

SECO Training phase V to achieve the full-level competition diploma. Results in a specific bariatric surgery unit.

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Summary:

Phase V of the SECO Bariatric Surgery Training Program requires accrediting a number of procedures performed in a tutored manner by two expert surgeons. In order to obtain the Full Level Diploma, 54 interventions were presented, 50 for primary surgery and 4 revision surgeries. The primary surgical procedures were performed, all laparoscopically, on 16 men and 34 women, with a mean age of 48.34 years and an average BMI of 45.34. The techniques were 30 vertical gastrectomies (60%) and 20 Roux-en-Y gastrojejunal bypass (40%). Vertical gastrectomies presented an average surgical time of 56 minutes and an average stay of 2.96 days. Gastric bypasses, an average surgical time of 97.75 minutes, and an average stay of 3.4 days. 45 patients completed the postoperative period favorably. The revision surgeries were 2 vertical gastrectomies on gastric remnant and two conversions from vertical gastrectomy to gastric bypass. The average stay was 3 days, with no complications. In conclusion, carrying out phase V in a bariatric surgery unit allows the learning curve of the different techniques to evolve, thus achieving standardization of vertical gastrectomy and gastric bypass procedures.

Keywords:

- Morbid obesity
- Bariatric surgery
- SECO training program
- Accreditation

Introduction

The development that bariatric and metabolic surgery has undergone in recent years, and the complexity not only of surgical techniques, but of the multidisciplinary management that patients require, requires a high degree of education and training to be able to carry out this type of surgery. with solvency and security (1,2).

The SECO (Spanish Society for Obesity Surgery) presents a training program in bariatric surgery with three levels of accreditation (Basic, Complete and Expert). This program is divided into 5 phases, each with a series of specific objectives, which must be completed in order to obtain the necessary accreditation to participate in bariatric surgery programs. Phase V or supervised surgical activity requires the performance of a number of procedures in a tutored manner by two surgeons with experience in bariatric surgery and with an Expert Level accreditation that certifies the correct compliance with the different requirements demanded (1, 3).

Since its new training in 2000, a total of 1095 bariatric surgery patients have undergone surgery in the General Surgery and Digestive Surgery Service of the Royo Villanova Hospital in Zaragoza. Currently, an average of 95 procedures are performed per year, including restrictive techniques, mixed techniques, and revision surgery, in addition to attending to emergencies that may arise in bariatric patients. In the last year, a multidisciplinary bariatric surgery working group has been formed, in which two surgeons and two endocrinologists work, supported by a rehabilitator and two physiotherapists, a psychiatrist and the entire Anesthesiology Service of the hospital.

The objective of the work is to present the results obtained during phase V of the SECO training program, carried out at the Royo Villanova Hospital in Zaragoza in a specific unit of newly established bariatric surgery for the application of the Diploma of Competence at its Full Level.

Material and methods

According to SECO guidelines, the bases of its training program were followed (3) to complete phase V at the Royo Villanova Hospital in Zaragoza, performing the supervised surgical activity and developing a care protocol for the comprehensive care of morbidly obese patients.

Data collection was made using the electronic medical record of the Aragon Health Service, obtaining during the admission time of each patient the different parameters that have been studied (sex, age, body mass index, ASA classification, comorbidities, technique surgical, approach, surgical time, postoperative course and complications that appeared during admission).

With all this, a descriptive analysis of the surgical procedures carried out during the completion of the supervised surgical activity phase, and their immediate postoperative period, was performed.

Results

54 surgical operations of bariatric surgery, 50 of them of primary surgery, and 4 revision surgeries were performed. 3 urgent surgery procedures for complications in bariatric patients are added, which will only be described, but are not included in the global computation of interventions as

they are non-standard surgeries that were resolved based on intraoperative findings.

All patients were referred from the Endocrinology Service, following a preoperative optimization protocol with nutritional preparation and physical and respiratory preparation in coordination with the Rehabilitation Service.

The 50 primary surgical procedures were performed on 16 men and 34 women, with a mean age of 48.34 [22-63] years, all of them for diagnosis of morbid obesity with an average BMI of 45.34 [37-63]. The ASA classification of patients was ASA 1 in 4 patients, ASA 2 in 28 patients and ASA 3 in 18 patients. 39 patients presented some type of associated comorbidity, among which the following stand out: arterial hypertension (27 patients), glycemic alteration including prediabetes and type 2 diabetes mellitus (20 patients), dyslipidemia (16 patients), OSA (10 patients), heart disease of some type (5 patients) and COPD (4 patients).

100% of the procedures were carried out laparoscopically, and no conversion was necessary. 30 vertical gastrectomies (60%) and 20 gastric bypass (40%) were performed. The average stay was 3.14 [2-7] days (2.96 [2-7] days in vertical gastrectomies and 3.4 [2-7] days in gastric bypasses). The surgical time was 56 [35-130] minutes on average in vertical gastrectomies and 97.75 [75-140] minutes on average in gastric bypasses.

45 patients (28 vertical gastrectomies and 17 gastric bypasses) completed the postoperative period favorably. 5 patients presented some complication in the immediate postoperative period: 2 self-limited rectal bleeding (2 gastric bypass), 2 self-limited bleeding due to intra-abdominal aspiration drainage (vertical gastrectomy and gastric bypass), and one picture of vomiting (vertical gastrectomy).

The revision surgery procedures were, all of them laparoscopically without the need for any conversion, a gastrojejunal re-anastomosis of a biliopancreatic bypass for stenosis, 2 vertical gastrectomies on gastric remnant due to failure of previously performed surgery (biliopancreatic bypass and gastroplasty) and two conversions from vertical gastrectomy to gastric bypass for gastroesophageal reflux. The average stay of these procedures was 3 days, with no complications postoperatively evident.

The three urgent surgical procedures were a massive bowel resection with complete open reversal of a biliopancreatic bypass by a necrotic volvulus, a laparoscopic approach of a vertical gastrectomy leak by washing and draining the abdominal cavity, and a laparoscopic reconversion of a perforated gastroileal bypass to a Roux-en-Y biliopancreatic bypass after redoing the gastrojejunostomy.

Discussion

Our work presents the supervised surgical activity carried out in a specific bariatric surgery unit to obtain the second level of SECO accreditation.

Surgical treatment of morbid obesity is considered today the most effective option. Surgery aims to prevent morbidity and mortality associated with obesity and metabolic syndrome, reduce comorbidities, and improve quality of life (1). To achieve these objectives, it is

recommended that the patient's approach be comprehensive, addressing the clinical aspects, aspects of the surgical technique and postoperative management by the surgeon (1,3,4).

The development of specific units in accredited centers guarantees that the training is carried out following the necessary quality standards and facilitates that the learning curve of the new bariatric surgeon is progressive and supported by the experience of experts (5,6,7).

The IFSO (International Federation for the Surgery of Obesity) recommends that you have gained experience as a first surgeon in advanced laparoscopic surgery procedures of all kinds, before starting bariatric surgery techniques (8).

SECO proposes certified training, for which it has developed a program in 5 phases that includes theoretical knowledge, experimental surgery, assistance to live surgery, training stays at reference centers, and finally an activity supervised by surgeons who are experts in bariatric surgery, to obtain an accreditation (1,2).

The supervised activity that is presented was carried out after completing the first 4 phases of the SECO training program and having obtained the Basic Level of accreditation. In addition, this supervised activity in the operating room was complemented by developing a care protocol for the morbidly obese patient in collaboration with the multidisciplinary working group, thus following the standards set by the SECO in terms of preoperative preparation and optimization aspects (1).

The learning curve for laparoscopic gastric bypass is complex (9), but in the work of Kim et al. and from Agrawal it is mentioned that it can be attenuated with the supervision of expert surgeons, and thus complications are minimized at the beginning of the practice (10,11). The SECO program requires a minimum of 50 interventions as the first surgeon tutored by an accredited surgeon with the Expert Level, of which at least 20% must be mixed techniques (3). The results that we present meet this requirement (40% laparoscopic gastric bypass), not being evidenced in the descriptive review of major postoperative complications.

It is necessary to complete the work presented with the long-term results in terms of weight loss, resolution of comorbidities and improvement in quality of life, to corroborate if the proposed quality indicators have been completed, as reflected in the work of Sabench et al. and de Char et al. (4,12), which requires a longer follow-up time.

Conclusions

Carrying out the supervised surgical activity (Phase V) to obtain the Complete Level of SECO accreditation within a specific bariatric surgery unit allows to meet the training objectives in terms of pre and postoperative management of the patient coordinated with the rest of the multidisciplinary team, as well as progressively evolve in the learning curve of performing the different surgical techniques.

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