

National report

Bariatric surgery in Brazil: Current status

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Introduction

Obesity is a growing epidemic not only in industrialized countries but also in the developing world. The main difference in places like Brazil is the phenomenon of nutrition transition. Till the recent past undernutrition was the main problem. The rapid shift toward excessive body weight resulted in the relatively frequent coexistence, in the same family and in the same house, of examples of the two derangements, namely undernourished children with obese parents, or the opposite association.

Antiobesity procedures were started in this country in the 1970's, in the form of jejunoileal bypass. Multiple modalities were tested along the years, especially in Hospital das Clinicas, Sao Paulo, which was the pioneer institution, till the creation of the Brazilian Society of Bariatric and Metabolic Society (BSBMS) in 1999, by Artur Garrido Jr.

Yearly congresses have been organized since that time, and the Society counts more than 900 members including surgeons as well as allied health professionals. Current president is Ricardo Cohen. A Bulletin was created in 2000 by Joel Faintuch and Artur Garrido Jr and converted into a quarterly Journal five years later. Now the Journal has merged with the Brazilian Archives of Digestive Surgery, which also appears every three months.

Acceptance of the specialty

Until the early 1990's just a few dozen surgeons had interest in bariatric operations and very few surgical residents had exposure to such the techniques. However after the establishment of BSBMS growth has been exponential, notably after government and private health providers accepted reimbursing the operations. At this moment such procedures are very well established all over the country, and actively sought by obese patients. Indeed, public hospital often suffer with long waiting lines.

Surgical residents in large academic hospitals and also in certain private ones have the chance of operating bariatric candidates during their rotations, and a couple of Centers of Excellence in Bariatric Surgery has been created in Sao Paulo, with a tendency to grow towards other cities as well.

Surgical procedures

The most practiced modality in the country is the Roux-en-Y gastric bypass (RYGB), which is the first intervention recognized and funded by the Federal Social Security System. Approximately 75% of the candidates undergo this treatment, but multiple other options are endorsed by BSBMS, namely vertical banded gastroplasty, sleeve gastrectomy, gastric banding, Scopinaro procedure and duodenal switch, along with the endoscopically placed intragastric balloon.

Patient care and hospital facilities

A national consensus signed by six surgical and clinical professional societies in 2007 established directives for most routines and indications concerning bariatric interventions, from patient selection to hospital equipment and postoperative care.

Current statistics

Brazil has roughly 190 million inhabitants of which between 2 and 4 million are morbidly obese, depending on the estimate. About 30 000 bariatric procedures are conducted each year, of which 25-30% are paid by the Federal Social Security System, 60-70% by commercial Health Providers, and around 5% privately financed.

### Distribution of morbid obesity

A national survey under the initiative of BSBMS revealed that though morbid obesity doesn't spare any of the regions of Brazil, distribution is not homogeneous. The two poorest areas, namely the North and Northeast, display the lowest proportion (2%). The rich Southeastern region, which includes Sao Paulo, wasn't bad either with 2.5% prevalence. The highest rates corresponded to the Western region and to the South, both with 5% values.

As concerns the South there is a rather obvious explanation. This area is quite affordable, there is strong immigrant influence especially from Italian and German people, and the population appreciates hearty meals. The Western region was a surprise and no obvious explanation is available, though meat is particularly abundant in that area because of vast cattle-raising farms.

### Metabolic surgery

In the last five years several groups have engaged in standard bariatric or tailor-made operations for non-morbidly-obese diabetics, with variable results. Animal investigations were started in a number of University laboratories, and Master's as well as PhD theses are going on. Some controversy occurred when a couple of teams started performing such interventions on a routine basis. A consensus established in 2009 decided that these treatments are still experimental and should be conducted under approval of an Ethical Committee, for the purposes of scientific investigation only.

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