



## Medical Assistance with the Battle of the Bulge

***"Some patients may have tried diligently for years to lose weight, while others may have made only cursory, poorly-supported efforts. The need for support is also likely to continue following bariatric surgery or after the implantation of a stomach pacemaker."***



Bariatric surgery, which often involves banding of the stomach, is a widely used procedure for treating severe obesity. Another approach that relies on an implantable “stomach pacemaker” also appears poised to assist those struggling with significant weight gain.

Many people have already benefited from these kinds of surgical interventions, enabling them to shed a great deal of weight, improve their health and get a new lease on life.

At the same time, however, it’s important for us to examine such interventions from an ethical point of view. It’s not simply a matter of weight loss, achieved by any means whatsoever, but a rational decision made after carefully weighing the risks, benefits and alternatives.

Bjorn Hofmann, a medical ethicist who writes about the ethical issues surrounding obesity-correction techniques notes,

“Bariatric surgery is particularly interesting because it uses surgical methods to modify healthy organs, is not curative, but offers symptom relief for a condition that is considered to result from lack of self-control and is subject to significant prejudice.”

The healthy organ that is modified is the stomach, which may be either banded or surgically modified with staples to create a small stomach pouch. This causes food to be retained in the small pouch for a longer period of time, creating a feeling of fullness, with the effect of reducing how much a person ingests at a single meal.

Like any surgical technique, bariatric surgery has risks associated with it: Mortality from the surgery itself is less than one percent, but post-surgical leakage into the abdomen or malfunction of the outlet from the stomach pouch can require further surgeries. Nearly 20 percent of patients experience chronic gastrointestinal symptoms. Wound infections, clot formation, vitamin deficiencies, cardio-respiratory failure, and other complications like gallstones and osteoporosis can also occasionally arise.

A new device, sometimes described as a “pacemaker for the stomach,” was recently approved by regulators at the Food and Drug Administration. This rechargeable and implantable device blocks electrical nerve signals between the stomach and the brain and helps to diminish the feeling of being hungry. The cost for the small machine, along with

# Making Sense of Bioethics

## Medical Assistance with the Battle of the Bulge

its surgical implantation, is expected to run between \$30,000 and \$40,000, making it competitive with various forms of bariatric surgery.

Because the stomach pacemaker does not modify the stomach or the intestines as organs, but instead reduces appetite by blocking electrical signals in the abdominal vagus nerve, some of the surgery-related complications associated with modifying or stapling the stomach are eliminated. Other surgical complications related to the insertion of the device into the abdomen have sometimes been observed, however, as well as adverse events associated with its use, like pain, nausea and vomiting.

Bariatric surgery, it should be noted, is not universally successful in terms of the underlying goal of losing weight and some patients ultimately regain the weight they lose either through enlargement of the stomach pouch or a return to compulsive eating patterns or both. Results have been similarly mixed for patients receiving the stomach pacemaker: some lose and keep off significant amounts of weight; others show only negligible improvements when they are unable to adhere to the needed life-long changes in eating habits.

Among the ethical questions

that need to be considered with regard to surgically-based approaches are: Should an expensive, invasive and potentially risky surgery be routinely used for an anomaly that might be addressed by modifications in diet and eating habits? What criteria should be met before such surgery is seriously considered?

It is also of ethical importance that physicians and surgeons not be unduly influenced by device manufacturers to utilize their various stomach banding apparatuses or their pacemaker devices.

In 1991, the National Institutes of Health developed a consensus statement on "Gastrointestinal Surgery for Severe Obesity" that offers guidance for clinical decision making. The statement notes that, beyond having a serious weight problem, patients seeking therapy for the first time for their obesity should "generally be encouraged to try non-surgical treatment approaches including dietary counseling, exercise, behavior modification and support."

These broad guidelines are intended to spark discussion on the part of patients and their medical team: How much support has an individual really received prior to looking into weight reduction surgery

or stomach pacemaker insertion? Some patients may have tried diligently for years to lose weight, while others may have made only cursory, poorly-supported efforts. The need for support is also likely to continue following bariatric surgery or after the implantation of a stomach pacemaker.

In sum, there are notable differences between such surgical interventions and traditional weight loss techniques involving exercise and diet. With the surgical techniques, due diligence will be required both prior to and following such interventions, particularly in light of the ongoing discussions about the cost-effectiveness, safety, risks and outcomes of interventional surgery for the overweight patient.

*Rev. Tadeusz Pacholczyk, Ph.D. earned his doctorate in neuroscience from Yale and did post-doctoral work at Harvard. He is a priest of the diocese of Fall River, MA, and serves as the Director of Education at The National Catholic Bioethics Center in Philadelphia. Father Tad writes a monthly column on timely life issues. From stem cell research to organ donation, abortion to euthanasia, he offers a clear and compelling analysis of modern bioethical questions, addressing issues we may confront at one time or another in our daily living. His column, entitled "Making Sense of Bioethics" is nationally syndicated in the U.S. to numerous diocesan newspapers, and has been reprinted by newspapers in England, Canada, Poland and Australia.*

