



Innovation in Surgical Technique

Intragastric Laparoscopic Surgery: An Option for Gastric Lesions not Resectable by Endoscopy[☆]



Alba Manuel Vázquez, * Alberto Hernández Matías, Agustín Bertomeu García, Juan Carlos Ruiz de Adana Belbel

Servicio de Cirugía General y Digestiva, Hospital Universitario de Getafe, Getafe (Madrid), Spain

ARTICLE INFO

Article history:

Received 17 June 2015

Accepted 3 November 2015

Available online 28 February 2016

Keywords:

Laparoscopic intragastric surgery
Minimally invasive gastric surgery
Benign gastric lesion
Esophagogastric junction

A B S T R A C T

Gastric mucosal and submucosal lesions can be resected by endoscopy, laparoscopy or open surgery. Operative methods have varied depending on the location, endophytic growth and size of the lesion.

Interest in minimally invasive surgery has increased and many surgeons are attempting laparoscopic approaches, especially in lesions of the stomach near the esophagogastric junction not amenable to endoscopic removal, because conventional surgery can produce stenosis and distort the postoperative anatomy, and increase morbimortality.

We report our experience with laparoscopic intragastric surgery in 3 consecutive patients, with no complications.

Laparoscopic intragastric surgery extends the surgeons' armamentarium to resect complex gastric lesions, while offering patients the benefits of minimal access surgery.

© 2015 AEC. Published by Elsevier España, S.L.U. All rights reserved.

Cirugía laparoscópica intragástrica: una opción en lesiones gástricas no resecables endoscópicamente

R E S U M E N

Las lesiones mucosas y submucosas gástricas pueden abordarse por vía endoscópica, laparoscópica o por cirugía abierta. El tamaño, la localización y el tipo de crecimiento son determinantes a la hora de la elección de la técnica.

El interés en la cirugía mínimamente invasiva ha llevado a desarrollar nuevos abordajes para suplir las dificultades de la laparoscopia tradicional, como puede ser el caso de la resección de lesiones próximas a la unión esofagogastrica no resecables endoscópicamente, donde la cirugía convencional puede producir estenosis o deformidades posoperatorias y aumento de la morbimortalidad.

Palabras clave:

Cirugía laparoscópica intragástrica
Cirugía gástrica mínimamente invasiva
Lesión gástrica benigna
Unión esofagogastrica

[☆] Please cite this article as: Manuel Vázquez A, Hernández Matías A, Bertomeu García A, Ruiz de Adana Belbel JC. Cirugía laparoscópica intragástrica: una opción en lesiones gástricas no resecables endoscópicamente. Cir Esp. 2016;94:175-178.

* Corresponding author.

E-mail address: alba_manuel_vazquez@hotmail.com (A. Manuel Vázquez).

Presentamos nuestra experiencia en el abordaje de este tipo de lesiones mediante cirugía laparoscópica intragástrica en 3 pacientes consecutivos, con resultado satisfactorio.

Este tipo de intervención supone un abordaje más en el arsenal de la cirugía mínimamente invasiva, que puede proporcionar ventajas frente a la cirugía tradicional.

© 2015 AEC. Publicado por Elsevier España, S.L.U. Todos los derechos reservados.

Introduction

Small size gastric mucosal and submucosal lesions can be removed endoscopically, laparoscopically or with an open approach. The choice of technique depends on the size, location and growth type of the lesion. Developments made in minimally invasive surgery and technological advances have led us to explore new approaches to overcome the difficulties found in traditional laparoscopy.

Possible indications for these new techniques would be gastric lesions that, due to their location, size or thickness, are not resectable by endoscopy, as well as those that require extensive gastrotomies or those that are located in a complicated region, such as the oesophagogastric junction (OGJ).

Surgical Technique

Below, we review our experience with an intragastric laparoscopic approach in 3 consecutive patients. All the patients were informed about the details of the procedure they were to undergo, as well as the fact that they would be the first cases.

Indication for the procedure was determined by the presence of gastric, mucosal or submucosal lesions that were noncancerous, proximal to the OGJ and endoscopically unresectable.

In all the cases, prior to the placement of 3 trocars in the peritoneal cavity, another 3 trocars with balloons were inserted in the interior of the stomach in the area of the gastric body. Once the lesion was located, the submucosa was infiltrated with adrenalin and resected, including the entire thickness of the wall, with an ultrasonic scalpel. The wall defect was closed with a manual suture in 2 planes, and the specimen was extracted through one of the gastrotomies.

One of the disadvantages of this procedure is the loss of "gastroperitoneum" when the gastric wall is opened. In the case of lesions situated on the posterior gastric side, there was no gas leak to the peritoneal cavity because the lesion was located in the retroperitoneal gastric portion. On the contrary, when the serosa was opened in an intraperitoneal area and the stomach collapsed from the pressure of the pneumoperitoneum, we were able to recover the gastric distension by opening one of the trocars located in the peritoneal cavity (not one of the intragastric ones) and increasing the gas flow into the stomach.

Patient 1

A 77-year-old woman underwent oesophagogastrroduodenoscopy (OGD), which had detected a submucosal lesion measuring 3.5 cm in the gastric fundus (Fig. 1A and B).

Intragastric resection was carried out with 3 trocars following the previously described technique. The histology study confirmed it as a gastrointestinal stromal tumour (GIST) measuring 4 cm×2.2 cm×1.5 cm that was well differentiated, very low risk and had free margins (pT2). The patient was discharged on the 5th day post-op with no complications.

Patient 2

In a 71-year-old woman, OGD identified a 7-cm polyp with lateral growth that was vegetative and situated in the infracardiac region. Biopsy was compatible with a hyperplastic polyp with low-grade dysplasia (Fig. 1C). Intragastric resection was performed of a polypoid lesion measuring 10 cm×5 cm×3 cm. The histology study confirmed a hyperplastic polyp with foci of low-grade dysplasia and free surgical margins. The patient was discharged on the 7th day post-op without incident.

Patient 3

OGD diagnosed an infracardiac semi-pedunculated lesion in a 70-year-old male that measured 3 cm and was probably submucosal in origin (Fig. 1D). Intragastric resection was done of the submucosal tumour and the histopathology defined it as a 4 cm GIST with free margins and moderate risk (pT2) (Fig. 2). The patient was discharged on the 5th post-op day without complications.

Discussion

Since its initial description by Ohashi in 1995,¹ intragastric laparoscopic surgery has provided an additional option for the approach of gastric lesions, both mucosal as well as submucosal, which are not endoscopically resectable.

In the case of endophytic lesions proximal to the OGJ or located at the posterior side of the stomach, it may be necessary to resect this junction, which can have long-term digestive consequences due to stenosis or postoperative deformities. In addition, these procedures are associated with considerably increased morbidity and mortality, even in expert hands.² The location and type of growth observed on OGD are fundamental for establishing surgical indication.²⁻⁴

In our opinion, this is most useful in 2 situations: (1) lesions that are proximal to the OGJ, whose excision by laparotomy or conventional laparoscopy would necessitate extensive gastrotomy very close to this junction, or may even require resection; (2) lesions with submucosal growth in the upper part of the posterior side of the stomach, which would equally require extensive gastrotomy.

Download English Version:

<https://daneshyari.com/en/article/4254513>

Download Persian Version:

<https://daneshyari.com/article/4254513>

[Daneshyari.com](https://daneshyari.com)