



Patient Contraindications to Undergoing MGB

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10.1 Introduction

Obesity is a chronic disease that has reached pandemic proportions and is becoming one of the leading causes of death and disability worldwide. Weight loss induced by surgery has proven to be highly efficacious in treating obesity and its co-morbidities. The indications were extended by IFSO in 2016 to obesity and weight-related diseases [1]. The body mass index (BMI) is no longer the only indicator for surgery in the presence of obesity.

10.2 Absolute Contraindications

The contraindications for obesity surgery have changed in the past decades. Current absolute contraindications are only:

- (a) Unacceptable risk (e.g., left ventricular output function <10%)
- (b) Liver cirrhosis CHILDC
- (c) Unstable psychopathological conditions
- (d) Active drug dependency

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10.3 Background and Reasons

The benefit-risk ratio is a fundamental part in all fields of modern medicine and is not specific for obesity surgery. Liver cirrhosis was a general contraindication for obesity surgery from the beginning. Later on, the improvement in liver function and the downstaging of NASH and early stages of cirrhosis has been demonstrated [2]. However, the status CHILD C does not meet the benefit-risk ratio.

Obesity is associated with a significant psychosocial burden. Some candidates for surgery for obesity and weight-related diseases present with significant psychopathology, which may impact the outcome of surgery, and, in some cases, represent a contraindication to surgery (IFSO statement: Level of evidence 2, grade of recommendation C) [1].

Several studies have identified the presence of psychopathology according to the Diagnostic and Statistical Manual of Mental Disorders V (DSM-V) in candidates for surgery for obesity and weight-related diseases [3–6]. Current American and European guidelines, as well as some reviews [7–9] have emphasized that the presence of specific psychiatric disorders are considered risk factors for suboptimal outcomes after surgical treatment.

Bulimia nervosa is considered a contraindication for surgery for obesity and weight-related diseases [10, 11] (Level of evidence 2, grade of recommendation B). Bulimia nervosa is relatively rare among individuals who present for surgery for obesity and weight-related diseases. Patients with this diagnosis are recommended for psychiatric treatment and a period of symptom remission, before being offered surgery for obesity and weight-related diseases.

Active or recent substance abuse and dependence, including alcohol abuse, is a contraindication to surgery for obesity and weight-related diseases (IFSO statement 3.7.4.: Level of evidence 3, grade of recommendation C) [1].

10.4 Specific Contraindications for MGB-OAGB

- (a) Primary short gut (total small intestine length <350 cm) or secondary short bowel syndrome (after intestinal resections)
- (b) Crohn's disease

10.5 Background and Reasons

There are two papers with reports of patients who died after MGB due to postoperative malnutrition and consequent liver dysfunction [12, 13]. The shortest recorded total small intestinal limb length was 302 cm. In the report of Motamedi et al. [13], a bilio-pancreatic limb (BPL) of 200 cm was used. The patient died 13 months after MGB, and autopsy revealed a common channel of 108 cm. On the back of this data and the fact that there can be errors in measurement, it is safer to have a cumulative length of >150 cm as BPL during Roux-en-Y gastric bypass (RYGB) and MGB-OAGB.

Crohn's disease can affect all parts of the GI tract. Therefore, bariatric intestinal surgery should be avoided with Crohn's disease, because one cannot predict when and which patterns this autoimmune disease will affect the small intestine.

10.6 Relative Contraindications for Obesity Surgery

(a) Relative contraindications for obesity surgery:

Inadequate drug treatment of pre-existing endocrine medical conditions is a contraindication to surgery for obesity and weight-related diseases (IFSO statement 3.8.2). In fact, the re-evaluation and optimization of the treatment of these conditions are necessary to reduce perioperative morbidity and mortality [1].

(b) Specific for MGB-OAGB: none.

Smoking is a relative contraindication for all types of gastric bypass surgery, based on the higher incidence of marginal ulcerations. Smoking is the most common reason for recurrent ulcerations after RYGB [14].

GERD is an additional indication and **not a relative contraindication** for MGB-OAGB. Due to the low pressure system, MGB-OAGB present an important therapy option in GERD. In a study by Tolone et al., manometric features and patterns did not vary significantly after MGB-OAGB, whereas the intragastric pressures and gastroesophageal pressure gradient statistically diminished [15]. In contrast, sleeve gastrectomy (SG) induced a significant elevation in both parameters [15]. Revision to MGB-OAGB offers a second option to treat GERD after SG or SADI [16], with the same efficacy as RYGB, but more effective with respect to weight loss [17, 18].

Conclusion

MGB-OAGB is an increasingly performed weight-loss operation with low morbidity and mortality. The principle is a lowered food uptake without any obstruction, but with a reduction of hunger feeling and earlier satiety caused by creating a wide sleeve-like gastric pouch anastomosed to jejunum. The low pressure system prevents GERD and can treat GERD after SG, BPD-DS and SADI, as a rescue operation. The long biliopancreatic limb offers extended bile reabsorption before fat assimilation starts in the common channel. The malabsorptive effect is lesser than after all forms of biliopancreatic diversion (with or without duodenal switch), which are bile losing procedures. In contrast to BPD, no bile-induced colitis can be expected. A short small intestine in MGB (<350–400 cm) is a contraindication to a MGB-OAGB.

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