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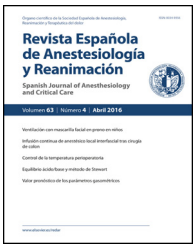

ORIGINAL ARTICLE

Spanish survey on enhanced recovery after surgery☆

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KEYWORDS
Enhanced recovery after surgery;
Perioperative care;
Fast track surgery;
Survey

Abstract
Introduction: The aim of this study was to determine the interest in ERAS protocols, and the extent to which clinicians are familiar with and apply these protocols during perioperative care.
Materials and methods: Free access survey hosted on the Spanish Society of Anesthesiology and Critical Care; Spanish Association of Surgeons and Spanish Society of Enteral and Parenteral nutrition and ERAS Spain (GERM) websites conducted between September and December 2014.
Results: The survey was answered by 272 professionals (44.5% anaesthetists, 45.2% general surgeons) from 110 hospitals, 73% of whom had experience in ERAS protocols. Most (86.1%) had specific knowledge of ERAS protocols, whereas only 50.9% were familiar with ERAS recommendations and 42.4% with GERM recommendations. Most (73.1%) respondents reported that ERAS protocols are performed in their hospitals, mainly in colorectal surgery (93%), and 52.2% reported that GERM/ERAS recommendations are followed. Nearly all (95.5%) would be interested in the development of multidisciplinary national guidelines. Less than half (46.6%) perform preoperative nutritional assessment, albeit without a universal malnutrition screening method (56.8%). Preoperative loading with carbohydrate drinks is carried out in only 51.4% of cases; nasogastric tube and drainage are avoided (79.3%), prophylaxis for postoperative nausea and vomiting (73.4%), goal directed fluid therapy (73.3%), and active normothermia

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maintenance (87.4%) are performed. In most cases, mobilization (90.1%) and early feeding (87.9%) are performed. The leading causes of protocol failure are postoperative nausea and vomiting (46.5%) and ileus (58.9%).
Conclusion: Clinicians in Spain are familiar with fast track protocols, although there is no overall consensus, and hospitals do not adhere to existing guidelines. Overall compliance with the items of the protocol is adequate, although perioperative nutritional management is poor.

PALABRAS CLAVE
Recuperación abdominal intensificada;
Cuidados perioperatorios;
Recuperación intensificada;
Encuesta

Encuesta nacional sobre cirugía con recuperación intensificada

Resumen
Introducción: El objetivo de este estudio fue examinar el interés, el conocimiento y el cumplimiento de los protocolos ERA en cuidados perioperatorios.
Materiales y métodos: Entre septiembre y diciembre de 2014 se realizó una encuesta de libre acceso desde las webs de la Sociedad Española de Anestesiología y Reanimación, la Asociación Española de Cirujanos, la Sociedad Española de Nutrición Enteral y Parenteral, y ERAS España (GERM).
Resultados: Respondieron 272 profesionales (44,5% anestesiólogos, 45,2% cirujanos) de 110 hospitales, el 73,1% con experiencia en protocolos ERAS. Conocía específicamente los protocolos ERAS un 86,1%, aunque solo el 50,9% conocía las recomendaciones ERAS y el 42,4% las españolas (GERM). Además, el 73,1% de sus hospitales realizaban protocolos ERAS, principalmente en colorrectal (93%), según recomendaciones GERM/ERAS (52,2%). Un 95,5% mostró interés en desarrollar guías nacionales. El 46,6% realizaron evaluación nutricional preoperatoria, aunque no existiera un método de cribado universal de desnutrición (56,8%). La carga preoperatoria con bebidas carbohidratadas se realizó en el 51,4%; se evitaron sonda nasogástrica y drenajes (79,3%), profilaxis de náuseas y vómitos postoperatorios (73,4%), terapia dirigida por objetivos de líquidos (73,3%), mantenimiento de normotermia activa (87,4%). La mayoría realizó movilización (90,1%) y alimentación temprana (87,9%). Las principales causas de fracaso del protocolo fueron las náuseas y vómitos postoperatorios (46,5%) y el íleo (58,9%).
Conclusión: La realización de protocolos de recuperación intensificada sería conocida en España, aunque no parece existir un consenso ni se realizan según las guías. El cumplimiento general de los elementos del protocolo sería adecuado, aunque exista un déficit en el manejo nutricional perioperatorio.

Introduction

Evidence-based medicine has led to extensive research in and development of new therapies and programs to improve the pre- and postoperative care given to surgical patients, known as enhanced recovery after surgery (ERAS) programs, ''fast-track'' programs or multimodal rehabilitation programs.

The ''fast track'' approach to major abdominal surgery was pioneered by Professor Henrik Kehlet in the late 1990s, thus firmly establishing the principles governing perioperative care.[1] ERAS protocols are multimodal perioperative care pathways designed to achieve early recovery after surgical procedures by maintaining pre-operative organ function and reducing the stress response following surgery. The ERAS protocol includes approximately 20 evidence-based care interventions aimed at reducing surgical stress and postoperative catabolism.[2] The key principles include preoperative counselling, preoperative nutrition, avoidance of excessive perioperative fasting and carbohydrate loading up to 2 h preoperatively, standardized anaesthetic and analgesic regimens (epidural and non-opioid analgesia), and early mobilization.[3] ERAS protocols were initially described in open colorectal surgery, but have since been studied in a variety of surgical specialties. The underlying aim of enhanced recovery programs is to ensure that patients are in optimal condition for treatment (to minimize the risk of surgery being postponed or cancelled because of the patient's condition), that they receive innovative care during surgery, and experience optimal postsurgical rehabilitation.

Despite a significant body of evidence indicating that ERAS protocols lead to improved outcomes,[4] they challenge traditional surgical doctrine. As a result, implementation