

LETTER TO THE EDITOR

Enhanced recovery after surgery (ERAS) nutrition protocol during COVID-19 pandemic

Protocolo nutricional de recuperación acelerada después de cirugía durante la pandemia por covid-19

Gabino Cervantes-Guevara^{1,2}, Alejandro González-Ojeda³, Clotilde Fuentes-Orozco³, Sol Ramírez-Ochoa^{4,5}, Lorena A. Cervantes-Pérez⁴, Guillermo A. Cervantes-Cardona⁶, Gabino Cervantes-Pérez⁴, Andrea Pérez de Acha-Chávez⁷, and Enrique Cervantes-Pérez^{4,5*}

¹Department of Gastroenterology, Hospital Civil de Guadalajara "Fray Antonio Alcalde", Guadalajara, Jalisco; ²Department of Welfare and Sustainable Development, Centro Universitario del Norte, Universidad de Guadalajara, Colotlán, Jalisco; ³Biomedical Research Unit 02, Specialties Hospital, Western National Medical Center, Instituto Mexicano del Seguro Social (IMSS), Guadalajara, Jalisco; ⁴Department of Internal Medicine, Hospital Civil de Guadalajara "Fray Antonio Alcalde", Guadalajara, Jalisco; ⁵Health Sciences University Center, Universidad de Guadalajara, Guadalajara, Jalisco; ⁶Department of Philosophical, Methodological and Instrumental Disciplines, Centro Universitario de Ciencias de la Salud, Universidad de Guadalajara, Guadalajara, Guadalajara, Jalisco; ⁷Department of Geriatrics, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico City. Mexico

To the editor,

The COVID-19 pandemic has wreaked havoc on health-care systems across the world and the financial costs are only beginning to be felt. Patients undergoing surgery have had to take a step back to make place for COVID-19-infected patients in need of acute and critical care. Intensive care units have been converted from operating rooms, and physicians, nurses, and allied health-care professionals have been quickly retrained to manage COVID-19. Overall, a significant shift in practice has occurred that few could have anticipated¹.

This vast and quick change in daily practice contrasts sharply with the usual rate of change in surgery and anesthesia. A shift in clinical care usually takes several years to develop. Many units all across the world have made tremendous changes in just a few days for COVID-19. This would not have been feasible without a shared desire to address a major problem by combining the knowledge of everyone involved, from the operating room to hospital administration. The goal was achieved thanks to the collaboration of all these entities².

This is where the future of surgery and anesthesia will be decided. Surgery and anesthesia must take the opportunity to revolutionize perioperative care by building on the momentum of change established during the COVID-19 epidemic. Telemedicine, for example, has been utilized to eliminate needless in-person visits.

A major obstacle is to close knowledge gaps through high-quality research. As part of its mission to advance clinical research, the Enhanced Recovery After Surgery (ERAS) Society has produced suggestions for writing about ERAS³. Now is the moment to develop what surgical care has always required: multidisciplinary teams that collaborate outside of their discipline's conventional boundaries with the common objective of improving patient outcomes. ERAS integrates modern monitoring and auditing to gain control of the entire perioperative process, resulting in much-needed surgical and nutritional outcomes improvement⁴.

Part of the ERAS protocol includes perioperative nutrition support. Pre-operative carbohydrate beverages designed to stimulate insulin release have a low osmolality and a carbohydrate content of roughly 12% (based

Correspondence:

*Enrique Cervantes-Pérez

E-mail: enrique.cervantes@academico.udg.mx

Date of reception: 04-04-2022
Date of acceptance: 06-04-2022
DOI: 10.24875/CIRU.22000196

Cir Cir. 2022;90(6):862-863 Contents available at PubMed www.cirugiaycirujanos.com

0009-7411/© 2022 Academia Mexicana de Cirugía. Published by Permanyer. This is an open access article under the terms of the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

mainly on maltodextrins). They minimize several of the detrimental consequences of overnight fasting when taken before surgery. Carbohydrates consumed before surgery result in decreased post-operative insulin resistance, decreased hyperglycemia, and decreased insulin treatment requirements while preserving skeletal muscle and, in patients having heart surgery, cardiac muscle function. Carbohydrate beverages vary significantly in composition, and their content has a direct impact on their physiological function and safety. Numerous carbohydrate-containing products have been recommended for pre-operative usage, but only a few have been adequately studied. As a result, customers should require manufacturers to give data on their specific recipe demonstrating that their product has been studied for safety and efficacy before usage⁵.

Delivering care through the ERAS system is proving to be highly beneficial. Surgery, nutrition, and anesthesia will be elevated to new heights with the help of low-cost, high-quality research in the next phase of ERAS. Patients and health systems will benefit from the efforts of perioperative care professionals during this time of global crisis.

Funding

No external funding was received to support this work.

Conflicts of interest

The authors declare that there are no conflicts interests.

Ethical disclosures

Protection of human and animal subjects. The authors declare that no experiments were performed on humans or animals for this study.

Confidentiality of data. The authors declare that no patient data appear in this article.

Right to privacy and informed consent. The authors declare that no patient data appear in this article.

References

- COVIDSurg Collaborative. Elective surgery cancellations due to the CO-VID-19 pandemic: global predictive modelling to inform surgical recovery plans. Br J Surg. 2020;107:1440-9.
- COVIDSurg Collaborative. Global guidance for surgical care during the COVID-19 pandemic. Br J Surg. 2020;107:1097-103.
- Elias KM, Stone AB, McGinigle K, Stone AB, McGinigle K, Tankou JI, et al. The reporting on ERAS compliance, outcomes, and elements research (RECOVER) checklist: a joint statement by the ERAS and ERAS USA Societies. World J Surg. 2019;43:1-8.
- Ljungqvist O, Nelson G, Demartines N. The post COVID-19 surgical backlog: now is the time to implement Enhanced Recovery After Surgery (ERAS). World J Surg. 2020;44:3197-8.
- Gianotti L, Biffi R, Sandini M, Marrelli D, Vignali A, Caccialanza R, et al. Preoperative oral carbohydrate load versus placebo in major elective abdominal surgery (PROCY): a randomized, placebo-controlled, multicenter, phase III trial. Ann Surg. 2018;267:623-30.