

and make the health system more efficient, which will allow us to treat a greater number of patients whose surgeries were postponed due to the COVID-19 crisis.

In conclusion, we surgeons face new challenges in the face of this pandemic. The first challenge is protecting ourselves and our patients from possible coronavirus infection. The next challenge is to organize our material and human resources in the most efficient manner possible. It is essential to reduce the need for prolonged ICU stays and to reduce the expenses in materials and surgical time, as well as medical personnel. Following these steps, we will be able to increase the number of necessary oncological procedures.

REFERENCES

1. Asociación Española de Cirujanos. Recomendaciones para manejo de pacientes con infección por COVID-19 en el contexto de una intervención quirúrgica urgente o electiva. 2020 [Accessed 22 March 2020] Available from: https://www.aecirujanos.es/files/noticias/152/documentos/Recomendaciones_caso_cirugia.pdf.
2. Kwack HD, Kim SH, Seo YS, Song KJ. Detecting hepatitis B virus in surgical smoke emitted during laparoscopic surgery. *Occup Environ Med.* 2019;73:857-63. <http://dx.doi.org/10.1136/oemed-2016-103724>.
3. Miller J. SAGES recommendations Regarding Surgical Response to COVID-19 Crisis. 2020 [Accessed 22 March 2020] Available from: <https://www.sages.org/recommendations-surgical-response-covid-19/>.
4. Yu GY, Lou Z, Zhang W. Several suggestion of operation for colorectal cancer under the outbreak of Corona Virus Disease 19 in China. *Zhonghu Wei Chang Wai Ke Za Zhi.* 2020;23:9-11. <http://dx.doi.org/10.3760/cma.j.issn.1671-0274.2020.03.002>.
5. Spinelli A, Pellino G. COVID-19 pandemic: perspectives on an unfolding crisis. *Br J Surg.* 2020. <http://dx.doi.org/10.1002/bjs.11627>.
6. Sociedad Española de Oncología Médica (SEOM). Las cifras del cáncer en España. 2020 [Accessed 22 March 2020] Available from: https://seom.org/seomcms/images/stories/recursos/Cifras_del_cancer_2020.pdf.
7. Liang W, Guan W, Chen R, Wang W, Li J, Xu K, et al. Cancer patients in SARS-CoV-2 infection: a nationwide analysis in China. *Lancet Oncol.* 2020;21:335-7. [http://dx.doi.org/10.1016/S1470-2045\(20\)30096-6](http://dx.doi.org/10.1016/S1470-2045(20)30096-6).
8. American College of Surgeon. COVID-19: Recommendations for Management of Elective Surgical Procedures. 2020. [Accessed 22 March 2020] Available from: https://www.facs.org/-/media/files/covid19/recommendations_for_management_of_elective_surgical_procedures.ashx.
9. Ha GW, Kim JH, Lee MR. Oncologic impact of anastomotic leakage following colorectal cancer surgery: a systematic review and meta-analysis. *Ann Surg Oncol.* 2017;24:3289-99.
10. Gehram J, Angenete E, Björholt I, Lesén E, Haglind E. Cost-effectiveness analysis of laparoscopic and open surgery in routine Swedish care for colorectal cancer. *Surg Endosc.* 2019. <http://dx.doi.org/10.1007/s00464-019-07214-x>.

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Respond to the Letter: The COVID-19 Health Crisis: The Surgeon Role[☆]



Respuesta a la carta: Crisis sanitaria COVID-19: el papel de un cirujano

To the Editor:

In representation of the Surgical Infection Division and the COVID-19 Working Group of the AEC, first we would like endorse the correct assessment made by our colleagues, Dr. García-Novoa and Dr. Casal-Beloy, regarding the current

situation.¹ We would also like to comment on some aspects of the measures that, as a Society, are being implemented.

Indeed, the terrible SARS-CoV-2 coronavirus pandemic is the greatest challenge that contemporary medicine has ever experienced. Throughout, the role of surgeons has been key, redefining leadership roles in the healthcare system through

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versatility, assuming very diverse responsibilities, and adapting our work to the circumstances.^{2,3}

The intention of the AEC is to provide maximum support to the surgical community, as well as the entire health system, through different positioning documents, guidelines for specific situations, answers to specific questions and initiatives with real-time interaction like webinars.⁴

Thus, we have prioritized creating safe, structured environments in which to conduct surgery in the current context, providing recommendations for performing surgical procedures and efficiently managing resources, especially in the context of patients whose surgery cannot be delayed.⁵

All of these recommendations are dynamic and are reviewed every few days, as the knowledge about the pandemic is growing exponentially and rapidly. Likewise, we do not have scientific evidence available for many of the aspects that affect surgeons' daily activities. Based on accumulated experience, there is a general consensus among all international surgical societies of the need to rule out the presence or absence of COVID-19 infection in all surgical patients, using various screening tests according to their availability. Recommendations on the suitability of minimally invasive surgery continue to fluctuate and are controversial since the quality of the studies is very low. In addition, we lack specific studies about the transmissivity of SARS-CoV-2 through the aerosols generated during laparoscopy.⁶ One of the challenges is to determine what part of our medical practice can continue to be carried out safely to so-called "second and third victims" of the pandemic: infected healthcare professionals and, above all, patients who receive treatments that do not provide the best results.

Surgical procedures in cancer patients represent the other side of this challenge as they are priority patients, but they are also fragile and many are immunosuppressed. The impact of the inflammatory response to surgery itself could aggravate the symptoms caused by COVID-19, especially in asymptomatic undiagnosed patients; meanwhile, non-infected patients could be exposed to nosocomial infection due to this virus. Thus, in addition to the aforementioned screening, recommendations for oncological surgery must take into account: the availability of local hospital resources; the assessed benefits of surgery and tumor characteristics (including the risk of delaying the procedure); and lastly, the estimated morbidity associated with the surgical procedure and potential need for ICU care and/or ventilatory support. These have been organized according to theoretical scenarios (probably changing) based on the number of expected COVID-19 admissions and their impact on available resources.⁷

Thus, from the AEC itself, our wish is to make all possible resources available to our members and the entire surgical

community, so that we are all able to face a truly devastating and uncertain situation. However, we are convinced that, as on so many other occasions, our knowledge, collective effort and dedication to the medical profession will lead us to prevail.

REFERENCES

- García-Novoa A, Casal-Beloy I. Crisis Sanitaria COVID-19: el papel de un cirujano. *Cir Esp*. <https://doi.org/10.1016/j.ciresp.2020.04.003>.
- Brindle M, Gawande A. Managing COVID-19 in surgical systems. *Ann Surg*. 2020. <http://dx.doi.org/10.1097/SLA>.
- Spinelli A, Pellino G. COVID-19 pandemic: perspectives on an unfolding crisis. *Br J Surg*. 2020. <http://dx.doi.org/10.1002/bjs.11627>.
- Documentos de posicionamiento y recomendaciones de la AEC en relación con la cirugía y COVID-19 [Accessed 4 April 2020]. Available in: https://www.aecirujanos.es/Documentos-de-posicionamiento-y-recomendaciones-de-la-AEC-en-relacion-con-la-cirugia-y-COVID19_es_1_152.html.
- Balibrea JM, Badia JM, Rubio Pérez I, Martín Antona E, Álvarez Peña E, García Botella S, et al. Manejo quirúrgico de pacientes con infección por COVID-19. Recomendaciones de la Asociación Española de Cirujanos. *Cir Esp*. 2020. <http://dx.doi.org/10.1016/j.ciresp.2020.03.001>.
- SAGES and EAES Recommendations Regarding Surgical Response to COVID-19 Crisis [Accessed 4 April 2020] Available in: <https://www.sages.org/recommendations-surgical-response-covid-19/>.
- ¿Qué debemos saber los cirujanos en los casos de patología oncológica en el contexto de la pandemia por COVID-19 (SARS COV-2)? [Accessed 4 April 2020]. Available in: https://www.aecirujanos.es/files/noticias/152/documentos/Pacientes_oncologicos_y_covid19_v2.pdf.

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