New Research Uncovers Serious Risks of Widely Used Diabetes Medication

A new study involving over 80,000 patients found that a class of medications widely used to manage type 2 diabetes increases risks of hospitalization and death, relative to available alternatives. The medications, known as sulfonylureas (SUs), have been a mainstay of diabetes treatment for more than 40 years and are sold under a number of generic names including glyburide, glipizide, and glimepiride. Recent estimates indicate that SUs are the second most commonly prescribed medication class for diabetes and are prescribed to about a third of patients (roughly 5 million Americans).

“These medications caused substantial increases in the risk of hospitalization and death that were previously undetected because large databases are needed to detect them and they can take many years to develop,” said Julia C. Prentice, lead author of the study published today in the journal *Value in Health*.

The study followed patients for up to 10 years and found a 68% increase in risk of certain kinds of hospitalization and a 50% increase in risk of death for patients taking SUs relative to thiazolidinediones (TZDs), an alternative class of medication previously thought to increase cardiovascular risk. “Recently published studies have raised questions about the risks of SUs relative to metformin, which is the standard first-line treatment, but finding that SUs are more risky than TZDs is truly surprising,” said Prentice.

“With more than 12 classes of glucose-lowering drugs currently approved, choosing the correct medications is becoming increasingly complex for patients with diabetes and their providers. The increasing availability of large databases of clinical information is making it possible for researchers to generate comparisons between medication alternatives like these that patients need to make informed decisions,” said Prentice. “These findings should reinforce the current trend in most treatment guidelines that is moving away from recommending SUs as a second line treatment after metformin,” Prentice added.

The article explains that most randomized controlled trials focus on comparing medications based on short-term outcomes and rarely provide information on long-term outcomes like those examined in this study. Controversy regarding the cardiovascular safety of TZDs led the Food and Drug Administration to release new guidance for the pharmaceutical industry on the need to evaluate this risk in new diabetes medications. This guidance emphasizes the need for adequately powered studies that can assess long-term outcomes.

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