

A management model with a shorter waiting list for bariatric surgery: how we do it.

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Summary:

Objective: In a recent survey performed by the Spanish Society for Obesity Surgery (SECO), the average waiting list time for bariatric surgery was 397 days. The objective of this study is to know the status of this waiting list in our hospital and compare it with the results obtained in said survey.

Material and methods: A retrospective analysis of the waiting list for primary bariatric surgery was performed at the Reina Sofía University General Hospital (HGURS) in Murcia from January 2016 to December 2018. The health area has a population of 201,645 inhabitants.

Results: A total of 153 patients (54 men and 99 women) were included on the waiting list during this period. The average time on the waiting list for bariatric surgery was 99.38 ± 68.05 days.

Conclusions: Our data demonstrate a shorter stay on the waiting list for bariatric surgery compared to the SECO survey. These results can be explained by the healthcare circuit developed in our hospital, in which the patient is not included in the list until he has completed the entire preoperative study.

Keywords:

- Waiting Lists
- Obesity
- Bariatric Surgery
- Health Management

Introduction

Bariatric surgery has been shown to be effective in controlling morbid obesity and its comorbidities, with a clear superiority over medical treatments (1). But the same success of the techniques means that more and more people require this type of assistance. Waiting lists for bariatric surgery represent a problem that affects most national health systems with universal coverage due to the existence of limited resources, which has favored the appearance of so-called "bariatric tourism" (2).

To find out the status of waiting lists for bariatric surgery, the Spanish Society for Obesity Surgery (SECO) performed an online survey in 2017 of the surgical services, the results of which revealed an unacceptably long wait to receive bariatric treatment. The study concluded that this delay for surgery in Spain inevitably has serious consequences for a potentially significant number of patients (3).

Therefore, the objective of this study was to find out the status of the waiting lists for bariatric surgery at the Reina Sofía University Hospital in Murcia and to compare it with the results obtained in the SECO survey. A secondary objective was to analyze the demographic characteristics of these patients.

Material and methods

The SECO survey was completed by 52 centers (47 public and 5 private). The total number of patients included was

4,724 (1,630 men and 3,094 women), with a mean age of 41 ± 10.43 years and a mean Body Mass Index (BMI) of 45 ± 5.15 kg / m². The average waiting list stay for bariatric surgery was 397 days, with a maximum wait of 1661 days (3).

In our study, a retrospective analysis of the waiting time and characteristics of all the patients who underwent primary bariatric surgery (gastric bypass or laparoscopic vertical gastrectomy) was performed in our center from January 2016 to December 2018. The health area has a population of 201,645 inhabitants. The time elapsed from the day of inclusion on the surgical waiting list (LEQ) to the day of surgery was analyzed by consulting the hospital records. The sex, age, BMI at the date of inclusion in LEQ and anesthetic risk defined by the classification of the American Society of Anesthesiologists (ASA) (4) of the patients were obtained by consulting the medical records. In our center, the scheduling order is based exclusively on time or "seniority" on the surgical waiting list, although patients with real clinical criteria that advise it are prioritized. The bariatric surgeon is part of a multidisciplinary team that meets monthly to discuss these patients, but the inclusion on the waiting list is not performed by the surgical team until the preoperative circuit has been completed. (Figure 1). First, the patient is evaluated by endocrinology, who, after verifying the failure of medical treatment, verifies that the patient meets the requirements to undergo bariatric surgery and that there are no contraindications. If the patient is approved in the Obesity Unit session, the endocrinologist asks for an



analysis that includes blood count, biochemistry, coagulation, and nutritional profile together with different preoperative studies such as psychiatric evaluation, abdominal and cardiac ultrasound and, in case of if necessary, spirometry and polysomnography. Once these tests and evaluations have been successfully completed, the patient is referred to the anesthesia clinic, who, in the absence of anesthetic contraindication for surgery, requests an upper digestive endoscopy with biopsy. Finally, the patient comes to the bariatric surgery consultation with all the evaluations and complementary explorations performed and it is the bariatric surgeon who makes the inclusion in LEQ.

Two bariatric interventions are performed a week for 10 months a year, without performing these types of operations outside the ordinary day (peonies) to reduce the surgical waiting list and respecting the vacation closings of hospital beds and operating rooms.

The data were included in a database and subsequently analyzed using the IBM-SPSS © Statistics statistical program (v. 25.0), calculating the frequencies and percentages for the qualitative variables, and the means, standard deviations, and maximum and minimum values for quantitative measurements. We performed the calculation of the collected variables and a univariate analysis of the factors associated with them using Student's t-test and Pearson's Chi-square. Values of $p < 0.05$ (95% CI) were considered statistically significant. There was no loss of cases in the analysis.

The study had the prior approval of the hospital's Research Commission at its meeting on 02/11/2019 and its results were presented at the 24th IFSO World Congress held in Madrid.

Figure 1: healthcare circuit aid developed in our center for those obese patients candidates for bariatric surgery.

Results

Between January 2016 and December 2018, a total of 153 patients (54 men and 99 women) underwent primary bariatric surgery at our center, performing 122 gastric bypass and 31 laparoscopic vertical gastrectomy, with a conversion to open surgery. The mean age of the patients was 44.8 ± 11.03 years and the mean BMI with which they were included in the LEQ of 43.7 ± 6.5 Kg / m². Of all the patients, 40 (26.1%) were classified with an anesthetic risk ASA II, 88 (57.5%) as ASA III and 25 (16.4%) as ASA IV.

The mean stay in LEQ for primary bariatric surgery in our hospital was 99.38 ± 68.05 days, with a maximum wait of 348 days and a minimum of 4 days. The median was 96 days, the mode was 110 days and the interquartile range was 84 (47-131) days.

The demographic characteristics of the patients and the results of the stay on the waiting list for a bariatric surgery are shown in Table 1. Figure 2 shows the distribution of the days in ESL by sections.

INDICATORS	HGURS MURCIA	SECO
Gender (Male/female)	54/99	1417 / 3307
Average age \pm SD (years)	$44,8 \pm 11,03$	$41 \pm 10,43$
Average BMI \pm SD (Kg/m ²)	$43,7 \pm 6,5$	$45 \pm 5,15$
Classification ASA		
• I	0 (0%)	(0%)
• II	40 (26,1%)	1701 (36%)
• III	88 (57,5%)	1984 (42%)
• IV	25 (16,4%)	1039 (22%)
Average wait \pm DE (days)	$99,38 \pm 68,04$	397
Maximum wait (days)	348	1661
Minimum wait (days)	4	

Table 1: Demographic characteristics of patients and waiting list indicators for bariatric surgery in our center and in the SECO survey (3). SD: Standard Deviation, BMI: Body Mass Index, ASA: American Society of Anesthesiologists

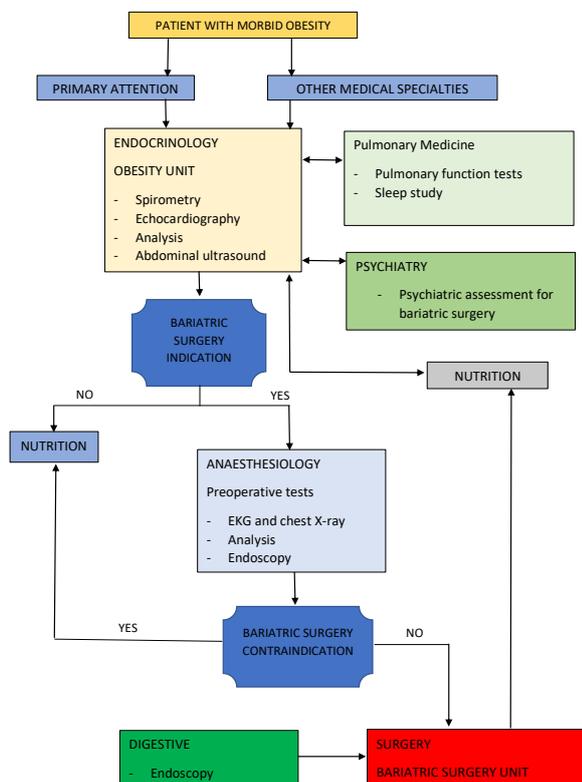


Figure 2: number of patients undergoing bariatric surgery in our center according to the days on the waiting list by sections.

Discussion

The waiting lists for bariatric surgery in the Spanish National Health System are due to the lack of available resources to meet demand. The surgical schedule is conditioned by the operating rooms available to the service, in which deferred emergencies are operated and priority is given to tumor processes or other cases from hospitalization with higher priority than the waiting list. The average waiting list for obesity is three times that of diseases with the longest terms.

In 2003, the Ministry of Health introduced the Waiting List Information System (SISLE) to be able to assess situations that are deviating from normality and establish priorities (5). However, bariatric surgeries are not included in this list and there are no official data on their waiting times, which prevents their analysis and the assessment of their impact on the health of patients.

The problem of obesity patients caught on an endless waiting list is relatively recent, but it has arisen simultaneously in health services in most developed countries. A study carried out in Canada (6) reflected that, in 2007, there were a total of 6783 patients corresponding to 12 centers on LEQ for bariatric surgery with an average wait of 5.2 years, qualifying these data as unacceptable. In another study carried out in the United States (7), 60,791 patients who underwent primary bariatric surgery between 2006 and 2016 were analyzed, and an increase in days of stay in LEQ was reported from 86 to 159 during this period, that is, They have multiplied by two in the last decade.

Probably, the solution to achieve reasonable waiting times is to include the surgical treatment of obesity in the prioritization lists of health systems and increase the offer of bariatric surgeries, due to greater activity in existing units or the incorporation of new hospitals.

Compared with the results obtained in the SECO survey (3), in our center the stay on the waiting list for bariatric surgery is significantly shorter. These results can be explained by the health care circuit developed in our hospital (Figure 1), the weekly scheduled operating room layout and the coordinated work of the Obesity Multidisciplinary Unit.

In conclusion, our results show a shorter stay on the waiting list for primary bariatric surgery compared to the

data obtained by the survey carried out by the SECO nationwide. This difference can be explained by the healthcare circuit that is carried out in our hospital in which the surgeon performs the inclusion in LEQ once the patient has been evaluated by other specialists and with the results of the different necessary complementary examinations.

Conflict of interest and financing

The authors state there's no conflict of interest, or external financing.

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