

Gastric By-pass surgeries long term health benefits and risk to include maintenance of

weight loss

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Abstract:

This paper has discussed gastric bypass that is a surgical solution to obesity. It has further discussed long term risk and benefits of Gastric bypass surgery as this surgery reduced the size of the stomach to limit the amount of food it would hold, avoiding some of the problems of the intestinal bypass while continuing the predominance of surgical intervention as the absolute treatment of chronic obesity problems. We have proved our point through numerous researches.

Introduction:

Surgical treatments for obesity are relatively new but are highly significant for that small fraction of people who suffer from "morbid" obesity, that is, 100 percent over ideal weight.

Four factors have made surgery the treatment of choice for many such people : (1) recent demonstration of the severity of the various physical complications often with profound psychosocial disability, resulting in a twelve-fold increase in mortality among younger persons, (2) the inefficacy of conventional treatments; (3) the continuing development of newer surgical measures ; and (4) many health benefits at acceptable levels of risk.

Although the prevalence of obesity is very low—less than 1 percent—over half a million Americans suffer from this condition and many of them seek psychiatric help at some time in their life. It is, therefore, worth describing the newer surgical procedures

and some of their surprisingly favorable behavioral sequelae. Two operations currently dominate the treatment of obesity—jejunoileal bypass and gastric bypass.

Mason and Ito (1967) developed the gastric bypass as surgical solution to obesity. Gastric bypass surgery reduced the size of the stomach to limit the amount of food it would hold (Halimi 1980), avoiding some of the problems of the intestinal bypass while continuing the predominance of surgical intervention as the absolute treatment of chronic obesity problems. As with other surgical means to deal with obesity, the gastric bypass proved to have a number of complications and also has fallen into less use by the medical profession. Physicians have developed few surgical procedures to medicalize other forms of deviance, with the exception of the lobotomy for mental illness. Interest in surgery for the treatment of obesity rose until the late 1970s and then declined.

European surgeons developed the surgical technique of suction lipectomy (popularly called "liposuction") to remove fat stored on selected body sites, and it became popularly applied in the United States. Such cosmetic surgical treatments are morally ambiguous. Like other forms of plastic surgery, liposuction uses medical technology but deals with appearance rather than disease and does not attach a sickness label to the patient.

Researchers suggest that an oversupply of surgeons generated demand for their services by applying their craft to obesity. An early form of eating control was jaw wiring, which required obese patients to subsist on only liquid diets. This procedure gave a physician (with the aid of a dentist) control over the eating of obese patients, producing dramatic weight loss and making physicians medical gatekeepers to the technique. Jaw wiring gained much attention in the mass media as promoting weight loss. However,

once jaws were unwired there was typically recidivism back to obesity. Physicians lacked enthusiasm for jaw wiring, as evidenced by the relatively small number of publications in the medical literature about the topic.

The lack of success with jaw wiring led surgeons to seek more lasting medical procedures to control obesity. Permanent surgical procedures that bypassed a part of the digestive process had been around for a long time, and were tried as a solution that allowed eating without the consequences of digestion and consequent fat storage. The intestinal bypass surgical technique was developed by Reeder B. A., et al. ( 1954), leading to the pioneering of jejunoileal bypass surgery for obesity by Rand C. S. W., and A. M. C. MacGregor (1990). In an intestinal bypass a surgeon removes a section of the intestine to prevent absorption of calories. Such surgery involved the highest status specialty of medicine in a dramatic (and hopefully permanent) treatment of deviant behavior that could be claimed as a medical solution. However, a number of complications result from intestinal bypass surgery, including diarrhea, malnutrition, liver disease, renal failure, and arthritis (Rodin J. 1992). The intestinal bypass as a treatment for obesity peaked in the 1970s with published reports on over 10,000 cases by 1980 (Rothblum E. D., P. A. Brand, C. T. Miller, and H. A. Oetjen. 1990). However, the technique lost favor as these side effects received increasing attention, and publicity about the problems associated with the procedure published in prestigious medical journals led to a decline in its use (Rothblum E. D. 1992).

In the gastric bypass operation, a stomach pouch of 50 ml capacity is constructed with a 1.2 cm outlet to the proximal jejunum, radically reducing the amount of food that can be consumed at one time. The original rationale for the jejunoileal bypass was to

decrease intestinal absorption of nutrients. Although malabsorption occurs, most of the weight loss following jejunoileal bypass (and all of the weight loss following gastric bypass) is due to voluntary restriction of food intake. Weight loss following both procedures occurs at a decelerating rate for twelve to eighteen months, during which time at least 50 percent of excess weight is lost, although there is, of course, considerable individual variability. This weight loss is accompanied by a number of significant benefits; among them, relief of the Pickwickian syndrome, reduction of elevated blood pressure and blood glucose to normal levels among most hypertensives and diabetics, and correction of a wide variety of the mechanical ill effects of excessive weight. One of the most gratifying results is marked amelioration of the psychosocial disabilities that afflict most morbidly obese persons. Against these benefits must be considered the risks of bypass surgery. Mortality in the operative and postoperative period is below 3 percent for both procedures, if they are carried out as they should be by skilled interdisciplinary teams able to provide continuing supervision. Postoperative results, however, favor gastric bypass. Though, this bypass is often followed by severe diarrhea, fluid and electrolyte disturbances over the short-term, and liver disease that is fatal in 2 percent of patients over the longer term. Hyperoxaluria leads to nephrolithiasis in 10 percent of patients and to serious focal nephritis induced by oxalate crystals in an undetermined number of other patients. Complications of jejunoileal bypass do not seem to decrease over the years and the long-term adverse effects have been serious enough to cause surgeons to turn increasingly to gastric bypass. The only common complications of this surgery are epigastric distress and vomiting; these are readily controlled as the patient learns new eating habits.

Some unexpected behavioral consequences of both operations are of interest for both theoretical and practical reasons. Five studies have reported that bypass surgery is followed by unusually benign behavioral consequences, but four of these studies have understated the benefits of this surgery and maintenance of weight loss. The latter studies used what was probably an inappropriate control period. For comparison with the emotional status after the surgery period, they used as a control the time just before surgery. A more appropriate control period would seem to be the time when the patient was attempting to lose weight (usually with far less success) without surgery. During such times a majority of these patients had experienced depression, anxiety, and a variety of depressive affects. By contrast, during the weight loss that follows surgery patients rarely experience such affects and, on the contrary, usually report enhanced feelings of well-being. Furthermore, the restriction of food intake, which plays the largest part in the weight loss, is achieved without particular effort and is accompanied by a striking normalization of eating patterns and there is no as such risk found in maintenance of weight loss. Moreover, There is a marked decrease in snacking, night eating, and binge eating; the ability to stop eating is also enhanced. Even more surprising is the effect upon the large percentage of persons who until then did not eat breakfast: during a period of rapidly falling weight, most of these people began to eat breakfast.

These phenomena are striking enough to suggest that far from merely altering the mechanics of the bowel, bypass surgery brings about a major change in the biology of the organism. It has been proposed that this surgery has the effect of lowering the set point at which the body weight of obese people may be regulated. According to this view, the lack of dysphoric reactions to weight loss and the normalization of eating patterns result

from the body adjusting to this new, lower set point, since it no longer has to struggle to reduce against the pressures of a higher set point.

Though, there are number of researchers debating whether or not bariatric surgeries contract with obesity present more benefits or more risks to patients.

In a study involving 66,109 obese patients, two groups were formed. The first group consisted of 3,328 patients who received gastric bypass surgery, while the second group included the remainder of the patients, or those hospitalized for some other medical reason.

Researchers found:

In the time span of 30 days, one in 50 surgery patients died

Approximately 3 percent of patients who had gastric bypass surgery were younger than 40 and died after 13.6 years, compared to the 13.8 percent who did not have the surgery

After 15 years, 11.8 percent of patients of all ages who had gastric bypass surgery died, compared to the 16.3 percent who did not have the surgery

Another study concerning bariatric surgery involved 1,035 morbidly obese patients who had gastric bypass surgery and 5,746 patients of the same weight who did not have the surgery.

The results from the study showed:

Sixty-seven percent of the gastric bypass patients lost their excess weight

In a five-year follow up, six patients died (four from the operation), compared to the 350 patients who died and did not have the surgery

Patients having bariatric surgeries had an 89 percent reduced risk of death

It is important to note: The success rate of gastric bypass surgery reflects the experience of the surgeon, in that patients are at five times the risk of death during surgery if a surgeon is less experienced.

USA Today October 6, 2004 [http://www.mercola.com/2004/oct/20/gastric\\_bypass.htm](http://www.mercola.com/2004/oct/20/gastric_bypass.htm)

Researchers claim that patients usually mislay an average of sixty percent of their surplus weight that is the sum beyond normal in two years subsequent to the operation. An additional measurement proves that they have lost an average of eighty pounds. Although especially than facilitating people lose weight they've not been capable to lose before, the surgery assists people getting back their long-standing good health (Sobal J., V. Nicopoulos, and J. Lee. 1995).

Morbidly obese people frequently have numerous staid health problems. These patients have an enormous yearning for a clean bill of health, as well as it's fascinating to note that the surgery does obstinacy ton numerous of their health problems, or as a minimum shows the way to a considerable improvement.

Similar to any surgery or other treatment, Gastric Bypass can churn out better or worse than standard for any person. It is a main surgery and people considering it must cautiously consider the potential benefits, as well as the impending obstructions in illumination of their own health (Wolf A. M., and G. A. Colditz. 1994).

As an instance of one health problem linked to obesity, the researcher found that before their operation, fifteen percent of Gastric Bypass patients had type II diabetes and another twenty five percent had pre-diabetes. As they were tested subsequent to the surgery, more than eighty percent of those with diabetes had their stipulation determined. Others reported perfection in their stipulation.

Coarse diabetes can lead to heart attack, stroke, poor vision or loss of sight, and early death. Appearing at a second health measure, thirty percent to forty percent of patients had high levels of cholesterol, lipids, or triglycerides in their bloodstream prior to the operation.

Testing subsequent to surgery found that seventy percent or more of the patients had lower levels of these matters. For instance, total cholesterol levels cut down by a standard of thirty three milligrams.

Elevated levels of cholesterol, lipids, and triglycerides boost the risk for heart disease and/or stroke. A further condition, high blood pressure, affected thirty four percent of patients before surgery. Subsequently, testing found that the predicament had moved out for sixty percent and enhanced for numerous others.

Medical researchers don't entirely comprehend how large weight loss is associated to this health perfection. Several conditions, akin to arthritis or heartburn, might progress subsequent to surgery exclusively as of weight loss.

Thus, Weight loss might show the way to a transform in the body's hormones, and a permutation of this issue and weight loss could reason the decree or progress in diabetes.

People make a decision to have the surgery as they have no other choice. It isn't a short-range. Patients have to demonstrate that they comprehend the risks as well as can fasten through the eating limits and make the everyday life changes subsequent to the surgery to lose the weight.

Anyone with morbid obesity has a shorter life convoluted by one or more medical troubles that get poorer eventually. They typically turn out to be more obese. They get

caught in a ferocious cycle. They can't exercise so they gain weight. Dieting just doesn't toil at this weight level (Stunkard A. J. 1988).

A Stanford University School of Medicine study using new measures of heart disease risk shows that gastric bypass surgery reduces the risk of heart disease even more than previously believed. The researchers say the finding underscores the value of the surgery for extremely overweight people, whose obesity puts them in danger of heart attack, stroke and other cardiovascular illness.

The researchers measured biochemical cardiovascular risk factors in 371 patients before surgery and again 12 months after gastric bypass surgery, adding three new tests to the standard panel of cholesterol and triglyceride assays. They saw improvements in all cardiac risk factors, with the most significant improvements for triglycerides and one of the new tests: C-reactive protein.

"Medication with statins, the most effective non-surgical treatment available, lowers C-reactive protein by about 16 percent. But we found that gastric bypass lowered it by 50 percent. That's a pretty significant improvement over what's been considered state-of-the-art therapy," said senior author John Morton, MD, assistant professor of surgery at the Stanford School of Medicine and director of bariatric surgery at Stanford Hospital.

Lead author Brandon Williams, MD, a general surgery resident, will present the study's findings at 7:45 a.m. Eastern time on June 30 at the annual scientific meeting of the American Society for Bariatric Surgery, held June 26-July 1 in Orlando, Fla.

Gastric bypass surgery, the most common form of weight-loss surgery, reduces the stomach's size to limit the amount of food intake and bypasses more than 35 inches of the approximately 20-foot-long small intestine, which cuts down on nutrient absorption. The number of gastric bypass surgeries has shot up in recent years, increasing from 29,000 procedures in 1999 to about 141,000 in 2004, according to the bariatric surgery society. The procedure poses about a 2 percent risk of mortality and requires lifelong changes in eating habits, but it's a life-saving operation for most morbidly obese individuals, Morton said.

"This operation is reserved for morbidly obese people, not the pleasantly plump," Morton said. "Being morbidly obese carries a pretty significant risk of premature death, in large part because of heart disease. The risk of premature death for the morbidly obese is about three times the risk of the general population."

Though for most obese people, the most compelling reasons to lose weight have to do with improvements in lifestyle, the health benefits are tremendous, Williams said. He expects that the new study will encourage physicians to discuss the surgery with obese patients who are at risk of heart disease. And he hopes that the findings will push insurance companies that deny coverage for the procedure to change their policies. More than 15 million people in the United States are morbidly obese, as measured by body mass index, which is a person's weight in kilograms divided by height in meters squared. A BMI over 40 qualifies as morbidly obese, according to National Institutes of Health guidelines for bariatric surgery. So, for example, a person whose height is 5 feet 8 inches and weight is 265 pounds would have a BMI of 40 and would be considered morbidly obese.

Morton, Williams and Stanford colleagues knew from earlier studies by others that gastric bypass lowered many risk factors for heart disease but no large-scale studies had investigated the effects of the surgery on all three newer heart-disease markers - C-reactive protein, lipoprotein A and homocysteine, Williams said. They set out to study the effects and found improvements across the board.

"All of the values improved to where they were no longer in the abnormal range. In other words, they normalized," Morton said.

The most significant decrease in risk was seen in C-reactive protein levels, which dropped from 10 mg/L to 3 mg/L. According to the Centers for Disease Control, C-reactive protein levels greater than 3 mg/L indicate high risk for cardiovascular disease. Interestingly, the improvements went beyond what would have been expected due to weight loss alone. "We're not sure why, but the process of bypassing the stomach might induce some changes in both lipid and inflammatory metabolism," Morton said. The lowering of cardiac risk factors was especially compelling given the patients' dire condition before their surgery, Williams said. "The study showed that these patients were at great risk of heart disease before their surgery. Their risk factors were even higher than we had expected," he said.

"I think our findings show that this is not in any sense a cosmetic procedure: that it really does benefit the health of these patients," Williams added.

<http://www.emaxhealth.com/69/2473.html>

"Gastric bypass surgery is not about losing weight the easy way and looking good -- the operation is about improving health," says Merkle. "There should be a long-term commitment by the patient. Eating habits must change. For example, patients will need

lifelong vitamin supplements. Some patients lose weight, and then gain it back again. Not everyone gets the results they want, but they all face the risk of these complications."

<http://my.webmd.com/content/article/77/95549.htm>

Thus, Gastric bypass surgery presents the prospective for considerable weight loss, the majority of which can be sustained for a long term. Yet, surgical procedure is not an alternative for everyone. Patients should meet explicit criteria to meet the criteria for surgery and should be eager to make sweeping changes in their lifestyle. The decision to have surgery must not be made flippantly; it will involve discussion with a primary care physician, and discussion with a bariatric surgeon (Sobal J. 1995).

Every patient deemed for gastric bypass surgery is assessed by a dietitian. The dietitian will evaluate a patient's weight loss history as well as their present eating habits. In several cases, patients might be inquired to found a weight loss program previous to surgery to assess their conformity and to lessen surgical risk. Prior to surgery, patients are systematically educated concerning the types as well as amounts of foods that should be eaten post-operatively. Typically patients should devour either liquids or smashed foods for about eight weeks subsequent to surgery until solid foods are steadily initiated.

In the gastric bypass process, the surgeon generates a small pouch at the apex of the stomach, which can simply hold a quantity of 1-2 ounces at a time. Individuals turn out to be fuller sooner on the small fractions of food. To get sufficient nutrition, patients should eat as a minimum six times per day, capture a multivitamin/mineral supplement daily, use sugar-free foods and drinks, and avoid foods through a high attentiveness of sugar (Sobal J., V. Nicopoulos, and J. Lee. 1995).

Foods should be chosen cautiously to give adequate protein, which is indispensable for proper healing, and to keep up muscle mass throughout weight loss. Patient's nutritional status and weight loss are examined after surgery. The sum of weight that is typically lost consequently of surgery varies, but can be as much as fifty to eighty of surplus body weight. The long-term success of the surgery is reliant on the patient's capability to keep up healthy lifestyle changes.

Patients are requisite to pursue a healthy low-fat, low-sugar diet for the rest of their lives. As the stomach pouch might elongate to hold 2-3 ounces, small portions should as well be continued. Usual exercise is as well an essential constituent of a healthy lifestyle.

As a result of the considerable weight loss, gastric bypass surgery could improve obesity linked medical conditions. Response does diverge among patients, but Type 2 diabetes along with sleep apnea syndrome tends to develop significantly and might even disappear. Patients often report increased energy, better mood and self-worth together with generally development in their excellence of life.

## Conclusion

Thus, gastric bypass is simply a tool to ease mind-full behavior for long-standing better health and there is no major risk found in maintenance of weight loss. They will confirm that weight control, regardless of surgery, takes a life span of industrious attention to their bodies and behavior. Research also shows that they guarantee long-term benefit.

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