

# Study compares duodenal switch vs. gastric bypass for morbid obesity

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A study comparing bariatric surgical procedures for obesity suggests that even though undergoing the less commonly used biliopancreatic diversion/duodenal switch (DS) may be associated with higher early risks compared with gastric bypass (GB), the DS appears to achieve better weight loss and control of co-existing illnesses, especially among patients whose body mass index (BMI) was more than 50, according to a report in the September issue of *Archives of Surgery*.

Bariatric surgery has been established as the most effective way to treat [morbid obesity](#) and weight-related co-existing illnesses. The traditional Roux-en-Y [gastric bypass](#) (GB) is widely considered "the gold standard," but some evidence suggests that weight loss failure and weight regain may be more prevalent than first thought, especially among the "superobese" (BMI greater than 50), the authors write in the study background.

Daniel W. Nelson, D.O., and colleagues from the Madigan Army Medical Center, Fort Lewis, Washington, used the Bariatric Outcomes Longitudinal Database (BOLD) to compare 1,545 [patients](#) who underwent DS (average preoperative BMI of 52) with 77,406 patients who underwent GB (average preoperative BMI of 48) between 2007 and 2010. The average age of the patients was 45 years and 78 percent of the patients were female.

"Although the DS carries a higher relative risk profile than GB, the absolute risk is low. Among morbidly [obese patients](#), the DS results in

superior sustained weight reduction and improved comorbidity control compared with GB, which may outweigh early perioperative risk. The benefits of the DS, including a significant decrease in the bariatric failure rates, appear to be greatest in the superobese population," the authors comment.

While the DS was associated with longer operative times (191 vs. 114 minutes), greater estimated blood loss and longer hospital stays (2.4 vs. 4.4 days), the percentage of change in BMI was significantly greater in the DS group at all follow-up intervals. In the superobese population, the DS was associated with a significantly greater percentage of excess body weight loss at two years of follow-up compared to GB (79 percent vs. 67 percent), according to the study results. The results also indicate that nearly 20 percent of GB patients failed to lose at least 50 percent of their excess BMI by both the one- and two-year follow-ups, while the [weight loss](#) failure rates for DS patients were lower at 9 percent and 6 percent.

"Finally, in regard to postoperative comorbidity control, the DS group saw significantly greater resolution or improvement in most of the well-recognized obesity-related comorbidities, including diabetes, hypertension, hyperlipidemia [high cholesterol] and obstructive sleep apnea," according to the results.

Although researchers note a relative increase in the use of the DS, this procedure is still used much less in the United States compared with gastric bypass. The researchers suggest that is likely due to several factors, including the technical difficulty of the procedure, the higher reported rates of short-term complications and concerns about the longer-term nutritional consequences of a primarily malabsorptive procedure (where absorption of calories and nutrients is reduced).

"Further studies of this procedure to determine the optimal patient selection, operative technique and longer-term risks vs. outcomes are

warranted," the authors conclude.

In an invited critique, Alec C. Beekley, M.D., of the Thomas Jefferson University Hospitals, Philadelphia, writes: "In summary, Nelson and colleagues provide a well-researched and well-presented analysis of DS [biliopancreatic diversion/duodenal switch] vs. GB [gastric bypass] for morbid obesity, derived from an enormous and reliable database."

"Their findings and conclusions challenge the notion that GB is the optimal operation for the majority of patients. As more surgeons familiarize themselves with the operative techniques and follow-up requirements for DS patients, it may be used more frequently in the superobese population," Beekley concludes.

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