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Results of a National Survey About Perioperative Care in Gastric Resection Surgery☆

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ABSTRACT

Introduction: Enhanced recovery after surgery programs in abdominal surgery are being established progressively. The aim of this study is to evaluate the application of different perioperative care measures in gastric surgery by Spanish surgeons.
Methods: A descriptive study of 162 surveys answered from September to December 2017 about the management and perioperative care in non-bariatric gastric resection surgery.
Results: Antibiotic and antithrombotic prophylaxis are always used by 96.9 and 99.4%, respectively; 62.7% recommend a fasting time for liquids >6 h and only 3% use preoperative carbohydrate drinks. Only 32.4 and 13.3% of subtotal and total gastrectomies are performed laparoscopically, respectively; 56.8% use epidural analgesia, and drains are always placed by 53.8% in total gastrectomy. Nasogastric tubes are used selectively by 34.6% and always by 11.3%. Bladder catheters are removed during the first 48 h by 77.2%. In the first 24 postoperative hours, less than 20% indicate oral intake and 15.4% mobilize their patients; 49.3% indicate walking after the first 24 h; 30.4% apply a clinical pathway for the care of these patients and only 15.2% used an enhanced recovery after surgery protocol.
Conclusions: The implementation of enhanced recovery after surgery measures in non-bariatric gastric resection surgery is not widespread in our country.

Resultados de la encuesta nacional sobre cuidados perioperatorios en cirugía resectiva gástrica

Palabras clave:
Rehabilitación multimodal
Cirugía gástrica
Encuesta

RESUMEN

Introducción: Las medidas de rehabilitación multimodal en cirugía abdominal se están instaurando progresivamente. El objetivo del estudio es evaluar la aplicación de diferentes cuidados perioperatorios en la cirugía gástrica por parte de los cirujanos españoles.

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Métodos: Estudio descriptivo de 162 encuestas contestadas desde septiembre a diciembre de 2017 acerca del manejo y cuidados perioperatorios en cirugía de resección gástrica no bariátrica.

Resultados: Las profilaxis antibiótica y antitrombótica son empleadas siempre por el 96,9 y 99,4%, respectivamente. El tiempo de ayuno para líquidos es mayor de 6 horas para el 62,7%, empleando solo bebidas con sobrecarga de hidratos de carbono prequirúrgicamente el 3%. Tan solo el 32,4 y el 13,3% de las gastrectomías subtotales y totales son realizadas laparoscópicamente. El 56,8% emplea analgesia epidural y los drenajes son colocados siempre por un 53,8% en la gastrectomía total. La sonda nasogástrica es empleada selectivamente por el 34,6% y siempre por el 11,3%. La retirada del catéter vesical es realizada durante las primeras 48 horas por el 77,2%. En las primeras 24 horas postoperatorias, menos del 20% indica la ingesta oral y un 15,4% moviliza a sus pacientes, comenzando la deambulación a partir de las 24 horas el 49,3%. El 30,4% emplea una vía clínica para el cuidado de estos pacientes y solo un 15,2% utiliza un protocolo de recuperación intensificada.

Conclusiones: La aplicación de medidas de rehabilitación multimodal en la cirugía de resección gástrica no bariátrica se encuentra poco extendida en nuestro país.

Introduction

Since Henrik Kehlet began to transmit his knowledge and experience about what is known as multimodal rehabilitation[1] in colon surgery at the end of the last century, there have been numerous advances and studies demonstrating that this form of perioperative management is safe, feasible and, in addition, improves patient recovery after surgical trauma.

In 2007, the Spanish Group for Multimodal Rehabilitation (GERM) was created, which, in close collaboration with the Spanish Ministry of Health, Social Affairs and Equality, published the RICA guidelines (Intensified Recovery in Surgery Abdominal) in 2015.[2] This protocol identifies the necessary stages and key points for enhanced recovery in the perioperative management of patients undergoing abdominal surgery.

Currently, there are numerous major abdominal surgical procedures whose perioperative care could include the application of this type of measures, including surgery for non-bariatric gastric resection. Thus, at the beginning of 2017, an enhanced recovery protocol in gastric surgery was published in the *Cirugía Española* journal,[3] together with a time matrix summarizing the measures to be applied in this setting, based on the consensus of experts. Even so, there are few high-quality studies that demonstrate proven evidence about enhanced recovery recommendations in esophagogastric surgery, although there is growing evidence about its safety and clinical benefits, in addition to its better cost-effectiveness compared to traditional management.[4–8]

In this study, using an online survey, we intend to evaluate the trends and measures applied by surgeons in Spain in the perioperative care of elective non-bariatric gastric resection surgery.

Methods

A descriptive study was conducted of the data collected from the surveys answered between September 15 and December 15, 2017, by Spanish surgeons regarding perioperative measures applied to patients undergoing non-bariatric gastric resection. We invited surgeons who were members of the Spanish Association of Surgeons (AEC) by e-mail to participate and anonymously complete an online survey. Currently, out of the 4612 active members of the AEC, only 308 surgeons are involved in the Esophagogastric Surgery Division. At the end of the 3 months of the study period, a total of 162 surgeons had correctly completed the questionnaire.

The survey consisted of 61 questions and was designed to evaluate the following aspects:

1. Membership data:
   - Age and sex
   - Experience and professional position
   - Characteristics and location of their place of work
   - Volume and type of procedures done
2. Preoperative care and preparation:
   - Antibiotic prophylaxis
   - Antithrombotic prophylaxis
   - Preoperative nutrition
   - Preoperative fasting
3. Perioperative care:
   - Prevention of hypothermia
   - Epidural analgesia
   - Catheters and drain tubes
4. Postoperative care:
   - Postoperative oxygen therapy
   - Respiratory exercises
   - Fluid therapy and parenteral nutrition
   - Test for leaks
   - Initiation of mobilization
   - Initiation of oral intake
5. Hospital discharge:
   - Hospital discharge criteria
   - Days of postoperative hospital stay
6. Follow-up of the perioperative care of these patients