

Popular diabetes meds put to the test

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Metformin poses fewer heart risks than sulfonylureas, study says.

(HealthDay)—Patients with diabetes who were treated with the popular oral medication metformin face a lower risk of heart attack, stroke or death than those taking sulfonylureas, another common option, according to a large, multi-year study.

Researchers who tracked hundreds of thousands of veterans with type 2 diabetes found that users of metformin (brand names include Glucophage and Fortamet) faced a "modest but clinically important" 21 percent lower risk of hospitalization because of [cardiovascular complications](#) than users of sulfonylureas (glyburide and glipizide).

The researchers cautioned, however, that they couldn't pinpoint whether metformin protects against [heart](#) issues or whether, by contrast, sulfonylureas pose a specific threat to heart health. It's possible that both are true.

Although the researchers said the findings suggest metformin should be the preferred oral treatment for diabetes, they also stressed that it's not yet clear whether their findings would apply to women or other racial and ethnic groups, given that 97 percent of their [study participants](#) were men and 75 percent were white.

"Metformin and sulfonylureas are the two most

commonly prescribed medications for type 2 diabetes treatment," said study lead author Dr. Christianne Roumie, of the Geriatric Research Education Clinical Center at the Nashville Veterans Affairs Medical Center in Tennessee. "Both do a very good job of controlling a patient's [blood sugar level](#)."

However, "metformin may do a better job at preventing hospitalization for heart attacks and strokes or death," she added. "Because of this it should be preferred as the starting medication for patients with diabetes."

About 8 percent of people in the United States have diabetes. Most have type 2 diabetes, which means they don't [metabolize](#) blood sugar (glucose) properly. Although there is no cure for [type 2 diabetes](#), the condition can be managed.

The findings are published in the Nov. 6 issue of the journal *Annals of Internal Medicine*.

According to the American Diabetes Association, sulfonylurea drugs are insulin-production stimulants that have been in use since the 1950s. Metformin, also dating to the 1950s, works by lowering blood glucose levels.

To compare the impact of the two drugs on cardiovascular results, the authors focused on a pool of more than 250,000 veterans over age 18 who started treatment with one of the two medications between 2001 and 2008.

Nearly 100,000 were placed on a standard regimen of sulfonylurea therapy, while roughly 155,000 took metformin. None had any serious medical complications other than diabetes at the start of the study.

A statistical analysis revealed that for every 1,000 patients who took metformin for one year there were two fewer heart attacks, strokes or deaths relative to those taking sulfonylureas, Roumie said.

The authors noted that their current observations were consistent with prior indications that metformin is associated with fewer serious heart issues than sulfonylurea.

In an editorial in the same journal, Dr. Steven Nissen, chairman of the department of cardiovascular medicine at the Cleveland Clinic in Ohio, agreed that the study's findings do point to [metformin](#) as a better choice for diabetes treatment, while calling for more research.

"While the signals pointing to this situation have probably been there for several decades the [U.S. Food and Drug Administration] did not require testing for cardiovascular outcomes when looking at diabetes drugs until very recently," Nissen said. "Which means the industry has developed drugs solely based on their ability to lower blood sugar."

At least two-thirds of people with diabetes will die of heart disease, Nissen added.

"The kind of information provided by a study like this on a [diabetes](#) drug's impact on heart disease is pretty important to have, when you think of it in that context," he said.

More information: For more on diabetes medication, visit the [American Diabetes Association](#)

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