Bariatric surgery more effective than lifestyle changes for type 2 diabetes remission
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Remission of type 2 diabetes is achieved more effectively and has longer-lasting results with bariatric surgery than through medications and lifestyle changes.

A new study from Pennington Biomedical Research Center, published in the journal *Diabetes Care*, assessed 316 patients with type 2 diabetes to determine the effectiveness and long-term results of metabolic surgery. This is the largest study to date to evaluate metabolic surgery, also known as bariatric surgery, as a treatment for type 2 diabetes.

According to the Centers for Disease Control and Prevention, more than 34.2 million Americans, or 10.5 percent of the population, have type 2 diabetes. Obesity is a significant contributory factor in the development of diabetes. Approximately 90 percent of people with type 2 diabetes are overweight or have obesity. These intertwined chronic health issues cause an enormous health burden on both the individual and societal level.

"Treatment guidelines from the American Medical Association, American Diabetes Association, and many other leading medical organizations, are that metabolic surgery is an effective treatment for type 2 diabetes," said Pennington Biomedical Executive Director John Kirwan, Ph.D., who led the study. "Despite growing consensus, many health insurers do not provide coverage for metabolic surgery because we haven't had a sufficiently large, randomized controlled trial that considered how long the results of surgery last relative to medications and lifestyle changes."

"Even when patients are provided with education in nutrition, exercise, self-monitoring and the newest diabetes medications on the market, only 2.6 percent of patients were able to achieve diabetes remission during the study," Dr. Kirwan notes. "When we looked at patients who underwent metabolic surgery, even three years later, 37.5 percent had achieved lasting remission of their diabetes," he added.

The study notes that less than one percent of individuals eligible for bariatric surgery receive the treatment, likely due to both patients' and their providers' concerns about long-term safety and lasting results.
The study also found that metabolic surgery was superior to medication and lifestyle changes in lowering HbA1c, fasting glucose, body weight, and other cardiovascular risk factors with substantially less medications.

"It is our hope that physicians will have greater confidence in recommending bariatric surgery to their patients, and that health insurers will see the health benefits and ultimately, cost-savings that can be achieved by covering metabolic surgery," Dr. Kirwan said.

**More information:** John P. Kirwan et al, Diabetes Remission in the Alliance of Randomized Trials of Medicine Versus Metabolic Surgery in Type 2 Diabetes (ARMMS-T2D), *Diabetes Care* (2022). DOI: 10.2337/dc21-2441