



Special Article

Abdominal wall surgery after SARS-CoV-2: Time to reestablish postponed non-essential procedures?^{☆,☆☆}



Manuel López Cano,^{a,*} Judit Saludes Serra,^b Daniel Rosselló-Jiménez,^c José Antonio Pereira,^d Victor Rodrigues Gonçalves,^a Josep M. García Alamino^e

^a Unidad de Cirugía de Pared Abdominal, Hospital Universitario Vall d'Hebrón, Universidad Autónoma de Barcelona, Barcelona, Spain

^b Servicio de Anestesiología y Reanimación, Hospital Universitario de Tarragona Joan XXIII, Tarragona, Spain

^c Institut de Recerca Vall d'Hebrón (VHIR), Hospital Universitario Vall d'Hebrón, Barcelona, Spain

^d Servicio de Cirugía General y Digestiva, Hospital del Mar, Parc de Salut Mar, Universidad Pompeu Fabra, Barcelona, Spain

^e Programme in Evidence Based Health Care, University of Oxford, Oxford, UK

ARTICLE INFO

Article history:

Received 8 April 2020

Accepted 16 April 2020

Available online 19 October 2020

Keywords:

COVID-19

Non-essential surgeries

Hernia

Abdominal wall

Surgery

A B S T R A C T

Pandemic by the COVID-19 has found us unprotected to provide an adequate and rapid sanitary response. The hospital network of our public health system has provided most of the resources for the treatment of patients affected by the infection. Non-essential (non-priority) surgeries have been postponed. The optimal and proportionate reestablishment of these non-priority surgeries can be a problem. This article offers a technical and non-technical view of reestablishment non-priority surgeries from the perspective of abdominal wall surgery.

© 2020 AEC. Published by Elsevier España, S.L.U. All rights reserved.

Cirugía de la pared abdominal después del SARS-CoV-2: ¿es hora de restablecer los procedimientos no esenciales pospuestos?

R E S U M E N

La pandemia por el COVID-19 nos ha encontrado desprotegidos ante la dificultad para dar una respuesta sanitaria adecuada y rápida. La red de hospitales del sistema sanitario público ha dispuesto la mayoría de los recursos para el tratamiento de los pacientes afectados por la infección. Las cirugías no esenciales (no prioritarias) han sido aplazadas. El reinicio óptimo y

Palabras clave:

COVID-19

Cirugías no esenciales

Hernia

[☆] Please cite this article as: López Cano M, Saludes Serra J, Rosselló-Jiménez D, Pereira JA, Rodrigues Gonçalves V, García Alamino JM. Cirugía de la pared abdominal después del SARS-CoV-2: ¿es hora de restablecer los procedimientos no esenciales pospuestos? Cir Esp. 2020;98:507-509.

^{☆☆} All authors contributed in the same way to this work.

* Corresponding author.

E-mail address: mlpezcano@gmail.com (M. López Cano).

Pared abdominal
Cirugía

proporcionado de estas cirugías no prioritarias puede representar un problema. En el presente artículo se ofrece una perspectiva técnica y no técnica del reinicio de las cirugías no prioritarias desde la óptica de la cirugía de la pared abdominal.

© 2020 AEC. Publicado por Elsevier España, S.L.U. Todos los derechos reservados.

The novel coronavirus responsible for severe acute respiratory syndrome (SARS-CoV-2) has caused, is causing and unfortunately will continue to cause physical health sequelae (morbidity and mortality) as well as mental health consequences (exhaustion, stress and anguish) in patients, healthcare workers and society in general. Likewise, SARS-CoV-2 will leave its mark on the structure and organization of healthcare facilities secondary to the 'express' change in the order and provision of care, resulting in the reorganization of hospitals and the provision of most resources for the treatment of patients affected by COVID-19.

In surgery, this quick restructuring has led to the recommendation (at varying degrees) to cancel or postpone all non-essential/non-priority surgical activities, and only emergency surgical activities have continued to function in many hospitals.^{1,2} One such 'deferred' non-essential surgical activity is abdominal wall surgery (primarily hernias). As we write these lines, the previously described context is our current reality.

However, there is undoubtedly a future that awaits us. In the short term and after the pandemic, we will logically have to face the effects of the pandemic on the public healthcare structure and organization. It is unquestionable that, when elective surgical activity is resumed, delayed or canceled oncological surgery and other preferential surgeries will be prioritized for operating room sessions. It is also obvious that, sooner or later, postponed non-essential surgical activities will have to be restarted. We do not intend to discuss all of them here, although abdominal wall surgery could be used as an example. To what extent and at what rate will it restart? We believe that it is pertinent to remember here that, in a 'normal care' situation (such as the situation prior to the current international public health emergency), hernia pathology is one of the most common surgeries and has the longest waiting lists.³ Furthermore, patients with hernia do not present a uniform pattern of medical 'importance' in terms of the repercussions of the pathology and the effect on quality of life. Consequently, we feel that its postponement until after the pandemic would generate an important organizational problem, with greater delays until surgery or a growing number of urgent complications and the consequent increase in morbidity and mortality rates.⁴

We live in a public health system with universal coverage, which for years has survived under the burden of spending cuts and restrictions.⁵ This healthcare crisis has cruelly revealed that our public health system suffers from a lack of means (both material and human) and resources (funding).⁶ In addition, there are two circumstances that provide a 'perfect storm' environment. First, those who are most affected by the return to 'normal care' are exactly those who have suffered the most from this health crisis (patients and healthcare workers). Second, the probable post-crisis

economic recession and increased public debt will most likely make us have to adapt to an even more hostile environment. Given this situation, in our opinion, the reorganization task of returning to 'normal' abdominal wall surgery activity can only be achieved through the cooperation of all healthcare professionals, optimizing the available resources and once again reinventing, with much effort and burnout, an insufficient and weakened healthcare model. Perhaps, on the way back to normalcy, we could lay the foundation of a more extensive reorganization that would restore the esteemed role that medical professionals should have in our society. Thus, if we exclude the use of major ambulatory surgery, which will be an essential resource in the treatment of wall pathology that does not require hospitalization and whose implementation may be less complex, it is likely that patients with wall disease who do require hospitalization should be approached from a technical perspective as well as a non-technical one.

Technical perspective

Complex abdominal wall hernias usually occur in patients with high associated morbidity and a very deficient quality of life secondary to their hernia.⁷ They usually require prehabilitation, which in some cases can be ambulatory (respiratory rehabilitation, botulinum toxin, weight loss), but in other cases it may require hospitalization (progressive pneumoperitoneum). Surgical treatment is associated with long surgeries and the need for close monitoring in the immediate postoperative period (beds in postoperative resuscitation units or intensive care) as well as potentially serious postoperative complications. These patients, whose surgery cannot be postponed indefinitely, should have a place among the priority procedures and not after them, both in the operating room and in resuscitation/postoperative ICU beds.

Less complicated wall surgeries for elderly patients with significant associated morbidity (heart disease, lung disease, kidney failure, treatment with anticoagulants), whose pathology also alters their quality of life, will also need treatment in surgical programs. These patients can benefit from short-stay units for patients with scheduled surgical procedures whose estimated hospital stay is less than 72 h,⁸ which also promotes more efficient bed management.

In this context, it is likely that afternoon/evening surgical programs will have to be intensified to treat the patients described above. However, surgeons (like other doctors and healthcare professionals) are not 'heroes' who are able to save a limitless number of patients from a waiting list after also having contributed to saving lives during a pandemic. We are providers of a specialized product who, for the proper function of the system, must be adequately regulated and incentivized in accordance with the value we bring to society.

Non-technical perspective

Most public hospitals have residents in surgical training. We believe that, even though a specific type of surgery is prioritized in the reorganization period after the pandemic, resident training needs to continue in all possible areas of general surgery, including abdominal wall surgery and others that may be in a similar situation. We cannot and should not add more precariousness to training programs that have already been affected by funding restrictions for years.⁹

In our opinion, the task of surgical reorganization should not be the sole responsibility of surgeons. In exceptional situations such as the one generated by the current health crisis, non-surgical specialists should also collaborate in cases of exacerbated chronic diseases or infectious diseases, optimizing the overall hospital stay of these patients, reducing the saturation of beds available and facilitating surgical programming. In the same manner, patients awaiting an abdominal wall procedure (and society in general) should be aware of the problem of delayed treatment for their pathology. In this sense, we believe that the administration of the public health system should raise public awareness and offer a realistic perspective of the situation, at the very least.

In short, we believe that abdominal wall surgery (at least a portion of patients requiring hospitalization) should return to surgical reorganization programs after the pandemic. We do not believe that it should go ahead of other priority procedures, but we do believe that it should not wait for their completion. Instead, it should be done simultaneously, perhaps not with the same intensity of resources, but parallel.

We have used abdominal wall surgery as the guiding example of this text since it is our daily environment. However, many of the previously described factors, except for the particularities specific to each area, are probably applicable to most non-essential (non-priority) surgical procedures. It is likely that this is the only way 'proportionate' access to healthcare services can be achieved following criteria of effective equality, while respecting basic aspects such as the severity of the pathology as well as the efficacy and timeliness of the surgery.

Funding

This article has not been funded by public or private entities.

Conflicts of interest

The authors have no conflict of interests to declare related with this article.

REFERENCES

1. General recommendations for action and basic organization of surgery units in areas highly affected by the covid-19 pandemic (sars cov-2). From the spanish association of surgery (AEC) [Accessed April 2020]. Available from: [https://www.aecirujanos.es/files/noticias/tmp27/documentos/6_Recommendations_from_the_AEC_for_Surgical_Units_for_HIGHLY_affected_areas_by_COVID\(1\).pdf](https://www.aecirujanos.es/files/noticias/tmp27/documentos/6_Recommendations_from_the_AEC_for_Surgical_Units_for_HIGHLY_affected_areas_by_COVID(1).pdf).
2. General recommendations for action and basic organization of surgery units in areas with low affection by the covid-19 pandemic (sars cov-2). From the spanish association of surgery (AEC) [Accessed April 2020]. Available from: https://www.aecirujanos.es/files/noticias/tmp27/documentos/5_Recommendations_from_the_AEC_for_Surgical_Units_for_areas_LOW_affected_by_COVID.pdf.
3. Kingsnorth A, LeBlanc K. Hernias: inguinal and incisional. *Lancet*. 2003;362:1561-71.
4. Martínez-Serrano MA, Pereira JA, Sancho J, Argudo N, López-Cano M, Grande L. Specific improvement measures to reduce complications and mortality after urgent surgery in complicated abdominal wall hernia. *Hernia*. 2012;16:171-7.
5. Bandrés E., González R. La reducción del gasto sanitario en España durante la crisis. Cuadernos de información económica-Funcas. Nº 248. Octubre 2015 [Accessed April 2020]. Available from: <http://rifde.info/documentos/repo2015/La%20reducci%C3%B3n%20del%20gasto%20sanitario%20en%20Espa%C3%B1a%20durante%20la%20crisis.pdf>.
6. Raurell-Torredà M, Martínez-Estalella G, Frade-Mera MJ, Carrasco Rodríguez-Rey LF, Romero de San Pío E. Reflexiones derivadas de la pandemia Covid-19. *Enfermería Intensiva*. 2020. <http://dx.doi.org/10.1016/j.enfi.2020.03.002>.
7. Slater NJ, Montgomery A, Berrevoet F, Carbonell AM, Chang A, Franklin M, et al. Criteria for definition of a complex abdominal wall hernia. *Hernia*. 2014;18:7-17.
8. Strøm C, Stefansson JS, Fabritius ML, Rasmussen LS, Schmidt TA, Jakobsen JC. Hospitalisation in short-stay units for adults with internal medicine diseases and conditions. *Cochrane Database Syst Rev*. 2018;8:CD012370.
9. Saavedra Rionda I, García Gonzalez JV, Llamazares Granda FJ, Arbesú Fernández E, López Díaz A. Grado de burnout en especialistas en formación de medicina y psicología clínica. *Educ Med*. 2019. <http://dx.doi.org/10.1016/j.edumed.2019.05.002>.