

Analysis of the restart of elective bariatric and metabolic surgery after the acute phase of the COVID-19 pandemic in Spain.

Pujol-Rafols Joan¹, Uyanik Ozlem², Curbelo-Peña Yuhamy², Balague-Ponz Carmen³, Sanchez-Santos Raquel⁴.

¹Department of Digestive, Bariatric and Metabolic Surgery. UCOM, Mi Tres Torres Clinic. Barcelona, Spain. ²Department of General Surgery and Digestive Diseases. Consorci Sanitari del Alt Penedès i Garraf. Barcelona, Spain.

³Department of General and Digestive Surgery. Esophagogastric and bariatric surgery unit. Hospital de la Santa Creu i Sant Pau, Barcelona, Spain. ⁴Department of General Surgery and Digestive Diseases. University Hospital Complex of Vigo, Vigo, Spain.

E-mail: joan.pujol.rafols@gmail.com.

All authors participated in the writing of this article and accept its submission.

Received (first version): June 10, 2020

Accepted: June 16, 2020

Published online: October 2020

Summary:

Introduction: May 2020, Spain begins THE de-escalation phase after the peak of the COVID-19 pandemic.

Objective: To know the status of the elective activity of bariatric and metabolic surgery (MBC) in Spain from May 5 to 20, 2020.

Method: Cross-sectional analytical descriptive study. We designed a survey that we distributed using databases from the Spanish Society of Obesity Surgery (SECO) and groups of experts in MBC.

Results: 152 professionals completed the survey. 56% have not restarted any type of surgical activity, 20% only perform urgent surgery, 13% take care of emergency and selected electives and 11% perform any type of surgery. Among those who have not restarted elective surgery, 68% do not have a restart date, 31% plan to restart in one month, 30% between one and two months, 19% between two and three months, and 20% not before three months. Only hospitals with an intensive care unit (ICU) and protocols for the treatment of patients with COVID-19 should restart MBC according to 72% of those surveyed. 97% would find the writing of a SECO recommendation document useful.

Conclusions: the CBM units approach the transition with different degrees of adherence to restart protocols and precautions. It is imperative that medical societies and governing bodies distribute protocols during the sensitive restart of the elective CMB.

Keywords:

- De-escalation
- Pandemic
- Metabolic and Bariatric Surgery

Introduction

In December 2019, health officials in Wuhan, China began investigating patients with viral pneumonia caused by a new coronavirus (SARS-Cov2) that is characterized as highly contagious and potentially serious [1].

Studies currently show a more complicated postoperative period in patients with the virus [2].

The Spanish government decrees a state of emergency on Saturday, March 14, 2020. All bariatric and metabolic surgery units (CBM) suspend the elective surgery schedule to divert resources towards controlling the pandemic and avoid possible serious complications during the postoperative period.

In addition to the risks that obesity has on people's health, several studies include obesity as a poor prognostic factor in the event of contracting SARS-Cov2 infection [3]. Surgery is the only treatment that has shown to be effective in controlling obesity in the long term [4, 5]. The epidemiological curves seem to indicate that we have already reached the peak of new infected cases and we are entering a "plateau" or de-escalation phase. Some CBM

units are already beginning elective surgery, others will begin very soon.

The objective of this work is to analyze and present the current status of elective CBM activity in Spain during this de-escalation phase and discover to what extent our units are already operational or prepared, hoping that this may help other bariatric surgeons at the time of making decisions about it.

Material and methods

A survey with multiple-choice questions is designed on the internet <http://surveymonkey.com>® as a tool. The objective thereof is to survey the activity of elective surgery in the different units of bariatric and metabolic surgery of the Spanish state. Prior to publication, the questions go through a selection process and are unanimously agreed by all the co-authors of this work. The following table lists the questions that were finally approved.



- 1- What type of bariatric / metabolic surgery (CB&M) is currently being performed in your hospital?
- 2- In case the elective the CB&M has been suspended in your hospital, who do you think will decide to restart it?
- 3- What do you think will prevail when making the decision to reopen the activity of the CB&M?
- 4- In case the elective the CB&M has been suspended in your hospital, is there a scheduled date for reopening?
- 5- In case the elective the CB&M has been suspended in your hospital, when do you think that it will be restarted?
- 6- In a first phase (of transition), which centers should restart the CB&M?
- 7- Is there a plan to restart the CB&M activity in your unit?
- 8- Would you find useful to have the writing of a recommendation document by SECO ?

Table 1: Questions

Once the survey is approved, all members of the Spanish Society for Obesity and Metabolic Surgery (SECO) and different groups of experts linked to this surgical subspecialty are invited to fill it out, using the databases of emails from the SECO and social media groups like Whatsapp @.The survey is open from May 5 to 20, 2020, and responses are analyzed.

Results

A total of 152 fully or partially completed surveys are received. The sample population consists mainly of surgeons linked to the activity of bariatric and metabolic surgery. 49% of them are adjunct, 23% are section chiefs and another 14% are department chiefs. 3% of those surveyed hold the position of medical directors of the center and finally there are 11% of other specialties (endocrinologists or internists).

The answers to the different questions are collected in the following graphs (figs. 1-5) and tables (tables 2-4):

1- What type of bariatric / metabolic surgery (CB&M) is currently performed in your hospital? (Answered: 152, Omitted: 0)

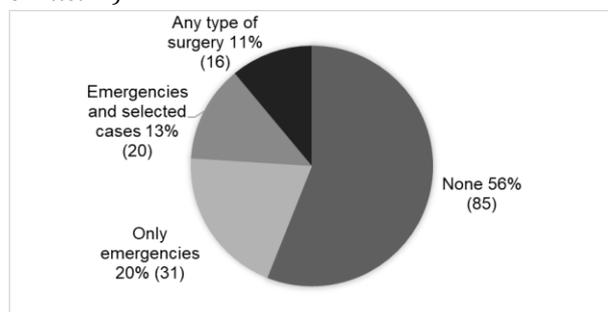


Fig. 1: Graphic representation of the distribution of responses of those answering the survey in relation to the first question.

2- In case the elective the CB&M has been suspended in your hospital, who do you think will decide to restart it? (Answered: 149 Omitted: 3)

ANSWER CHOICE	ANSWERS	
	%	n
Medical management	33%	49
Service chiefs	26%	38
Section chiefs (CBM)	13%	20
The public administration, autonomous community or local authority	11%	17
It doesn't mention it/ Unknown	17%	25
TOTAL	100%	149

Table 2: Distribution of responses of those answering the survey in relation to the second question.

3- What do you think will prevail when making the decision to reopen the CB & M's activity? (Answered: 150 Skipped: 2)

ANSWER CHOICE	ANSWER	
% n	% n	% n
Medical decision based on consensus documents of communities and / or scientific evidence 51% 77	Medical decision based on consensus documents of communities and / or scientific evidence 51% 77	Medical decision based on consensus documents of communities and / or scientific evidence 51% 77
Economic, political-administrative decision based on resource management 37% 56	Economic, political-administrative decision based on resource management 37% 56	Economic, political-administrative decision based on resource management 37% 56
I don't know 12% 17	I don't know 12% 17	I don't know 12% 17
TOTAL	100%	150

Table 3: Distribution of responses of those answering the survey in relation to the third question.

4- In case the elective CB&M has been suspended in your hospital, is there an expected date to restart it? (Answered: 148, Omitted: 4).

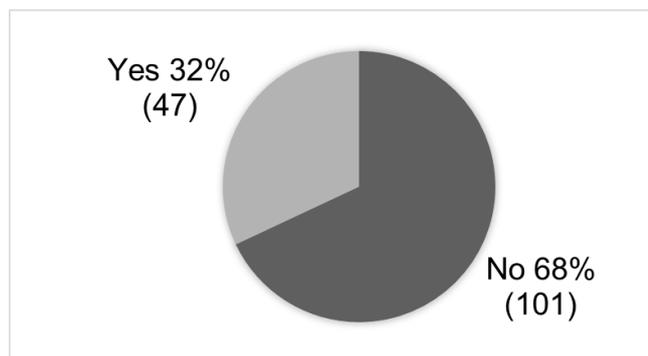


Fig. 2: Graphic representation of the distribution of responses Distribution of responses of those answering the survey in relation to the fourth question.

5- In case the Bariatric/Metabolic Surgery has been suspended in your hospital, when do you think that it is going to restart? (Responded: 148, Omitted: 4)

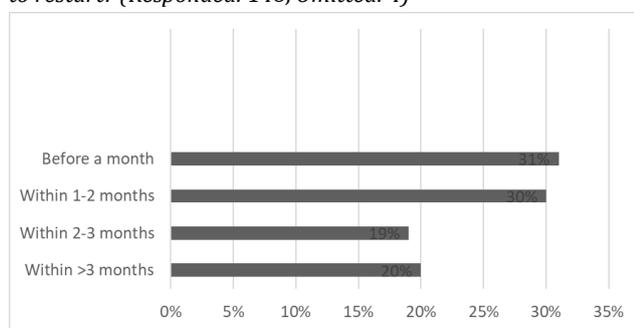


Fig. 3: Graphic representation of the distribution of answers to the fifth question.

6- In a first phase (transition), which centers should restart the CB&M? (Answered: 152, Omitted: 0)

ANSWER CHOICE	ANSWERS	
ANSWERS	ANSWERS	ANSWERS
% n	% n	% n
Any center that previously performed this activity 18% 28	Any center that previously performed this activity 18% 28	Any center that previously performed this activity 18% 28
Only hospitals with ICUs 4% 6	Only hospitals with ICUs 4% 6	Only hospitals with ICUs 4% 6
Only hospitals with established protocols for the treatment of patients with COVID-19 6% 9	Only hospitals with established protocols for the treatment of patients with COVID-19 6% 9	Only hospitals with established protocols for the treatment of patients with COVID-19 6% 9
Only hospitals with ICU and established protocols for the treatment of patients with COVID-19 72% 109	Only hospitals with ICU and established protocols for the treatment of patients with COVID-19 72% 109	Only hospitals with ICU and established protocols for the treatment of patients with COVID-19 72% 109

Table 4: Distribution of responses from those answering the survey in relation to the sixth question.

7- Is there a plan to restart the CB&M activity in your unit? (Answered: 150, Omitted: 2)

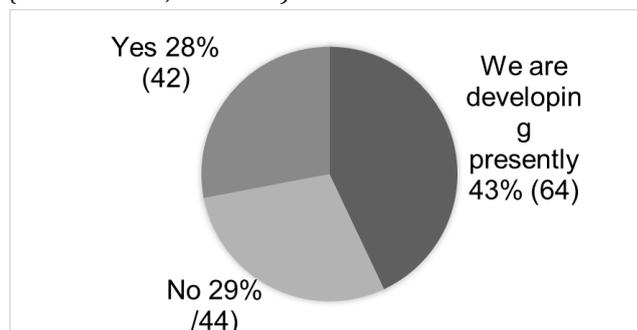


Fig. 7: Graphic representation of the distribution of answers to the seventh question of the survey.

8- Would you find the drafting of a document of recommendations by SECO useful? (Answered: 151, Omitted: 1)

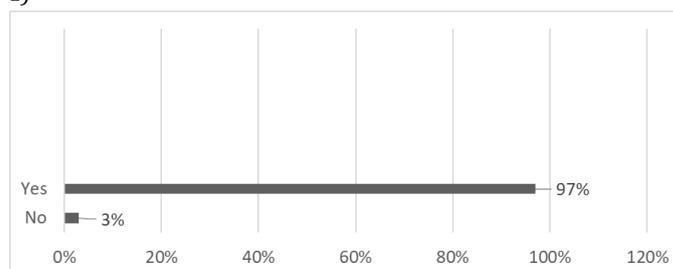


Fig. 5: Graphic representation of the distribution of answers to the eighth question of the survey.

Discussion

Once the peak of the pandemic by SARS-Cov-2 has been overcome, Spain enters the de-escalation phase on May 4, 2020 (gradual transition from confinement to normality) [6]. However, epidemiological studies seem to indicate that, for the moment, we will not be able to completely eradicate the pandemic, but we will enter a flat phase where we will have to modify our professional activity, adopting new healthcare protocols and greater protection measures [7, 8, 9].

The survey reveals that, during the month of May, more than 75% of surgeons did not perform any type of elective CBM. If we also add those who only performed selected cases, we only have a small group of surgeons (11%) who continued with their usual activity. This makes us think that we are probably dangerously increasing waiting lists that are already overloaded [10].

The decision related to the time to start the elective MBC, seems to depend largely on the center itself. In some of them, it will be the medical management who will make the decision (33%) while in others, it will depend on the CBM service itself (39%). It should be remarked that, in a total of 72% of those answering the survey, believe that the decision to restart will be made by the center itself based on the hierarchy, and only half believe that it will be based on medical criteria. Curiously, 17% of those answering the

survey state that they have not yet established who should assume responsibility for restarting the activity.

There are two issues that must be weighed in when deciding when to restart the elective surgical activity; the economic and medical variables. MBC has a significant economic cost and its profitability is only achieved in the long term with the control or resolution of comorbidities [11, 12]. In a situation of limited resources, it may be decided to slow down its restart to divert efforts to more needy areas. However, the medical consequences of postponing activity and fattening waiting lists can lead to an increase in medical complications in this group of patients. Therefore, based on the responses received, it seems that the decision related to the time to restart the elective activity will be based more on medical variables, consensus documents and scientific evidence, than on economic or political-administrative variables.

It is surprising to find out that, in mid-May, 68% of those who answered the survey, did not know when they were going to restart the elective MBC, which could be understood as a lack of an action plan by the different management units. In fact, almost 70% of those who answered the survey, think that they will not resume elective CBM within two months, among them, 13% believe that they will probably not restart it within three months. We think that the consequences that this could have on the waiting lists could be serious and that it would probably be necessary to initiate a crash plan on the part of the medical communities and the different management bodies, to try to accelerate the de-escalation and increase the means availability to try to alleviate the problem.

In 2008, IFSO-EC established a series of rules that the centers where CBM is performed should comply with. Among other requirements, it is recommended to have an intensive care unit to look after complex patients [13]. It seems logical to think that, in the current pandemic situation, to all this, we should also add protocols or circuits adapted to the care of possible infections by SARS-Cov-2 during the perioperative period. In this sense, there is broad consensus when deciding which units should be first at the time of starting the elective MBC; 72% of those who answered the survey, believe that this should only be performed in those centers equipped with intensive care units and established protocols for the treatment of patients with COVID-19.

Finally, we found out that a third of those who answered the survey, have not yet begun to develop a start-up plan with protocols and circuits adapted to this de-escalation phase and that 43%, although currently in the phase of development, have not yet completed it.

Although 69% of respondents believe that elective surgery will not begin before two months, more than 70% of respondents would have action protocols prepared for the restart in the next month (28% already have it and 43% in development), so activity may restart earlier than expected in the survey. 97% of the respondents would find the drafting of a recommendation document by SECO useful.

Fortunately, in recent weeks, publications have come up with recommendations on how to adapt CBM units to the new situation, both nationally and internationally [7, 14, 15]. In this sense, it is worth highlighting the good work that the SECO is doing in association with the Spanish

Association of Surgeons (AEC), the Spanish Society for the Study of Obesity (SEEDO), the Spanish Scientific Society of Diet and Nutrition (SEDYN) and the Spanish Society of Endocrinology and Nutrition (SEEN) to draft a consensus document on recommendations to be followed during the restart phase of our activity [16] and highlight the telematic work of these entities with webinars and online information sessions that provide alternatives and guidelines to bariatric surgeons.

This work tries to show the activity in the field of the MBC in Spain during the month of May and the beginning of June. The large number of participants, most of them surgeons, gives strength to the study and they are already enough sample that can reflect with enough fidelity the real current scenario. Unfortunately we lack information on the geographical distribution of the respondents. Within Spain there are areas where the incidence of the infection has been higher, while others have experienced fewer cases. This can influence the time to restart strategies in each center. In addition, it must be considered that the data collection of the present study was performed between May 5 and 20, it is very likely that, given the speed with which events are developing, many of them could have changed, so that the results of this study should be understood according to the moment and the geographical area of each center.

Conclusions

Once the peak of the COVID-19 pandemic contagions has been overcome, we enter a progressive de-escalation that will probably last over time. The different CBM units approach the moment with different degrees of prevention depending on the local effect of COVID-19. It is imperative that medical communities and the different management bodies distribute guidelines of conduct and protocols that can serve as a guide during the delicate process of restarting elective surgery.

Financing

None.

Declaration of conflicts of interest

The authors state that they have no potential conflict of interest related to this work one.

Ethical considerations

Given the nature of the study, the Declaration of Human and Animal Rights and the declaration of the informed consent are not applicable.

Acknowledgments

We would like to thank Concepción Gómez Ramos for her invaluable help in distributing the survey.

Bibliography

1. Mohammadi M, Meskini M, do Nascimento Pinto AL. 2019 Novel coronavirus (COVID-19) overview. *J Public Health (Berl)* 2020;1-9. <https://doi.org/10.1007/s10389-020-01258-3>.

2. Aminian A, Safari S, Razeghian-Jahromi A, Ghorbani M, Delaney CP. COVID-19 Outbreak and Surgical Practice: Unexpected Fatality in Perioperative Period. *Ann Surg*. 2020; Mar 26:10.1097
3. McMichael TM, Currie DW, Clark S, et al. Epidemiology of COVID-19 in a Long-Term Care Facility in King County, Washington. *N Engl J Med* 2020;382:2005-11.
4. Torgerson JS, Sjöström L. The Swedish Obese Subjects (SOS) Study-Rationale and Results. *Int J Obes Relat Metab Disord* 2001;25:2-4.
5. Sjöström L. Bariatric Surgery and Reduction in Morbidity and Mortality: Experiences From the SOS Study. *Int J Obes* 2008;32:93-7.
6. *La Vanguardia* online. Crisis del Coronavirus. Qué se podrá hacer y cuándo en las cuatro fases de desescalada del confinamiento. Accesible el 03 junio, 2020 en: <https://www.lavanguardia.com/vida/20200429/48817457267/desescalada-espana-fases-que-hacer-cuando-confinamiento-coronavirus.html>.
7. Diaz A, Rahmanian A, Pawlik TM. COVID-19: The road to recovery, *The American Journal of Surgery*, <https://doi.org/10.1016/j.amjsurg.2020.05.024>
8. Barrios AJ, Prieto R, Torregrosa L, et al. Volver a empezar: cirugía electiva durante la pandemia del SARS-CoV2. Recomendaciones desde la Asociación Colombiana de Cirugía. *Rev Colomb Cir*. 2020;35:302-21.
9. Yang W, Wang C, Shikora S et al. Recommendations for Metabolic and Bariatric Surgery During the COVID-19 Pandemic from IFSO. *Obes Surg* 2020; Apr 14:1-3.
10. Hernandez Matías A. Actividad, Situación y Gestión de las Listas de Espera en Cirugía. Accesible el 02 junio, 2020 en: *Bariátrica*. https://www.seco.org/ACTIVIDAD-SITUACION-Y-GESTION-DE-LAS-LISTAS-DE-ESPERA-EN-CIRUGIA-BARIATRICA_es_0_31.html
11. Sussenbach SP, Padoin AV, Silva EN, et al. Economic Benefits of Bariatric Surgery. *Obes Surg*. 2012;22(2):266-70.
12. Larsen AT, Højgaard B, Ibsen R et al. The Socio-economic Impact of Bariatric Surgery. *Obes Surg* 2018;28(2):338-48.
13. Melissas, J. IFSO Guidelines for Safety, Quality, and Excellence in Bariatric Surgery. *Obes Surg* 2008;18:497-500.
14. Francesco Rubino F, Cohen RV, Mingrone G et al. Bariatric and metabolic surgery during and after the COVID-19 pandemic: DSS recommendations for management of surgical candidates and postoperative patients and prioritisation of access to surgery. *Lancet Diabetes Endocrinol*. 2020;7(20):1-9.
15. Asociación Española de Cirujanos (AEC) y su Grupo de trabajo "Cirugía-AEC-COVID-19". Recomendaciones de gestión para la vuelta a normalidad y "desescalada" en los servicios de cirugía general en el contexto de la pandemia COVID-19. Asequible el 04 de junio de 2020 en: https://www.aecirujanos.es/files/noticias/162/documentos/Vuelta_a_la_normalidad_v_7.pdf
16. Sanchez Santos R, Arroyo Martín JJ, Bretón Lesmes I, Recomendaciones para el reinicio de la Cirugía Bariátrica tras el pico de la pandemia SARS-COV-2. Asequible el 04 de junio de 2020 en: https://www.seco.org/guiasconsensos_es_27.html

© 2020 seco- seedo. Published by bmi-journal. All rights reserved.

