



¿ES NECESARIA LA  
RESECCIÓN TOTAL  
DEL EPIPLON  
MAYOR EN LA  
LINFADENECTOMÍA  
D2 DURANTE LA  
GASTRECTOMÍA EN  
EL CÁNCER  
GÁSTRICO?

**OBJETIVO DE CUALQUIER INTERVENCIÓN PARA EL CÁNCER GÁSTRICO:  
“EXTIRPACIÓN DE TODAS LAS LESIONES MACROSCÓPICAS Y MICROSCÓPICAS”**



**Table 3. Lymph Node Metastasis According to Depth of Tumor Invasion**

Depth Tumor	JCGC Stage	Total No. of Tumors	N+ Tumors		No. of N0 Tumors	No. of N1 Tumors	N2 Tumors		No. of N3 Tumors	No. of N4 Tumors
			No.	%			No.	%		
T1	M	619	14	2	605	9	5	0.8	0	0
	SM	499	89	18	410	60	29	5.8	0	0
T2	MP	276	126	46	150	74	47	17	5	0
	SS	207	130	63	77	65	57	28	3	5
T3	SE	646	484	75	162	171	266	41	28	19
T4	SI	152	121	80	31	31	65	43	12	13
Total		2,399	964	40	1,435	410	469	20	48	37

Abbreviations: JCGC, Japanese Classification of Gastric Cancer; M, mucosal; SM, submucosal; MP, muscularis propria; SS, subserosa; SE, serosa exposed; SI, serosa infiltrating (neighboring organ or organs involved).

**RO**

**Mitsuru Sasako**

*Journal of Clinical Oncology*, Vol 21, No 23S. 2003: 274s-275s  
**Principles of Surgical Treatment for Curable Gastric Cancer**

From the Department of Surgery, National Cancer Center Hospital, Tokyo, Japan.

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# NUESTRA EVOLUCIÓN

## PRIMERA FASE

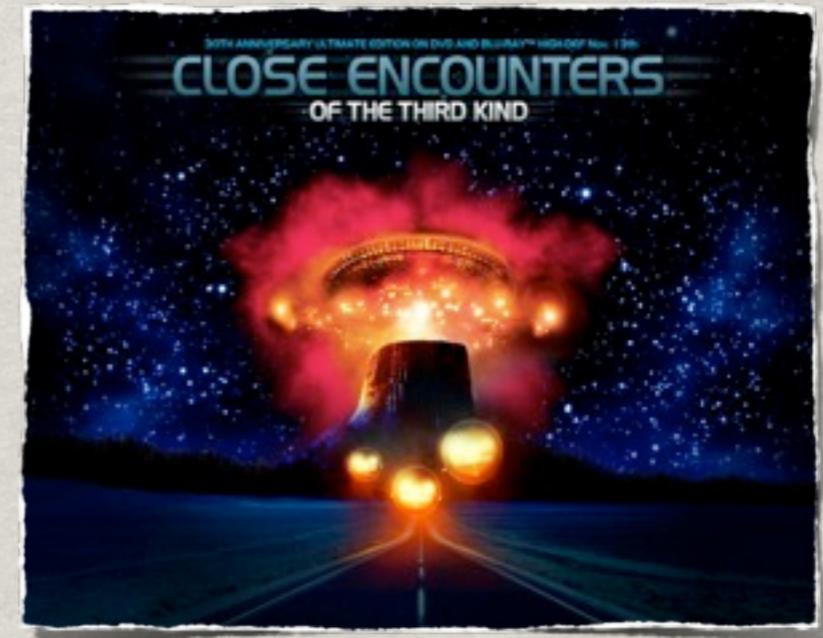
OMENTECTOMÍA TOTAL EN BLOQUE

## SEGUNDA FASE

OMENTECTOMÍA TOTAL TRAS EXTRACCIÓN DE LA PIEZA

## TERCERA FASE

OMENTECTOMÍA PARCIAL



# ¿PORQUÉ NOS PLANTEAMOS EVITAR LA OMENTECTOMÍA TOTAL?



Mitsuru Sasako (笹子三津留) National Cancer Center

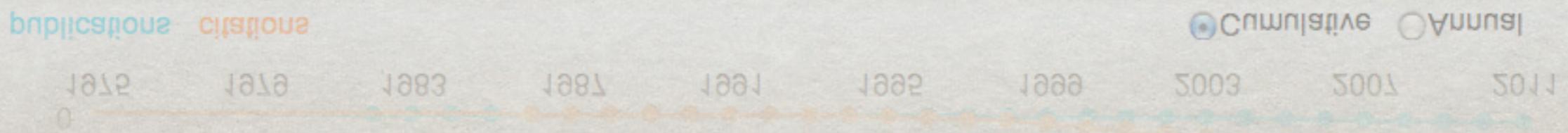
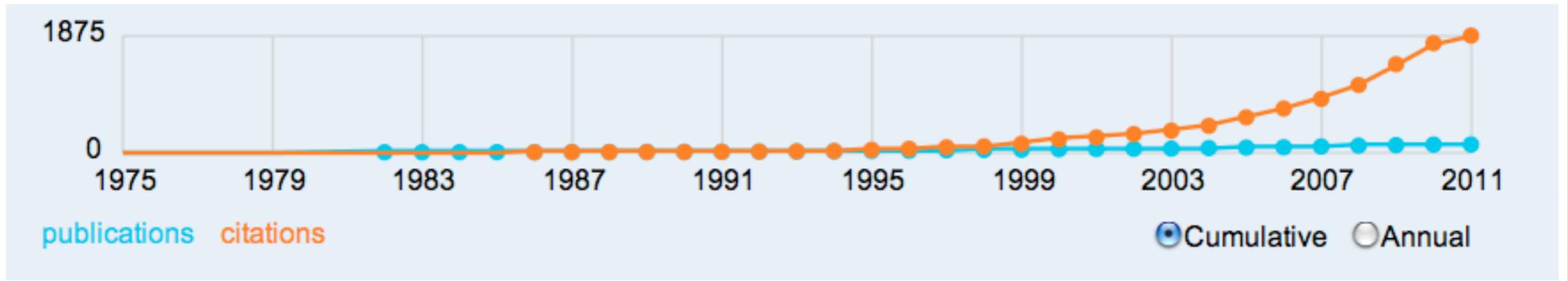
Edit

Publications: 133 | Citations: 2036 | G-Index: 41 | H-Index: 23

Interests: Oncology, Pathology, Anatomy

Collaborated with 449 co-authors from 1982 to 2011; Cited by 4890 authors

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# ¿QUÉ OMENECTOMÍA REALIZAMOS?

**Mitsuru Sasako**

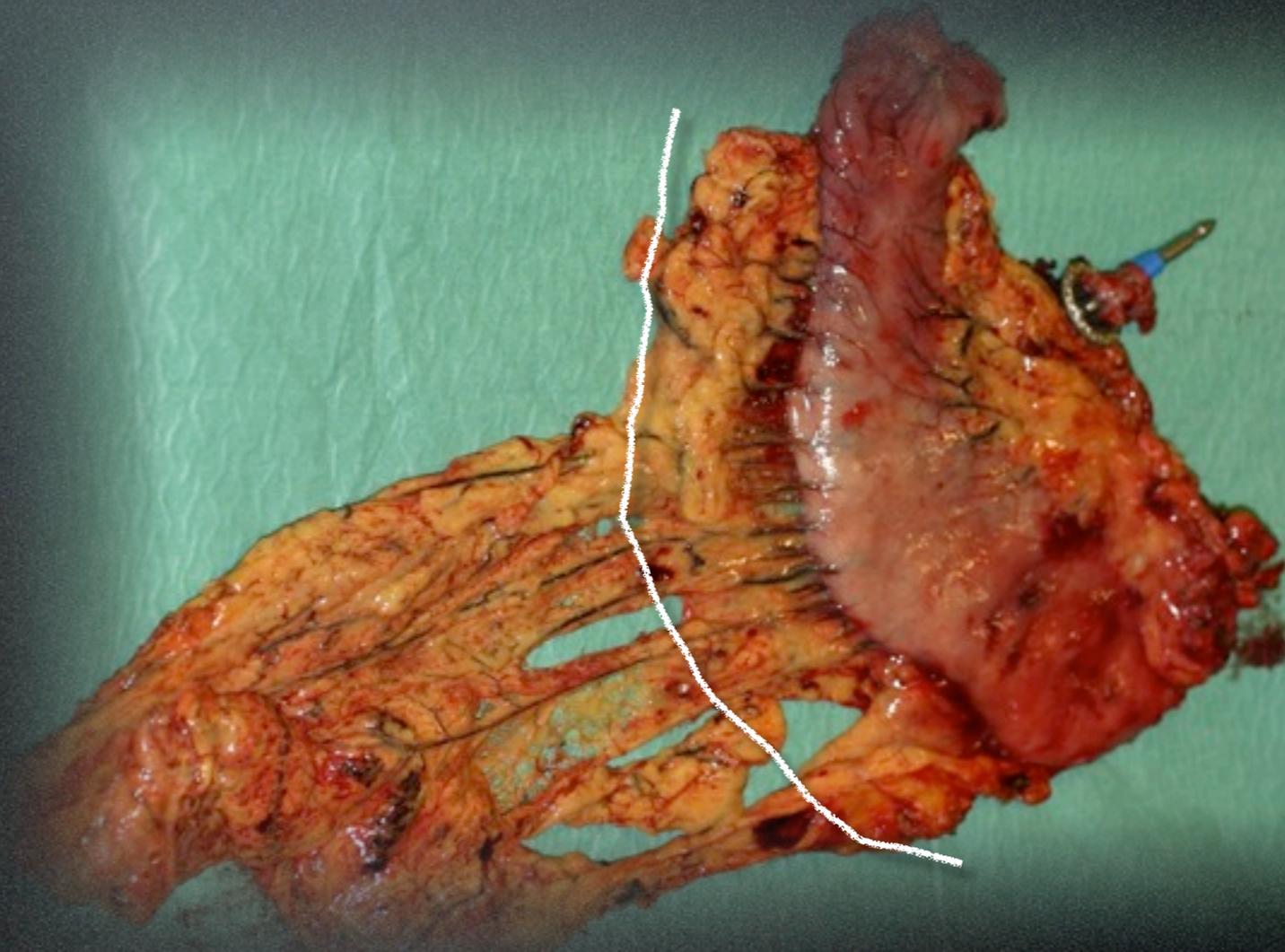
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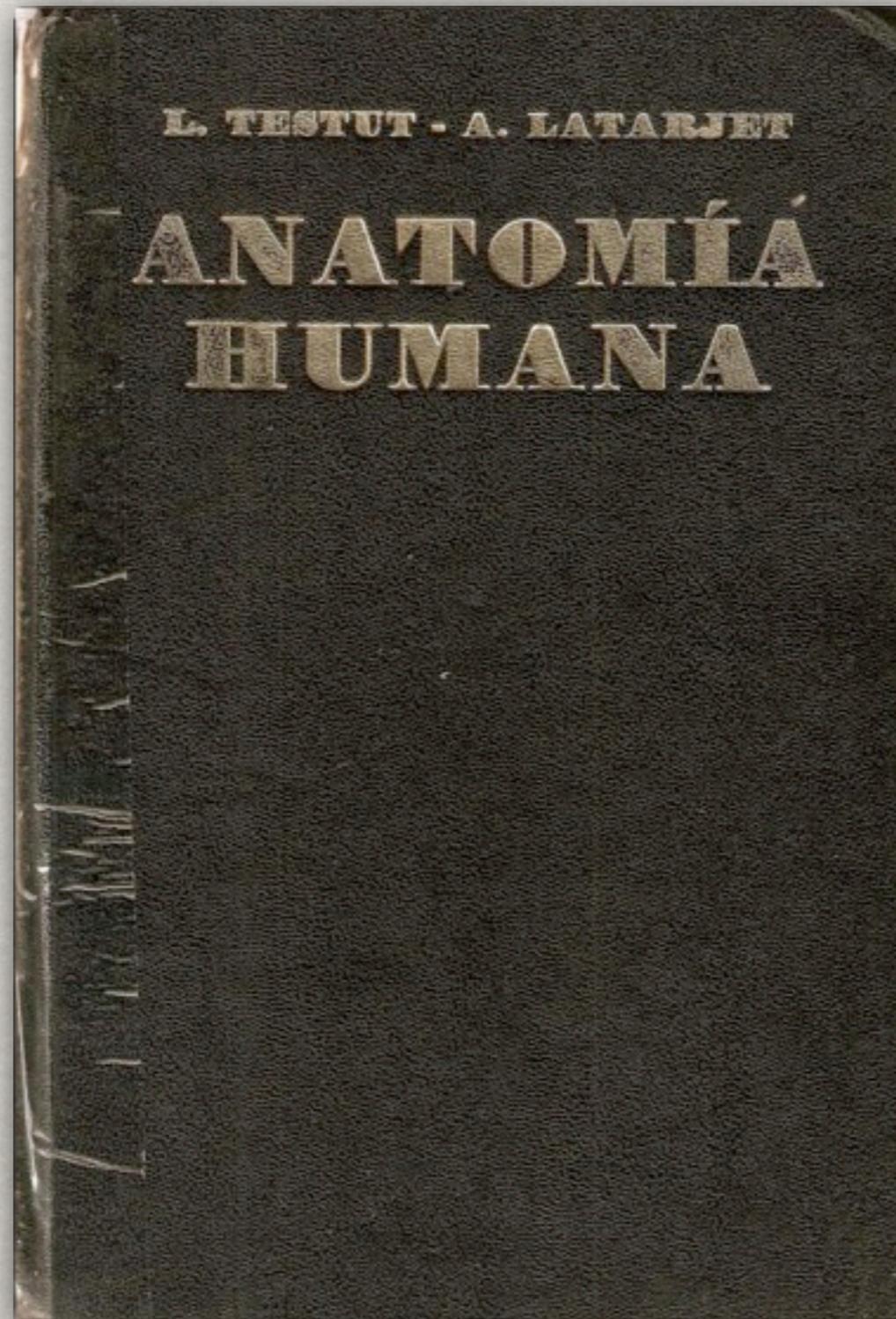
# ¿QUÉ OMENECTOMÍA REALIZAMOS?

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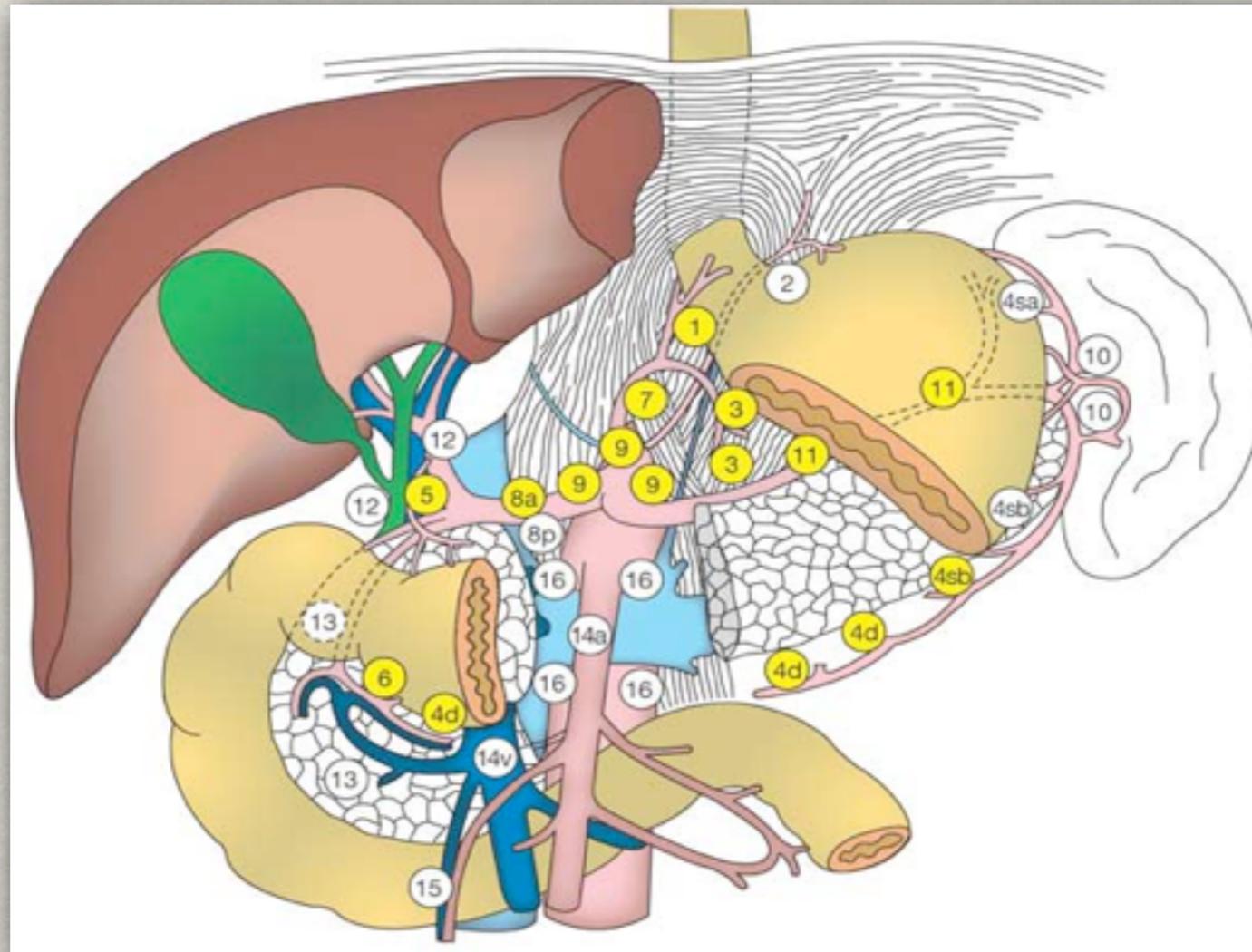
From the Department of Surgery, National Cancer Center Hospital, Tokyo, Japan

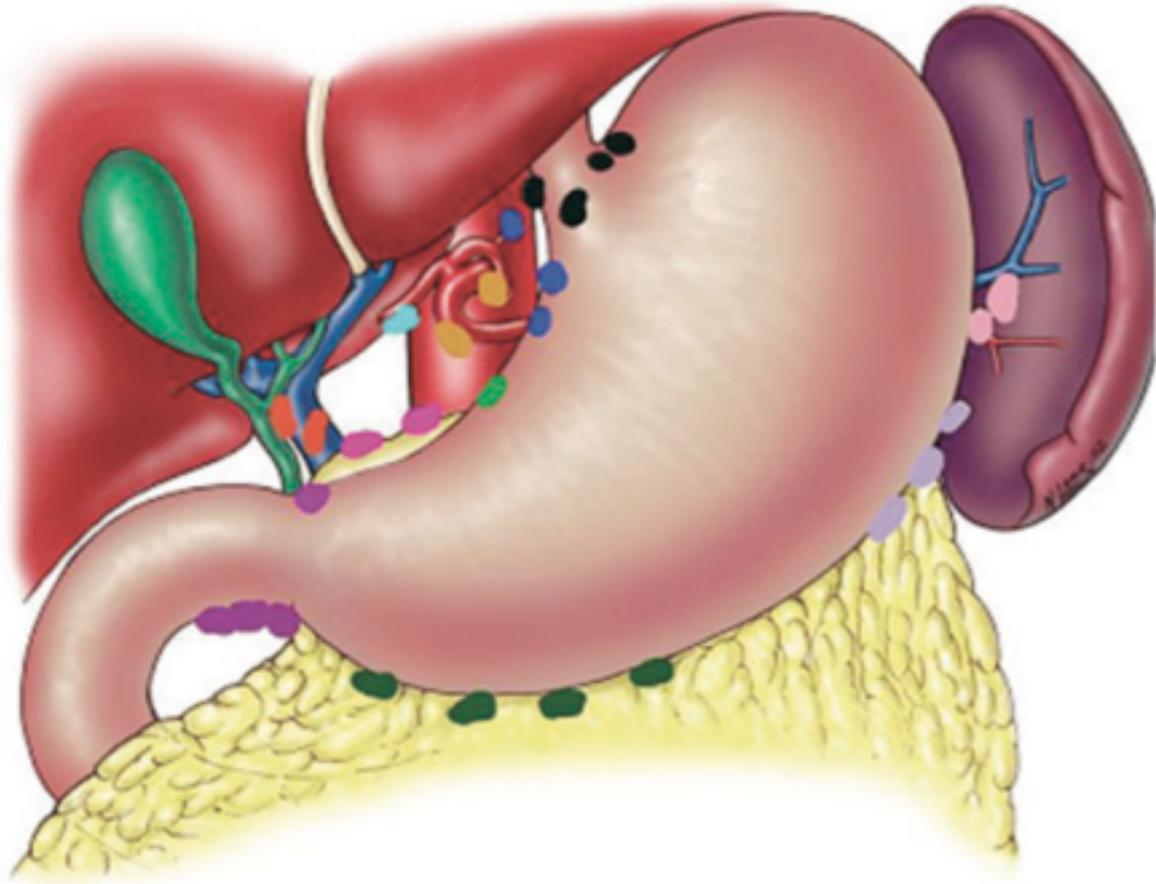


# FUNDAMENTOS ANATÓMICOS

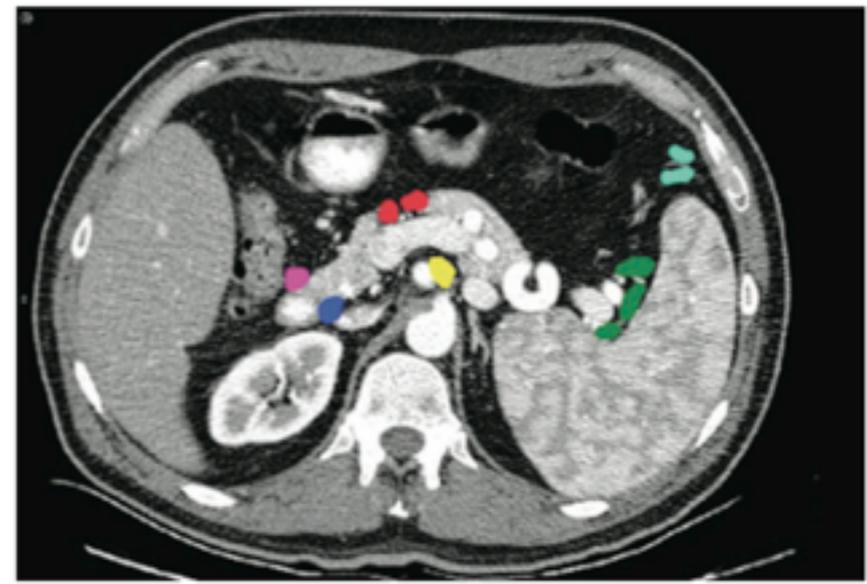


# OMENTECTOMÍA PARCIAL

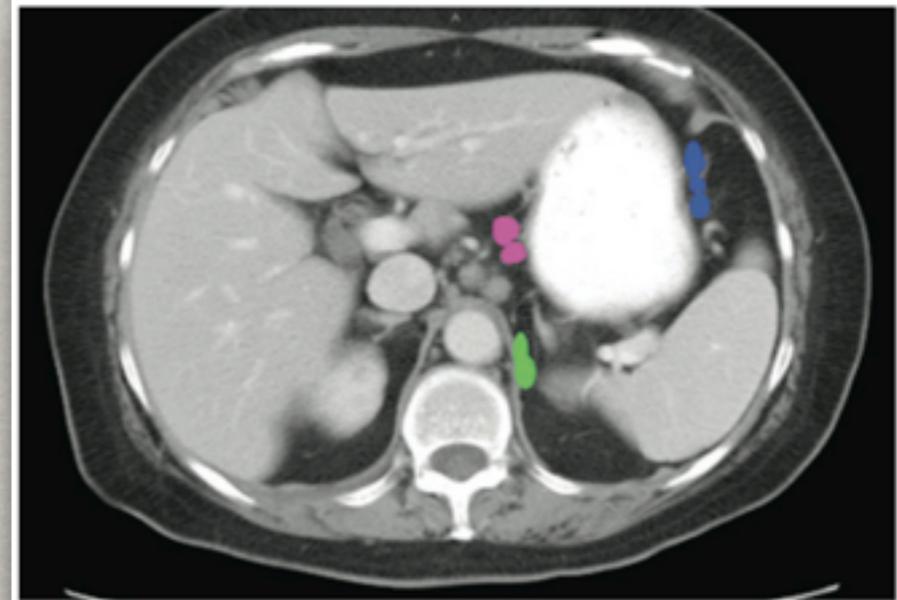




**Figure 1.** Diagram of the abdomen: gastro-oesophageal (black); hepatic artery (aqua); splenic (pink); gastro-omental (light purple); left gastric (blue); hepatoduodenal ligament (orange).



**Figure 13.** CT image of the abdomen demonstrates the following nodal stations: coeliac axis (yellow); splenic (green); greater omental (light blue); anterior pancreaticoduodenal (pink); posterior pancreaticoduodenal (blue); pancreatic inferior (red).



**Figure 6.** CT image of the abdomen demonstrates the following nodal stations: left gastric (pink); greater curvature (blue); left inferior phrenic (green).

# ¿PORQUÉ PARCIAL?

- ✻ En cirugía laparoscópica mejor manejo de la pieza quirúrgica
- ✻ Disminución del tiempo operatorio
- ✻ No extirpar un tejido innecesariamente
- ✻ ¿Alguna otra ventaja?

## Comparative Study of Complete and Partial Omentectomy in Radical Subtotal Gastrectomy for Early Gastric Cancer

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The authors have no financial conflicts of interest.

**Purpose:** Curative surgery for patients with advanced or even early gastric cancer can be defined as resection of the stomach and dissection of the first and second level lymph nodes, including the greater omentum. The aim of this study was to evaluate the short- and long-term outcomes of partial omentectomy (PO) as compared with complete omentectomy (CO). **Materials and Methods:** Seventeen consecutive open distal gastrectomies with POs were initially performed between February and July in 2006. The patients' clinicopathologic data and post-operative outcomes were retrospectively compared with 20 patients who underwent open distal gastrectomies with COs for early gastric cancer in 2005. **Results:** The operation time in PO group was significantly shorter than that in CO group (142.4 minutes vs. 165.0 minutes,  $p=0.018$ ). The serum albumin concentration on the first post-operative day in PO group was significantly higher than CO group (3.8 g/dL vs. 3.5 g/dL,  $p=0.018$ ). Three postoperative minor complications were successfully managed with conservative treatment. Median follow-up period between PO and CO was 38.1 and 37.7 months. All patients were alive without recurrence until December 30, 2009. **Conclusion:** PO during open radical distal gastrectomy can be considered a more useful procedure than CO for treating early gastric cancer. To document the long-term technical and oncologic safety of this procedure, a large-scale prospective randomized trial will be needed.

**Key Words:** Partial omentectomy, gastric cancer, post-operative outcome, comparative study

### INTRODUCTION

The greater omentum is the largest peritoneal fold and contains areas with high concentrations of immune cells that may aid in the removal of foreign materials and bacteria. The greater omentum becomes densely adherent to intraperitoneal sites of inflammation, often preventing free peritonitis during instances of intestinal gangrene or perforation. The greater omentum is also frequently involved in intra-abdominal dissemination of gastrointestinal or ovarian malignancies, either facilitating primary spread or being a site of recurrent cancer after surgical treatment.<sup>1,2</sup>

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## SIGNIFICACIÓN ESTADÍSTICA

## TIEMPO OPERATORIO

## ALBÚMINA SÉRICA

## UN GRUPO PROSPECTIVO Y OTRO RETROSPECTIVO

## EARLY STAGE

# OMENTECTOMÍA PARCIAL

**Kim MC, Choi HJ, Jung GJ, Kim HH. Techniques and complications of laparoscopy-assisted distal gastrectomy (LADG) for gastric cancer. Eur J Surg Oncol 2007;33:700-5.**

**Hwang SH, Park do J, Jee YS, Kim MC, Kim HH, Lee HJ, et al. Actual 3-year survival after laparoscopy-assisted gastrectomy for gastric cancer. Arch Surg 2009;144:559-64.**

*... "The procedure began by dividing the greater omentum 3 to 4 cm from the gastroepiploic arcade toward the branch of the short gastric vessels, including lymph nodes 4d and 4sb in LADG"...*

# PELIGRO

## Case Report

<http://dx.doi.org/10.3348/kjr.2011.12.6.757>

pISSN 1229-6929 · eISSN 2005-8330

Korean J Radiol 2011;12(6):757-760

Korean Journal of Radiology

# KJR

## Secondary Omental Infarction Related to Open and Laparoscopic-Assisted Distal Gastrectomy: Report of Two Cases

Kyung Eun Park, MD<sup>1</sup>, Dong Jin Chung, MD<sup>1</sup>, Wook Kim, MD<sup>2</sup>, Seong-Tae Hahn, MD<sup>1</sup>, Jae Moon Lee, MD<sup>1</sup>

Departments of <sup>1</sup>Radiology and <sup>2</sup>General Surgery, St. Mary's Hospital, The Catholic University of Korea, Seoul 150-713, Korea



**PELIGRO**

**Case Report**

<http://dx.doi.org/10.3348/kjr.2011.12.6.757>  
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Korean Journal of Radiology

**KJR**

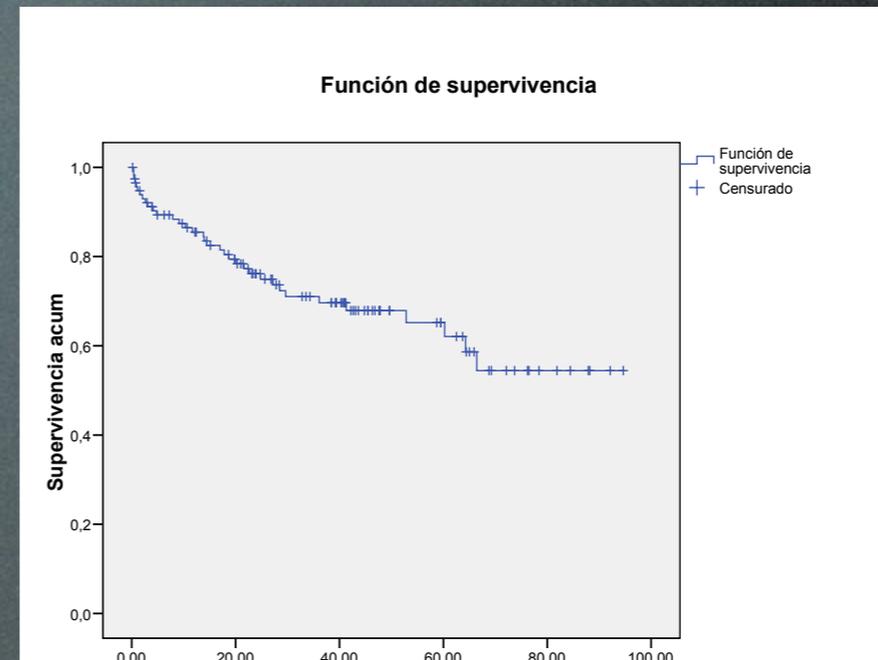
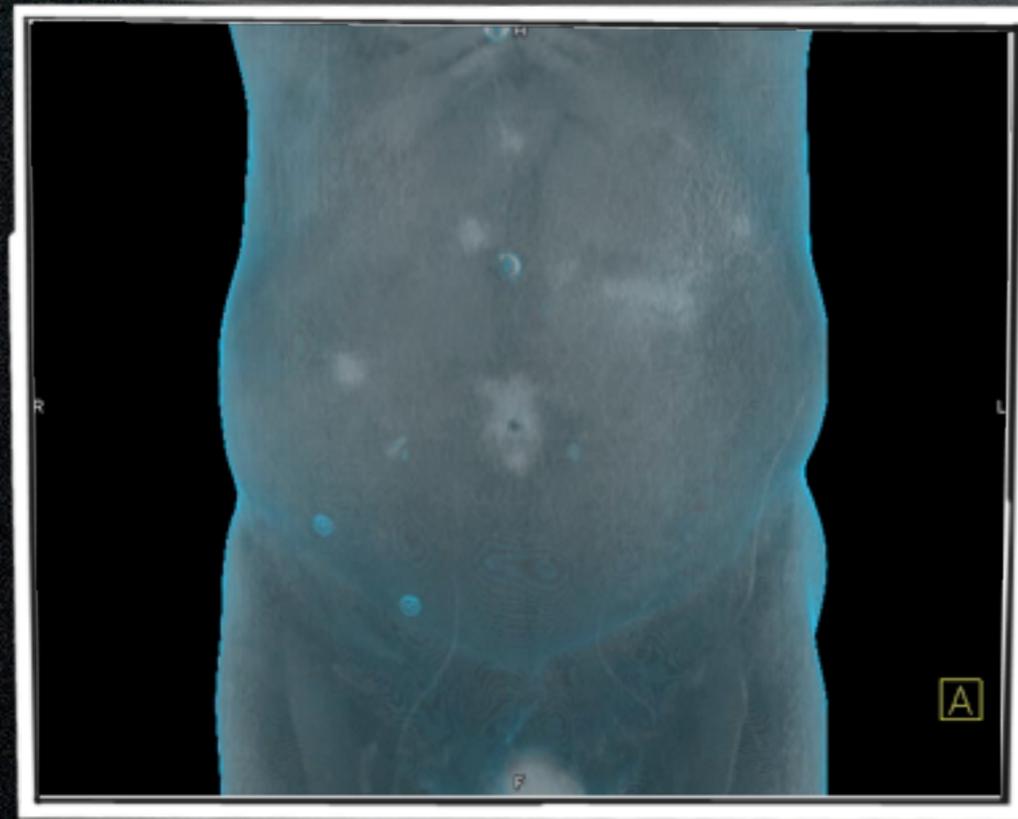
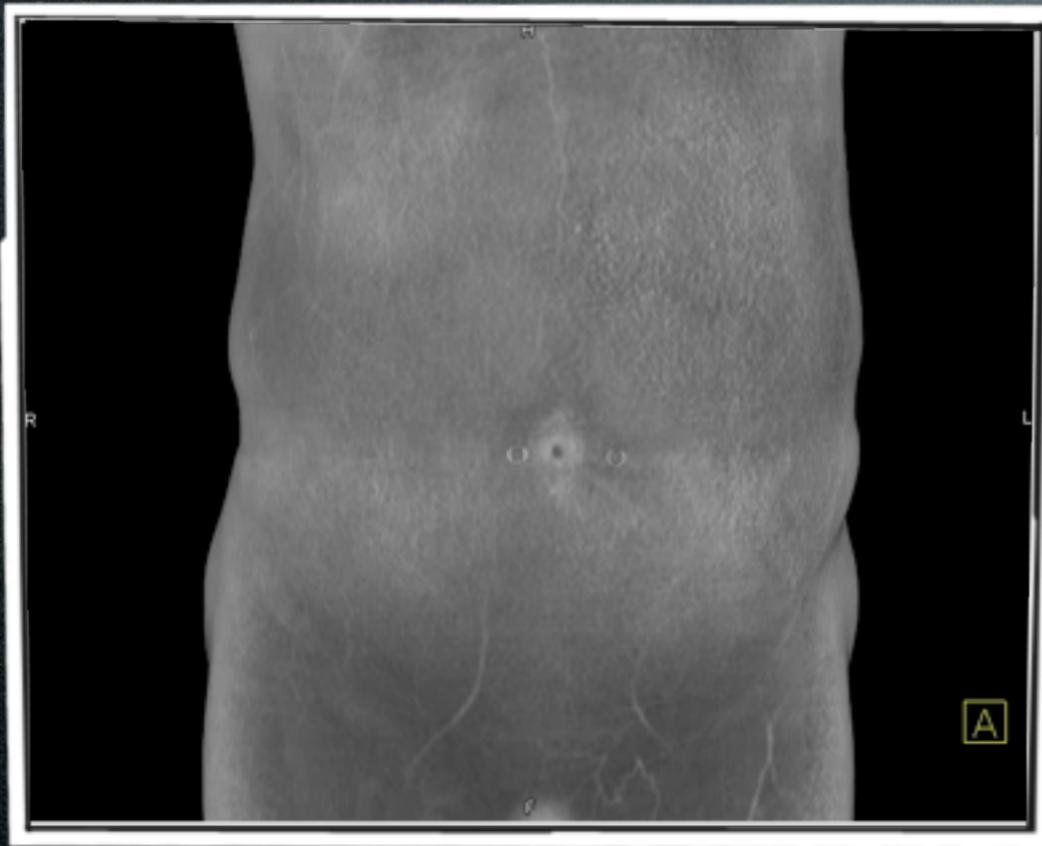
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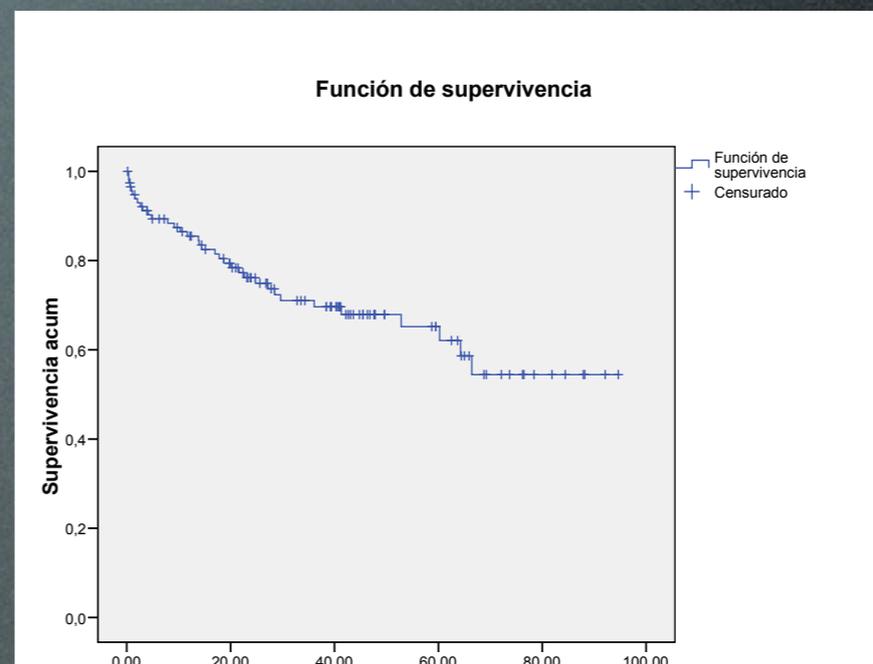
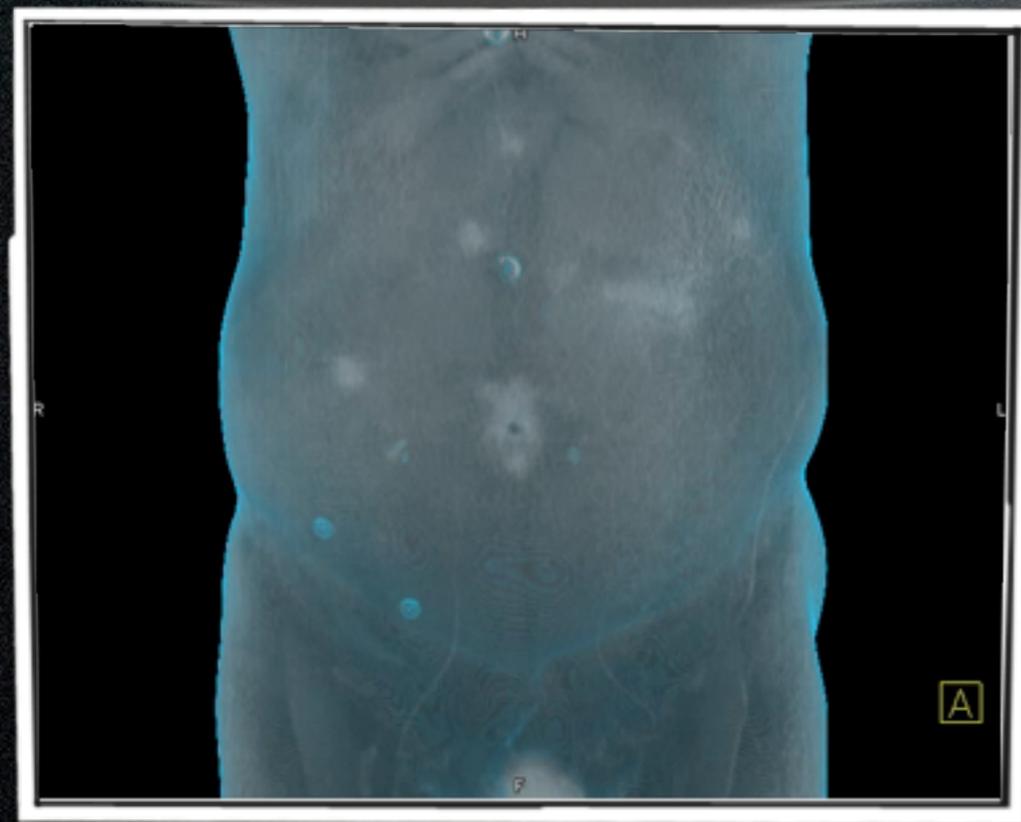
# NUESTRA EXPERIENCIA



ESTADIOS	
	%
0	5,6
IA	16
IB	20,8
II	19,2
IIIA	16
IIIB	9,6
IV	3,2
Otros	9,6

42%

# NUESTRA EXPERIENCIA

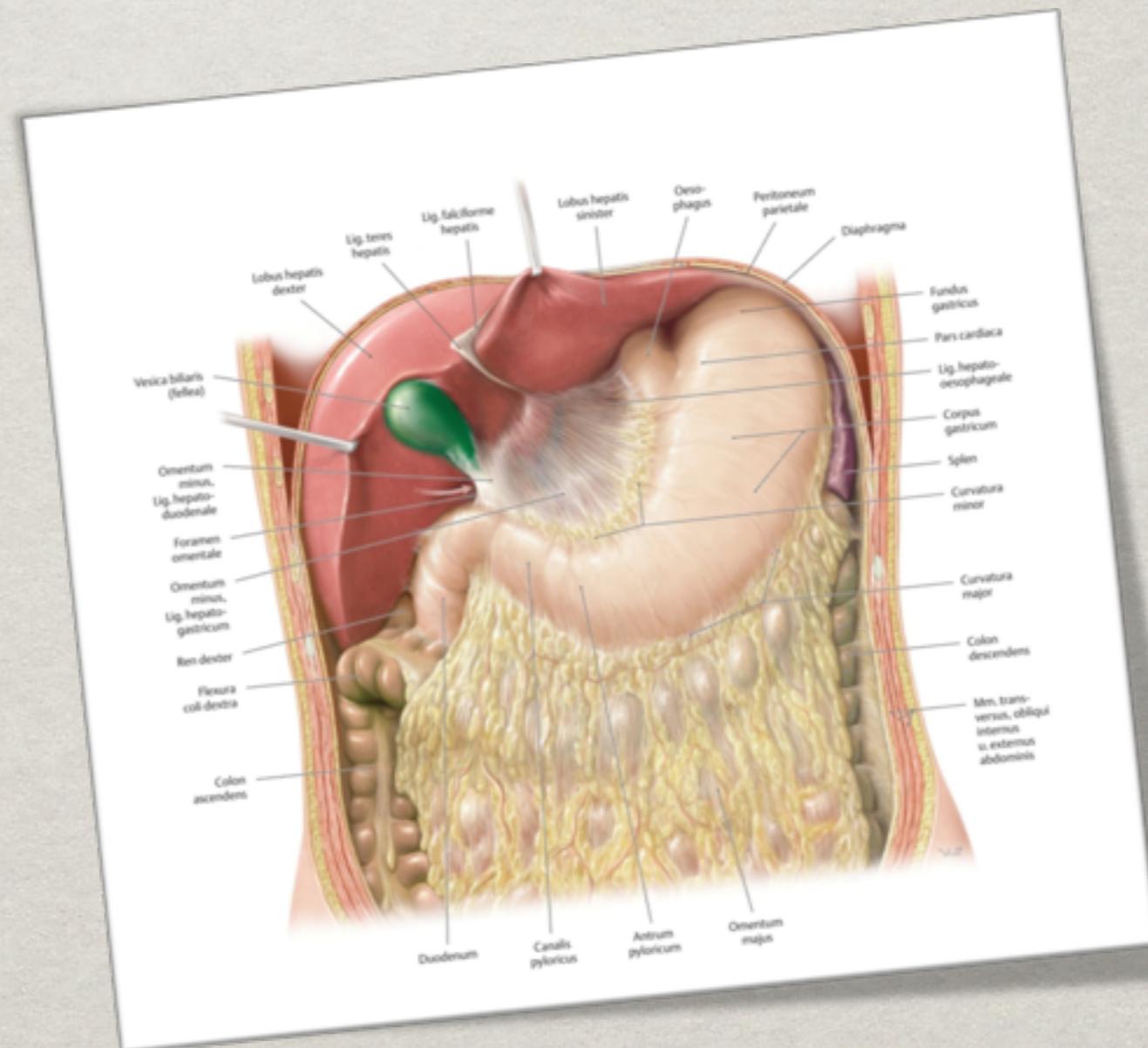


ESTADIOS	
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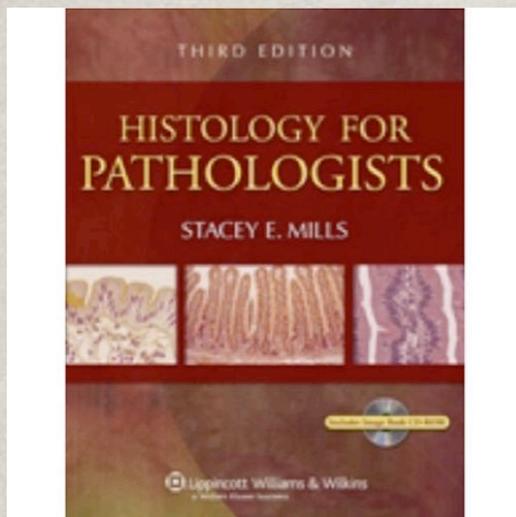
42%

# FUNDAMENTOS

¿HAY ALGUNA EVIDENCIA HISTOLÓGICA DE LA PRESENCIA DE GANGLIOS FUERA DEL TERRITORIO DEL GRUPO 6?



# OPINIÓN DE LOS PATÓLOGOS



HISTOLOGY FOR PATHOLOGISTS

STACEY E. MILLS

THIRD EDITION

LIPPINCOTT WILLIAMS & WILKINS

- ✿ En la página 547 del capítulo 21 “SEROUS MEMBRANES” de Darryl Carter, Lawrence True and Christopher N. Otis, al final de la columna de la derecha y ocupando las tres últimas líneas, y la primera línea de la página siguiente, dice: **“El epiplón mayor es una hoja doble con cuatro capas de mesotelio entre los cuales hay numerosos vasos sanguíneos y el tejido adiposo, que puede ser abundante, los vasos linfáticos y los ganglios linfáticos son menos prominentes que en el mesenterio.”**

Dr. Iosu Antón Badiola

**GASTRECTOMÍA ONCOLÓGICA LAPAROSCÓPICA**

**EPIPLON MAYOR Y GANGLIOS LINFÁTICOS**

**OBJETIVO:**

Identificar la máxima distancia, medida a partir de la curvatura mayor gástrica, a la que puede haber ganglios linfáticos en el epiplon mayor

**DEFINICIONES:**

**Ganglio linfático:**

Nódulo de tejido linfoide rodeado por cápsula de tejido conjuntivo

- Pequeños agregados de tejido linfoide sin cápsula no serán considerados ganglios linfáticos
- Dado que los ganglios linfáticos del epiplon mayor se consideran ganglios regionales en la cirugía oncológica gástrica, y siguiendo norma de AJCC Cancer staging, Seventh edition:
  - Un nódulo metastático en la grasa adyacente a un carcinoma, sin evidencia de tejido linfoide residual, será considerado como ganglio linfático metastático.
  - Un nódulo metastático implantado sobre la superficie peritoneal no será considerado ganglio linfático regional, sino que ya se considera metástasis a distancia (M1)

**MATERIAL:**

Siempre se hará con tejido procedente de adultos.

Siempre se hará con tejido fijado en formol durante al menos 24 horas.

1. Piezas de gastrectomía con epiplon mayor de procedencia quirúrgica, ya sean de cirugía oncológica o de otro tipo
2. Piezas de gastrectomía con epiplon mayor procedentes de autopsia de adulto
3. Piezas de omentectomía de cualquier procedencia, en la que el cirujano asegure que el epiplon mayor ha sido retirado exactamente desde su conexión con la curvatura mayor gástrica, y que ésta haya sido marcada debidamente para que el patólogo identifique exactamente dónde comienza.

**MÉTODO:**

1. Comenzando en la curvatura mayor gástrica, cortar el epiplon mayor en su totalidad en bandas paralelas a la misma de 1 cm de anchura.
2. Identificar cada banda
3. Hacer exploración de las mismas, una por una, según rutina anatomopatológica:
  - a. Exploración visual y separación de los nódulos observados
  - b. Palpación y separación de los nódulos palpados
  - c. Seriación de la grasa y separación de los nódulos identificados
4. Estudio microscópico de los nódulos por bandas, identificando lo que consideraríamos ganglios linfáticos, ya fueran metastáticos o no.
5. Definir la cantidad de ganglios linfáticos en cada banda
6. Pasar los datos a una tabla de estas características:

**NÚMERO DE GANGLIOS LINFÁTICOS**

	Caso 1	Caso 2	Caso 3	Caso 4	Caso 5	Caso 6	Caso 7	etc
1º cm								
2º cm								
3º cm								
4º cm								
5º cm								
6º cm								
7º cm								
8º cm								
etc								