



Bariatric Surgery Waiting Lists in Spain

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Abstract

Bariatric surgery is one of the most common general surgery procedures in countries that, like Spain, have public healthcare systems, but is also one of the procedures for which patients have to wait the longest.

The Spanish Society of Obesity Surgery (SECO) conducted a survey to estimate the situation of bariatric surgery waiting lists in Spain's public hospitals and to gather information on a number of related aspects.

Methods

An online survey was sent to the members of the SECO. The survey received 137 visits, all via the click-through link provided, from 52 health centers (47 public and 5 private). The data collected were included in a database and later analyzed using the SPSS18.0 statistical software package.

Results

A total of 4724 patients were on bariatric surgery waiting lists (BWLs), at an average of 100 per public hospital. Sixty-eight percent had been waiting for more than 6 months. The mean delay per patient was 397 days, and the longest wait was 1661 days.

A further 46.2% of respondents were able to recall cases of patients who in the past 5 years had suffered cardiovascular events with sequelae while awaiting surgery, and 21.2% recalled at least one fatal cardiovascular event in that time.

Conclusion

Our data revealed an unacceptably long wait for obesity surgery. Notwithstanding the limitations and potential biases of our research, the long wait for surgery in our context inevitably has serious consequences for a potentially significant number of patients.

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Introduction

Bariatric surgery has proved to be hugely beneficial for its patients [1, 2]. However, our public health system's failure to establish response pathways capable of coping with the demand has meant that most hospitals have lengthy waiting lists. In addition, Spain does not provide official data on bariatric surgery waiting lists (BWLs), nor have there been studies on the impact of these delays on the health of our patients.

To address this situation, the Sociedad Española de Cirugía de la Obesidad (Spanish Society of Obesity Surgery, SECO) conducted a survey to estimate the state of bariatric surgery waiting lists in Spain's public hospitals and to gather information on a number of related aspects.

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Methods

An online survey was sent to the members of the SECO. It was open to replies for 30 days (02 February 2017 to 03 March 2017) and comprised 16 single choice, short answer, and polar questions on a number of aspects related to surgical waiting lists for morbid obesity. The survey received 137 visits, all via the click-through link provided. Fifty-two health centers (47 public and 5 private) replied in full, for an overall completion rate of 38%. A further 20 provided incomplete replies. Incomplete questionnaires were discarded from the final analysis. The data collected were included in a database and later analyzed using the SPSS18.0 statistical software package.

Results

The survey took between 5 and 10 min to respond and was completed by 38% of the health centers. BWLs contained 4724 patients in total, at an average of 100 per public hospital. Sixty-eight percent had been waiting for more than 6 months. The mean delay per patient was 397 days, and the longest wait was 1661 days. The entry-to-exit ratio was 1.37:1 (Table 1). Most hospitals (47) did not refer morbidly obese patients to lower-level health centers for surgery.

A further 46.2% of the respondents said they could recall cases of patients who in the past 5 years had suffered cardiovascular events with sequelae while on the bariatric SWL, and 21.2% recalled at least one fatal cardiovascular event in that time (Table 2).

Table 1 Bariatric surgery waiting list (SWL) indicators for Spain and demographic characteristics (Source: FUNSECO survey)

Indicators	SWL
Total number of patients on waiting lists	4724
Sex (male/female) (%)	18/70
Age (mean \pm SD)	41 \pm 10.43
BMI (mean \pm SD)	45 \pm 5.15
ASA* score (%)	
I	36%
II	42%
III	22%
IV	0%
Mean no. of patients per hospital	90 (0–433)
No. of patients waiting for more than 6 months (%)	3223 (68)
Mean delay current (days)	447
Mean delay to exit (days)	543
Entry-to-exit rate	1.37

SD standard deviation, BMI body mass index

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51.9% of hospitals said they received at least one written complaint from BWL patients per week (9.6%) or per month (42.3%).

The most common criterion to prioritize patients was time spent on the waiting list (49%), and 26 hospitals had protocols that prioritize clinical condition over date of inclusion.

Eighty percent of hospitals had regular schedules for bariatric surgery, but while 31 centers were able to fulfill their schedules, the other 21 often had to postpone surgery because operating rooms were taken for oncological procedures and other urgent surgeries. Bariatric surgery was performed one to two times per week at 84% of hospitals, but 74% estimated that they would need to perform two to four surgeries/week to adequately manage their BWL. Nine hospitals (17.3%) worked longer or extra shifts to reduce waiting lists. The remaining 43 (82.7%) did not, citing the availability of nursing staff or anesthesiologists as the most common cause (46.2%) (Table 3).

Discussion

Waiting lists in public healthcare systems such as Spain's come about because of the lack of resources available for meeting the demand. The country's morbid obesity surgery waiting lists provide a clear and severe example of system inefficiency. When the length of the delays has clinical repercussions for our patients, what we could initially consider an administrative issue becomes a real health problem. However, the lack of official data on BWLs means that the authorities are unlikely to address this issue in the short or medium term. In fact, morbid obesity is not even listed as one of the surgical indications monitored by the Waiting List Information System (WLIS) of the Spanish National Health System, a Ministry of Health office that reports every 6 months on waiting lists for the main diagnostic and surgical procedures.

In response to this situation, the SECO decided to survey its bariatric surgeons in order to assess the extent of the problem and of its consequences for our patients. In addition, we sought our members' opinions on the potential approaches for tackling the issue.

Our survey found that, on average, public hospitals have 100 patients awaiting bariatric surgery, and that the situation is in fact getting worse. Based on the number of hospitals providing this service, we estimate that some 11,000 patients may currently be awaiting weight-loss surgery in Spain. This would make morbid obesity the third most common indication for general and gastrointestinal surgery, only behind inguinal hernia and cholecystectomy. The number of patients with morbid obesity would be similar to that awaiting hip replacement surgery. Furthermore, we found that 68% of our patients have to wait more than 6 months for surgery. This compares to 13.3% and 15.6% for inguinal hernia and cholecystectomy,

Table 2 Source: SECO Survey. Text replies: replies 52, not replies 0

	Yes	No
1. In your health district, are BWL patients diagnosed for morbid obesity referred to other, publicly-funded private hospitals?	9.6	90.4
2. In your health district, is it common for patients with greater comorbidities to be rejected by the hospitals they are referred to?	23.1	76.9
3. Have there been, that you know of, any cases in the past five years of patients suffering non-fatal cardiovascular events while on your hospital's BWL?	43.2	53.8
4. Have there been, that you know of, any cases in the past 5 years of patients who have died due to a cardiovascular event while on your hospital's BWL?	21.2	78.8
5. Does your department have a regular schedule for bariatric surgery?	80.8	19.2

respectively, or 27.3% for hallux valgus, which has the highest proportion all surgical specialties for patients waiting more than 6 months (Table 4).

Our data revealed an unacceptably long wait for obesity surgery, averaging more than 1 year (397 days) per patient. Some have even had to wait for nearly 5 years. The situation morbidly obese patients have to endure is unparalleled for any other surgery. According to the SISLE, the mean wait for all of the procedures monitored is 89 days. Our patients' situation is even worse when bearing in mind that by the time they are finally included on a SWL, they will already have endured lengthy waits in previous healthcare circuits. Prior to their

inclusion on a bariatric surgery waiting list, candidates in Spain are assessed by a multidisciplinary committee that normally comprises an endocrinologist, a psychiatrist specializing in eating disorders, and a bariatric surgeon. Patients can only be included on the list once the committee deems them suitable.

All of the above factors inevitably prompt the question of what impact—if any—do these long waits have on our patients' health.

A number of studies have demonstrated that morbidly obese patients face a higher risk of dying [3, 4]. One collaborative, population-based study that looked into the causes of nearly one million deaths from the 1970s to the present day

Table 3 Source: SECO Survey. Single choice: replied 52, not replied 0

How many patients diagnosed for morbid obesity undergo surgery each week?
• 1 (36.5%)
• 2 (38.5%)
• 3 (7.7%)
• 4 (5.8%)
How many bariatric surgeries per week do you estimate would be necessary at your hospital in order to reasonably address the existing demand?
• 1 (1.9%)
• 2 (32.7%)
• 3 (15.4%)
• > 3 (38.5%)
How often do you receive complaints from patients awaiting obesity surgery?
• Never (23.1%)
• Only exceptionally (25%)
• Every week (9.6%)
• Every month (42.3%)
Which is the most common criterion at your hospital for prioritizing patients who are on the obesity surgery waiting list?
• Date of inclusion on the waiting list (49%)
• Patient's clinical condition (31.4%)
• Other (please specify) (19.6%)
Does your hospital allow bariatric patients to be prioritized based on criteria other than date of BWL inclusion (e.g., patient's metabolic risk)? Choose the answer closest to the truth:
• This is not possible at my hospital (15.4%)
• This possibility does exist, but it is more theoretical than practical (34.6%)
• There is a prioritization protocol in which the patient's clinical condition is more important than the date of inclusion on the BWL (50%)
Is it common for bariatric surgery to be canceled because your department's operating room is needed for oncological or emergency room patients?
• Yes, nearly always (3.8%)
• Yes, it is common (36.5%)
• Only exceptionally (59.6%)
Does your hospital work afternoon shifts or longer surgery shifts in order to operate on patients from the bariatric BWL?
• Yes, no problem (17.3%)
• This kind of surgery is not normally performed in the afternoons for reasons related to the anesthetists or nurses (46.2%)
• Obese patients are not normally scheduled for these shifts because we have enough experienced bariatric surgeons (15.4%)
• Obese patients are not normally scheduled for these shifts because the economic conditions are not attractive enough (21.2%)

Table 4 Situation of surgical waiting lists in the Spanish National Health Service (NHS) (data as of 31 December 2017 distribution by selected procedures). Source: Waiting List Information System of the

Spanish NHS. Data from the 17 Autonomous Communities and the National Health Management System

Procedure	Total patients on structural waiting lists	Difference in December 2016	Rate per 1000 inhab.	Percentage over 6 months	Mean waiting time (days)	Difference in December 2016
Cataracts	95,728	628	2.12	3.7	67	-2
Inguinal/femoral hernia	29,731	-365	0.66	13.3	91	-3
Hip replacement	11,769	-483	0.26	15.1	103	-5
Arthroscopy	19,403	-5227	0.43	23.4	123	-13
LL varicose veins	14,286	-609	0.32	15.5	97	-5
Cholecystectomy	15,650	134	0.35	15.6	94	2
Hallux valgus	15,693	-1779	0.35	27.3	124	-3
Adenoidectomy	11,700	-26	0.26	21.7	110	5
Benign prostatic hypertrophy	7143	548	0.16	15.5	99	8
Pilonidal cyst	5504	-306	0.12	14.9	93	2
Carpal tunnel	12,964	-800	0.29	15.6	93	-8
Total procedures selected	239,571	10,621	5.31	12.2	89	-20

found a 30% increase in mortality for every 5 kg/m² increase in BMI, with the greatest impact occurring from 35 to 59 years of age [5]. Increased mortality was associated with a higher incidence of fatal cardiovascular events, as also demonstrated previously by the Swedish SOS study [2]. Bearing in mind that 64% of the patients awaiting bariatric surgery in Spain have comorbidities associated with metabolic syndrome, the delays they endure could entail serious consequences for their health (Table 1).

In Canada, whose healthcare system is similar to Spain's, recent research on mortality among patients awaiting bariatric surgery found that the death rate (1.57%) is three times that expected for the general population [6, 7].

In this regard, 24 of our respondents recalled cases in the past 5 years of patients who, while on the BWL, had suffered cardiovascular events with sequelae, and 11 remembered at least one death in said circumstances. It therefore seems clear, notwithstanding the limitations and potential biases of our research, that the long wait for surgery in our context, inevitably has serious consequences for a potentially considerable number of patients. The situation calls for systems other than length of wait for prioritizing patients, but at present, only around half of our hospitals have them [8].

In 2003, Spain passed legislation on the management of information of the National Health System's waiting lists. It established a series of priorities for surgical indication depending on the potential consequences of a patient's clinical condition on their health, and set recommended waiting times ranging from 30 to 90 days according to clinical priorities. The regulations are quite clear in this regard, and non-compliance can even imply subsidiary liability. In addition, the Ministry of Health instructs that the mean delay for cancer patients must not exceed 40 days.

The surgeons surveyed believe that in order to reasonably address the existing demand and reduce waiting times, it would be necessary to double the number of surgeries currently performed. To this end, significant improvements could be made by observing the scheduling of operating rooms and by implementing longer or dedicated afternoon shifts, but said measures are in place at only 40% and 17% of the hospitals, respectively.

As our organization's annual surveys show, the improved training and technical qualification of our staff and hospitals have allowed us to ensure that bariatric surgery is extremely safe. Likewise, most of our hospitals have fully trained and amply qualified cross-functional teams to ensure high standards of perioperative patient care. Alas, such considerable efforts are futile if we cannot provide timely surgery, which is arguably the most important factor for our patients' health. Legislation passed in 2011 established a guaranteed maximum waiting time of 180 days for a list of surgical procedures earmarked by the National Health System. Unfortunately, this list does not currently include bariatric surgery (Table 5).

Table 5 Guaranteed maximum access times for users of the National Healthcare System

Surgical procedures	Maximum time to access (calendar days)
Cardiac valve surgery	180
Cardiac coronary surgery	180
Cataracts	180
Hip replacement	180
Knee replacement	180

Our research aimed to establish the approximate situation of waiting lists in our country, to learn more about the functioning of the hospitals, and to gauge the views of the surgeons providing bariatric treatment for obesity. We believe our findings on a number of aspects related to this issue to be of interest. Regardless of any potential measures that might be taken at the hospital level, it is essential that our national authorities recognize the significant negative health impacts that delaying bariatric surgery has on morbidly obese patients, and therefore include the surgical indication for morbid obesity on the list of diagnostic and surgical procedures routinely monitored by the WLIS.

Authors' Contribution All of the contributing authors of this article approve its final version.

Compliance with Ethical Standards

This article does not contain any studies with human participants or animals performed by any of the authors. Informed consent does not apply.

Conflict of Interest The authors declare that they have no conflict of interest.

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