithromycin or erythromycin with those taking azithromycin.

In terms of absolute risk, the odds of kidney damage increased 26 percent among people who took clarithromycin or erythromycin and statins compared with patients who took azithromycin with statins.

Also, hospitalizations for [muscle damage](#) (a condition called rhabdomyolysis) and deaths were slightly higher—0.02 percent and 0.25 percent, respectively—in the clarithromycin or erythromycin groups compared to the azithromycin group, the study authors found.

Dr. Gregg Fonarow, a spokesman for the [American Heart Association](#), said patients should not stop taking statins, which are known to prevent heart disease. Instead, doctors should prescribe another antibiotic, he suggested.

"It is well documented that certain medications that inhibit the liver enzyme cytochrome P450 isoenzyme 3A4 can increase the drug level of statin medications," said Fonarow, a professor of cardiology at the University of California, Los Angeles. "Nevertheless, large-scale randomized clinical trials and clinical effectiveness studies have demonstrated [that] the benefits of statin therapy in reducing fatal and nonfatal cardiovascular events outweigh the potential risks."

The study data included more than 73,000 patients prescribed clarithromycin, about 3,200 prescribed erythromycin and more than 68,000 people who took azithromycin. Almost three-quarters of the statin users were taking atorvastatin (Lipitor). The other commonly used statins were simvastatin (Zocor) and lovastatin (Altoprev, Mevacor).

[Clarithromycin](#) and erythromycin are often prescribed for respiratory illness such as pneumonia. Previously, the U.S. Food and Drug Administration warned that [statins](#) don't interact well with these and certain other drugs used to treat HIV and hepatitis.

The study authors noted that younger patients are less likely than older adults to experience serious side effects from drug interactions.

**More information:** For more information on statins, visit the [U.S. National Library of Medicine](#).

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Citation: Statins plus certain antibiotics may set off toxic reaction, study says (2013, June 17)

retrieved 20 September 2024 from

<https://medicalxpress.com/news/2013-06-statins-antibiotics-toxic-reaction.html>

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