

EVIDENCE UPDATE

Comparing Two Common Types of Weight Loss Surgery

Weight loss surgery, also called bariatric surgery, helps people with obesity lose weight. A recent study compared the benefits and harms of two common types of weight loss surgery.

Findings



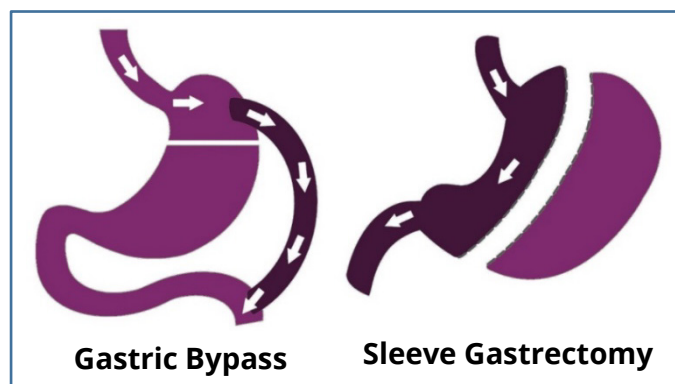
A PCORI-funded study found that people lost more weight with gastric bypass than with sleeve. But more people who had gastric bypass needed additional surgeries and hospitalizations than those who had sleeve.

Among patients with type 2 diabetes, about the same number of people no longer had to take medicine for their diabetes with both surgeries. However, more people with sleeve had their diabetes return.

Some adults with obesity are not able to lose weight with diet and exercise alone. Surgery can help people lose weight and improve problems related to obesity, like diabetes. But surgery can also cause harm.

Two of the most common types of weight loss surgery are:

- ▶ **Roux-en-Y gastric bypass, or gastric bypass.** In this surgery, a surgeon uses part of the stomach to create a pouch that is attached to the small intestine. Instead of food going into the person's stomach, it goes to the pouch and then into the small intestine.
- ▶ **Sleeve gastrectomy, or sleeve.** In this surgery, a surgeon removes a large part of the stomach. This turns the stomach into a narrow tube, or sleeve.



The study also included a third type of surgery called adjustable gastric banding, or lap band. This update does not include findings related to lap band because many weight loss surgery centers no longer perform this surgery.

About the Findings

Benefits

Weight Loss. Overall, patients lost weight with both types of surgery even though most patients had some weight gain after their initial weight loss. Five years after surgery, patients who had gastric bypass lost 26 percent of their total weight on average, while patients who had sleeve lost 19 percent of their total weight. For example, a 300-pound patient would have lost about 78 pounds five years after gastric bypass, compared with 57 pounds five years after sleeve.

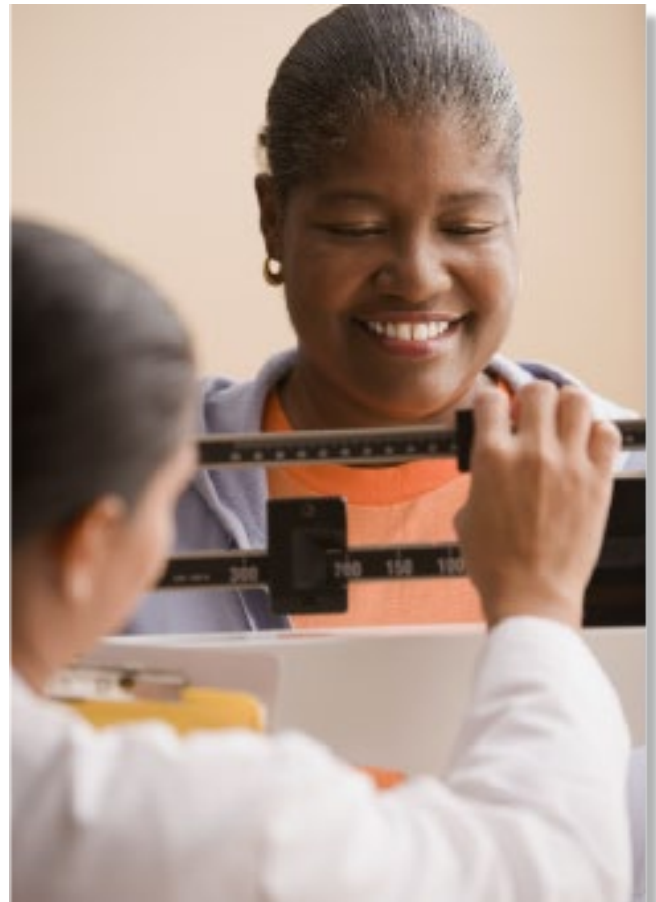
Type 2 Diabetes. About 85 percent of patients no longer needed to take medicines for their type 2 diabetes at some point in the five years after either type of surgery. Type 2 diabetes returned in 33 percent of patients who had gastric bypass and in 42 percent of patients who had sleeve. Among all patients with diabetes, patients who had gastric bypass had better blood sugar levels than patients who had sleeve.

Other benefits. Many patients who had either type of surgery noted other positive results. Patients said they could move and function better. Some patients also saw improvements in chronic health problems or in their mood, depression, or anxiety.

Harms

Needing another surgery. In the years after they had surgery, some patients needed another surgery to fix problems from the original operation. Patients who had sleeve had a 9 percent chance of needing another surgery in five years compared with 12 percent of patients who had gastric bypass.

Risk of dying. The risk of death from weight loss surgery is very low. Death for any reason following weight loss surgery happened in less than 1 percent of all patients in the study. There wasn't a difference in risk of dying between the two types of surgery.



Support After Surgery

Bariatric surgery can affect more than your physical life. It can also affect your mental health and social life. For example, some patients were surprised by negative reactions from friends and family who think surgery is an easy shortcut for losing weight. Others felt unprepared for the strict diet and exercise that surgery required or changes to their body after losing weight quickly.

Your clinician, like your doctor or PA, may have resources to help you prepare for life after surgery. Support may include:

- ▶ Classes to prepare for changes in diet, exercise, and lifestyle
- ▶ Follow-up care from clinicians
- ▶ Patient support groups in your area.

What Should I Ask My Clinician?

You and your clinician can talk about the benefits and harms you might expect from weight loss surgery. Questions you may want to ask your clinician include:

- ▶ Do you think I am a good fit for weight loss surgery? Why or why not?
- ▶ Which weight loss surgery type is best for me?
- ▶ What changes will I have to make to my lifestyle before surgery? What about after surgery?
- ▶ What other changes or challenges should I expect?
- ▶ What kind of support is available to me before and after surgery?
- ▶ What can I do to keep from regaining weight after I have surgery?

A version of this Evidence Update written for clinicians is available at www.pcori.org/new-evidence-bariatric-surgery-clinicians. You may want to share it with your clinician at your next visit.

What Else Should I Think About?

- ▶ What type of surgery is available to me? Not all clinicians and areas offer both types of surgery. Check whether the type of surgery you prefer is offered by your clinician or in your area.
- ▶ Where should I get treatment? Research has found that patients treated at accredited weight loss centers have fewer harms from their surgery. Centers are accredited jointly by the American College of Surgeons and the American Society for Metabolic and Bariatric Surgery.
- ▶ What type of surgery does my insurance cover? The type of surgery that insurance plans cover can vary. Check to see what your insurance plan covers and what your out-of-pocket costs are likely to be.



About the Study

Researchers looked at health data for patients with obesity who had weight loss surgery between 2005 and 2015. Patients had a body mass index, or BMI, of at least 35.

Data came from 41 health systems around the country that were part of PCORnet®, the National Patient-Centered Clinical Research Network.

Read more about this study at www.pcori.org/Arterburn218

SOURCES

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Anau J, Arterburn D, Coleman KJ, et al. (2020). Comparing Three Types of Weight Loss Surgery -- The PCORnet Bariatric Study. Patient-Centered Outcomes Research Institute (PCORI). <https://www.pcori.org/sites/default/files/Arterburn218-Final-Research-Report.pdf>

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