Surgery

What are the most frequent complications of Fobi-Capella bariatric surgery and how to treat them?

Elias Jirjoss Ilias

Physician, Medical Sciences School, Santa Casa São Paulo (FCMSCSP); Member of the Brazilian College of Surgeons

The mortality rate of the Fobi-Capella bariatric surgery can reach up to 1% in large series and general complications can occur in up to 40% of the cases.

We will cite the most frequent complications and will attempt to describe the best way to prevent and treat them, to the best of our knowledge.

1. Gastrojejunal anastomosis fistula: it is a feared complication and difficult to diagnose. The patient can have only tachycardia, in the beginning, and later develop dyspnea and pleural effusion. The last thing to be perceived is peritonitis. Its occurrence rate can be decreased by carrying out a careful anastomosis and performing a second plane of suture over the clamping of the small gastric chamber. The maneuver that consists of injecting saline solution with methylene blue through the orogastric tube can disclose small leaks in the anastomosis, which can be corrected during the intraoperative period. We also suggest the placement of drain in this region, exteriorized to the left flank, which diagnoses and guides the fistula when the latter appears. In cases where the patient did not receive a drain and fistula diagnosis was suspected, we suggest an immediate surgical reapproach, with washing of the cavity, ample draining of the abdominal cavity and performing a gastrostomy in the large excluded gastric chamber for feeding.
2. Surgical wound hematoma-seroma: it can be minimized by carefully washing the surgical wound and subcutaneous approximation. Wearing an elastic abdominal support can also help decrease its incidence in the postoperative period.
3. Incisional herniation: its incidence is higher in the open surgery than in the one performed by videolaparoscopy. Aponeurosis must be preferably closed with nonabsorbable sutures and stitches should be placed closed to each other. Wearing an elastic abdominal support can help and must be encouraged for at least 60 days after surgery.
4. Pulmonary embolism: it is a rare complication, albeit a feared one. Its incidence can be decreased by wearing support hose or knee-high compressions stockings in immediate intra- and postoperative periods. Early ambulation must be encouraged and motor physical therapy must be prescribed as early as in the immediate postoperative period. Use of anticoagulants in the postoperative period is mandatory for 10 days after the surgery.
5. Postoperative atelectasis and pneumonia: can affect up to 3% of the cases and prophylactic antibiotic therapy and respiratory physical therapy must be carried out during the hospitalization. Physical therapy with positive-pressure must not be performed due to the risk of air ingestion and gastrointestinal suture rupture.
6. Persistent nausea and vomiting: can occasionally occur and, in these cases, Wernicke's syndrome can appear. This is a severe syndrome and can result in significant neurological sequelae. In these cases, vitamin B1 (thiamine) must be administered by IV route as long as the vomiting persists.
7. Gastrojejunal anastomosis stenosis: it is the most frequent one when round staples are used instead of linear ones, when performing the anastomosis. It tends to have a lower incidence in manual anastomoses. We recommend an anastomosis of approximately 3 cm or more in length to prevent stenosis. Treatment of stenosis is satisfactory through endoscopic dilatation.
8. Complications with the band: band rupture can occur, as well as band displacement with stomach obstruction or erosion when the band enters the gastric lumen. Due to these complications, we have decreased band use, indicating it only for super-obese patients. In individuals whose BMI < 50, the band is no longer used.
9. Intestinal obstruction: a severe complication that occurs due to small intestine herniation. Its treatment is surgical and must be carried out immediately. Treatment delay can lead to necrosis of

the intestinal segment or distention of the biliopancreatic loop and consequent retrograde dilatation of the excluded stomach, with staple line rupture and consequent peritonitis.

10. Dumping syndrome: consists in the rapid emptying of the stomach into the small intestine, leading to malaise and a feeling of imminent death. It can be treated by avoiding very concentrated and sweet foods. When there is no improvement, subcutaneous octreotide can be used, which usually leads to resolution of the clinical picture.
11. Cholecystitis calculosa: it appears a few months after the surgery and its cause seems to be due to fast weight loss. Surgical treatment must be instituted as soon as the diagnosis is made, preferably by laparoscopic approach, even when the bariatric surgery was performed by laparotomy.
12. Metabolic complications: iron and B12 vitamin deficiencies, with consequent anemia are the most common ones. Supplementation must be carried out, preferably using injections every 6 months.

It is not our ambition to cover all aspects related to bariatric surgery complications, but to help detect, prevent and treat them, by providing a practical and objective overview of these complications to aid the bariatric surgeon.