Controversies in Gastroenterology

Laparoscopic gastric bypass

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Abstract
Obesity is considered to be the epidemic of the 21st century. Until now there are no known medical or phar-
macological methods to manage obesity in ways that control it and significantly reduce the comorbidities
associated with it. Bariatric surgery has become the best alternative for management of obesity. Management
of patients undergoing bariatric surgery requires referral centers with multidisciplinary medical groups com-
mited to choice and long term follow-up of these patients. Bariatric surgery continues to be the gold standard
for surgical management of morbid obesity.

Key words
Morbid obesity, gastric bypass, laproscopic surgery, metabolic syndrome, diabetes type 2.

In both developed and developing countries obesity has
increased in an epidemic manner in the last 20 years: and
the prognosis for the next 30 years is not optimistic (1).
The poor results of medical management and the excellent
results with low levels of complications of bariatric surgery
have transformed this branch of surgery into the specialty
which has developed most of all the surgical specialties in
the last decade (2). This development is primarily due to
the minimally invasive techniques which have been devel-
oped since 1990 (3).

Since 1977 gastric bypass procedures (GBP) have been
the gold standard for surgical management of morbid obe-
sity. This is mostly because of the good results obtained
in terms of weight loss and correction of comorbidities
proven over a period of more than 30 years (4). By 2002,
sleeve gastrectomy had become the most frequently used of
all bariatric techniques the world over, accounting for 75%
of the procedures performed according to the American
Society of Bariatric and Metabolic Surgery (ASMBS) (5).

In simple terms sleeve gastrectomies mix restriction,
with a gastric pouch of 30 cc, with reduced absorption
through gastrojejunal derivation Roux-en-Y gastric bypass.
This produces functional exclusion of the duodenum and
the first portions of the intestine, resulting in decreased
food intake and causing varying degrees of malabsorption.
Possible variations include different sizes of reservoirs, the
option of using restrictive rings along the length of the
excluded intestinal loops and the choice of methods for
performing the gastrojejunal anastomosis. In addition, the
choice of whether to make the ascent in front of or behind
the colon is difficult to standardize internationally which
makes it difficult to compare results obtained in different
institutions.

Sleeve gastrectomy is a complex technique which requi-
res referral centers with well coordinated specialized surgical
teams, surgical inputs and operating rooms which are
appropriate for obese patients in order to achieve rates of
complications lower than 10% and perioperative mortality
rates below 1% (6).

Indications for performance of sleeve gastrectomy con-
jue to be those set out by the National Institutes of Health
in the United States in 1991 (7).
1. Patients over 18 years of age and younger than 65 years of age
2. Body mass index over 40kg/m²
3. Body mass index between 30 and 40 with associated comorbidities
4. Multidisciplinary evaluation which determines
   - Low possibility of weight loss through non-surgical methods
   - Patient understands short and long term risks of surgery
   - Patients is highly motivated to lose weight through surgery
   - Patient is prepared to have lifetime medical follow-up

Counter indications to surgery (8) include:
- Medical counter indications
  - Unacceptable operating risk due to severe comorbidities
  - Incurable diseases such as HIV, cancer and cirrhosis
  - Gastrointestinal disorders such as Crohn’s Disease and dysmotilities
  - Poor quality of life which will not improve with reduced weight.
- Psychiatric counter indications
  - Significant psychiatric illness or major depression
  - Severe mental retardation
  - Self-destructive life style
  - Active bulimia
  - Drug or alcohol abuse
  - Inability of patient to understand behavioral changes required following surgery

The majority of patients who undergo sleeve gastrectomies experience similar patterns of weight loss following surgery. During the first three months after surgery they lose between 25% and 50% of their excess weight. From that point on they lose weight more slowly until they have lost 60% of their excess weight at the end of a year. Maximum loss of 72% of excess weight is reached on average by the end of 18 months.

It is well known that between 3% and 5% of patients who undergo properly performed sleeve gastrectomies do not have good results. From that point on they lose weight more slowly until they have lost 60% of their excess weight at the end of a year. Maximum loss of 72% of excess weight is reached on average by the end of 18 months.

In summary, gastric bypass procedures and laparoscopic sleeve gastrectomies in particular are the most commonly used techniques today for surgical management of morbid obesity. Laparoscopic sleeve gastrectomies are better for patients under 30 years of age who do not have diabetes and do not consume large quantities of simple sugars. Gastric bypass surgery would be recommended for patients over 30 years of age who have diabetes or dyslipidemia and who eat sweets, but who do not have inflammatory bowel disease or intra-abdominal adhesions from previous surgical procedures and who have not had risky hernia surgery. In our service we have performed gastric surgery on more than 1,400 patients since 2001 with about 10 gastric bypass operations for each laparoscopic sleeve gastrectomy (9, 10).

REFERENCES