



Editorial

Multimodal Rehabilitation Program in Thoracic Surgery[☆]

Programa de rehabilitación multimodal en cirugía torácica

Ignacio Garutti Martínez,^{a,*} Federico González Aragonese,^b José Manuel Ramírez^c^a Servicio de Anestesiología, Hospital General Universitario Gregorio Marañón, Madrid, Spain^b Servicio de Cirugía Torácica, Hospital General Universitario Gregorio Marañón, Madrid, Spain^c Servicio de Cirugía General, Hospital Universitario de Zaragoza, Zaragoza, Spain

One of the main principles of medicine is that advances in knowledge and technological developments lead to improvements in patient care. In the area of surgery, 2 indisputably significant advances have emerged in the last 20 years, namely, minimally invasive surgery and multimodal rehabilitation programs, also known as Fast Track protocols or Enhanced Recovery After Anesthesia (ERAS) programs. The aim of both developments is the same: to minimize surgical aggression, thereby improving post-operative recovery.

Comparative, validated data are available from numerous studies to show the benefits of these protocols for both patients (reduced morbidity and improved quality of life) and the healthcare system (shorter hospital stays),¹ but the degree of implementation needs to be examined. ERAS protocols are in essence multidisciplinary, and a lack of coordination between the various specialist areas sometimes makes them difficult to introduce. But what are ERAS programs, exactly? To paraphrase Kehlet, the father of multimodal surgical rehabilitation, ERAS is a combination of perioperative strategies supported by evidence-based medicine and aimed at improving recovery after surgical interventions.²

ERAS protocols revisit conventional perioperative practices and evaluate the specific key points of each procedure, analyzing the scientific evidence for the perioperative management of patients undergoing major surgery, to produce guidelines for helping coordinated teams improve postoperative care.

These protocols cover different phases in the care of surgical patients, and address issues such as shortening the preoperative fasting period, giving carbohydrate-rich drinks before surgery, detection of malnutrition in the preoperative period, need for preventive analgesia, early postsurgical mobilization, rapid reintroduction of oral intake of fluids and food, and prompt withdrawal of unnecessary catheters and tubes. Each of these individual measures

is beneficial in itself; however, to maximize the benefit, they should all be implemented together. The level of compliance is important: Gustafsson pointed out the need for implementing over 70% of the measures,³ and it is thought that the application of these protocols successfully improves postoperative progress by reducing the stress response and quickly reactivating organ function.⁴

Most of the scientific evidence is derived from colorectal surgery,⁵ since this is where the multimodal approach began. Successes there have led to these practices being extended to all surgical specialties.

In thoracic surgery, however, very little data is available, and the success rate is minimal,^{6–8} despite recommendations from the British National Institute of Clinical Excellence (NICE).⁹ In Spain, the Spanish Multimodal Rehabilitation Group (GERM) was formed in 2007, in an attempt to adapt the protocols to our social and healthcare setting. This initiative has produced good results in several studies, and the current goal of GERM is to work towards introducing these protocols into the care setting.

In thoracic surgery, first concerted multidisciplinary multimodal rehabilitation protocol for the management of patients lobectomized due to tumor disease has been published, following the initiative and concerted efforts of a small group of anesthetists, thoracic surgeons and nutritionists from 6 hospitals located in autonomous communities throughout Spain.¹⁰ This protocol, based on the essential phases of care, is in line with GERM philosophy, and places emphasis on the quality of analgesia and rapid withdrawal of chest tubes. Moreover, it is sufficiently flexible to be adapted to most thoracic surgery departments in the country.

The evidence supporting ERAS programs is so overwhelming that it is hard to understand why they have not been implemented sooner. To be acceptable, all protocols must receive the agreement of all participating departments (Anesthetics, Surgery, Nursing and Nutrition) and must involve the patient in the process and decision-making. To meet program objectives, the protocol needs to be followed closely, and reliable measurements are needed to analyze surgical outcomes, using indicators such as morbidity and postoperative stay. Outcomes must be audited with the aim of improving the protocol, and areas for improvement must be examined in interdisciplinary meetings, until these protocols become part of standard clinical practice.

[☆] Please cite this article as: Garutti Martínez I, González Aragonese F, Ramírez JM. Programa de rehabilitación multimodal en cirugía torácica. Arch Bronconeumol. 2015;51:159–160.

* Corresponding author.

E-mail address: ngaruttimartinez@yahoo.es (I. Garutti Martínez).

Study Team Members

Dr. Julian Arevalo Ludeña (1), Fundación Jiménez Díaz, Madrid.
 Dr. José Luis Ayala Ortega (1), Hospital Rey Juan Carlos, Madrid.
 Dra. Cristina Cuerda Compes (3), Hospital General Universitario Gregorio Marañón, Madrid.

Dr. Manuel De la Matta (1), Hospital Universitario Virgen del Rocío, Sevilla.

Dr. Rafael Esturi Navarro (1), Hospital de la Ribera, Alzira, Valencia.

Dr. José Marcelo Galbis Caravajal (2), Hospital de la Ribera, Alzira, Valencia.

Dr. Ignacio Garutti Martínez (1), Hospital General Universitario Gregorio Marañón, Madrid.

Dr. Federico Gonzalez Aragonese (2), Hospital General Universitario Gregorio Marañón, Madrid.

Dr. José Miguel Izquierdo Elena (2), Hospital Universitario Donostia, San Sebastián.

Dr. Ana Lajara Montell (1), Hospital General Universitario Gregorio Marañón, Madrid.

Dr. Encarna Miñana Aragón (1), Hospital de la Ribera, Alzira, Valencia.

Dr. Nicolás Moreno Mata (2), Hospital Universitario Virgen del Rocío, Sevilla.

Dr. Ignacio Muguruza Trueba (2), Hospital Rey Juan Carlos, Madrid.

Dr. Luis Enrique Muñoz Alameda (1), Fundación Jiménez Díaz, Madrid.

Dr. Reyes Ortiz de Urbina González (1), Hospital Universitario Donostia, San Sebastián.

Dr. Rafael Peñalver Pascual (2), Hospital General Universitario Gregorio Marañón, Madrid.

Dr. Fernando Sánchez (1), Hospital de la Ribera, Alzira, Valencia.

Dr. José Zapatero Gaviria (2), Fundación Jiménez Díaz, Madrid.

1: Department of Anesthesiology; 2: Department of Thoracic Surgery; 3: Department of Endocrinology and Nutrition.

Funding

No funding was received for the preparation of this manuscript.

Conflict of Interests

The authors state that they have no conflict of interests.

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