

XXV Congreso de la Sociedad Española de Anatomía  
Patológica y División Española de la International Academy  
of Pathology

**Reunión del Club de Patología digestiva**

Zaragoza, 18 de mayo de 2011

*Adenoma Gástrico de Glándulas Pilóricas*

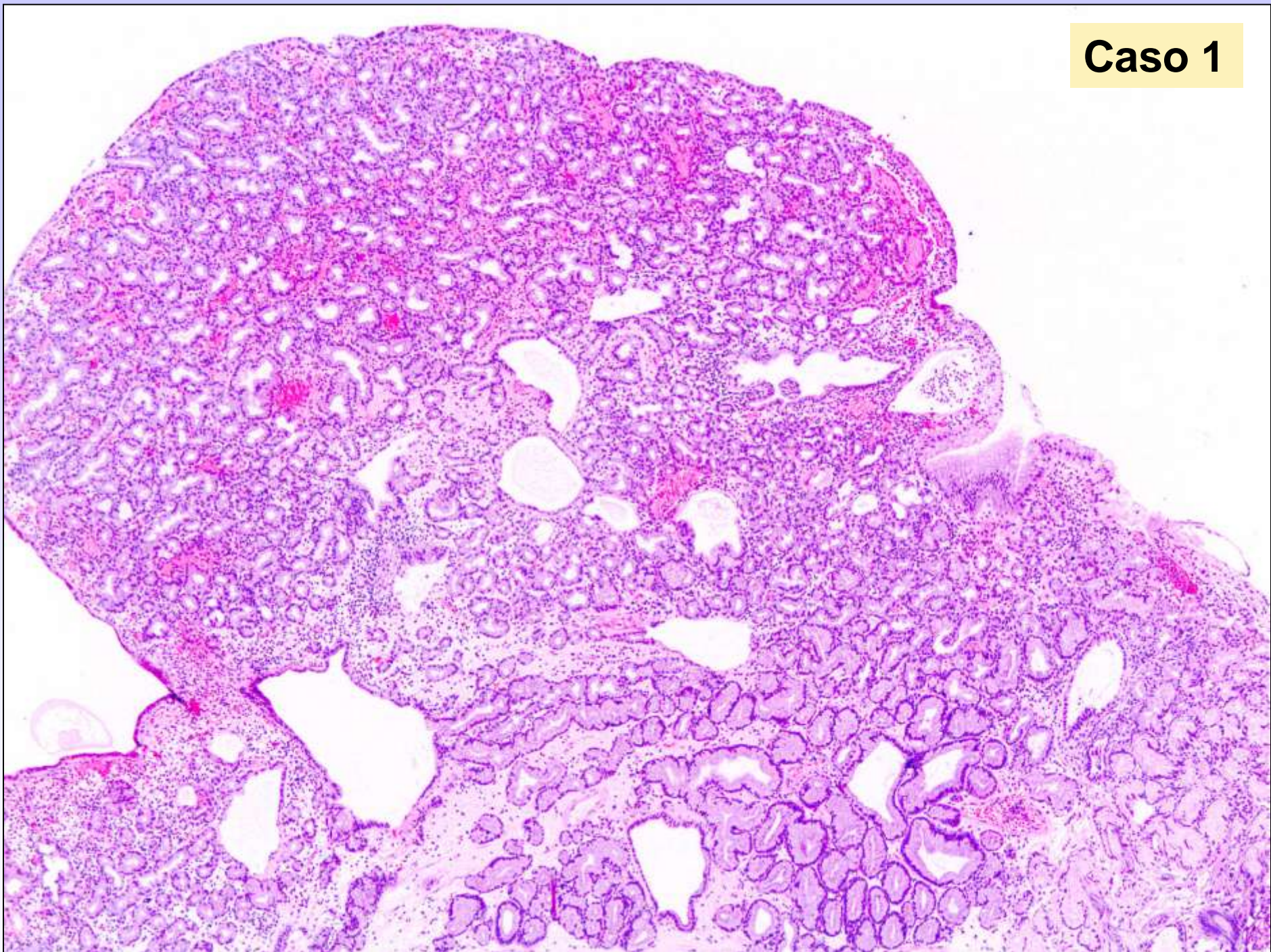
Carolina Ibarrola  
Hospital Universitario 12 de Octubre. Madrid

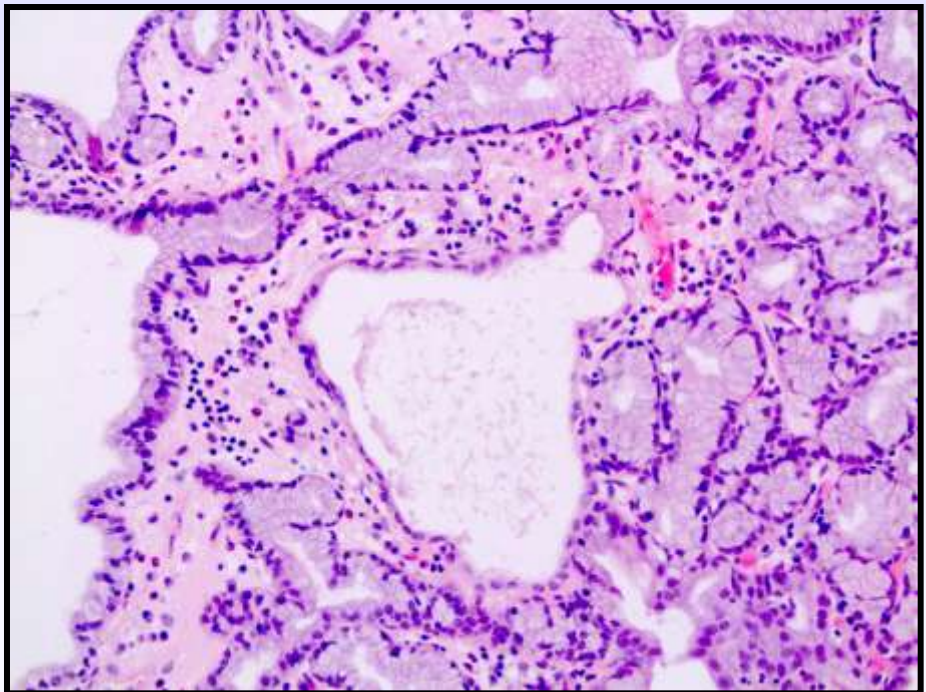
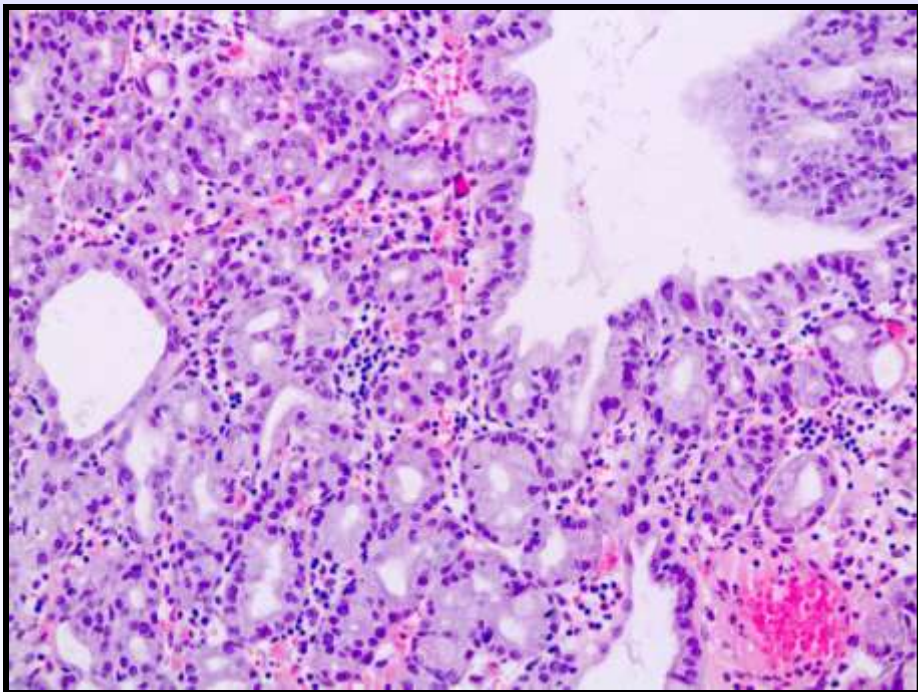
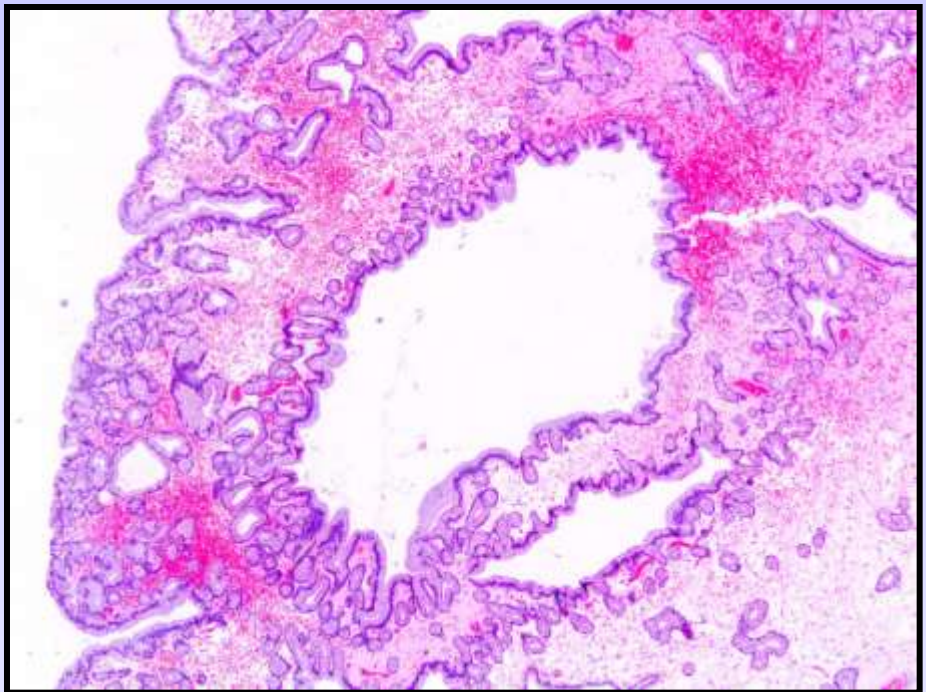
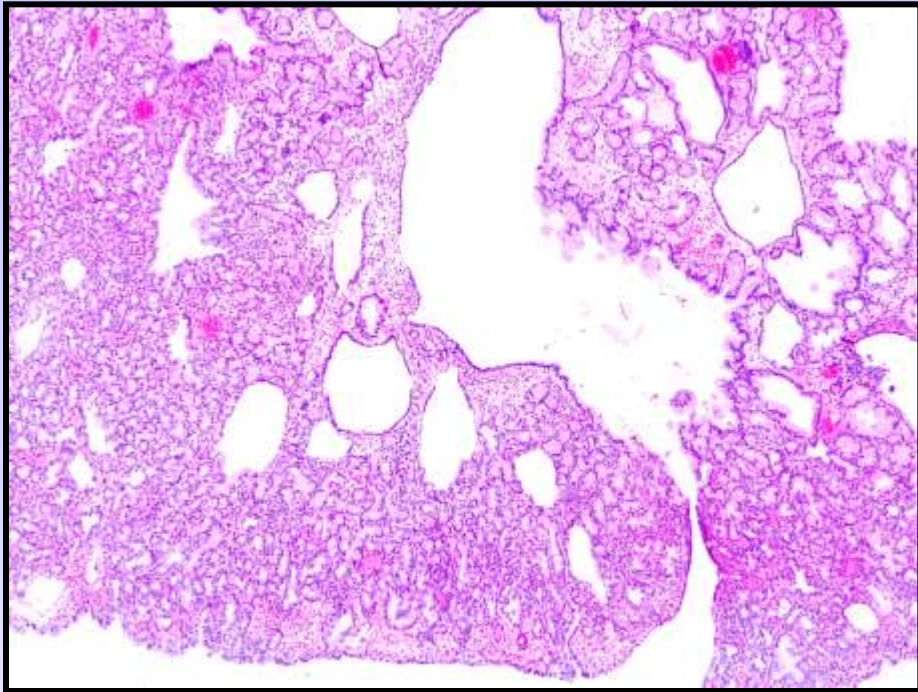
# Casos clínicos

- Caso 1: mujer, 74, anemia, un pólipo de 1'3 cm en el fundus.
- Caso 2: varón, 84, RGE, un pólipo de 0'5 cm en el cardias.

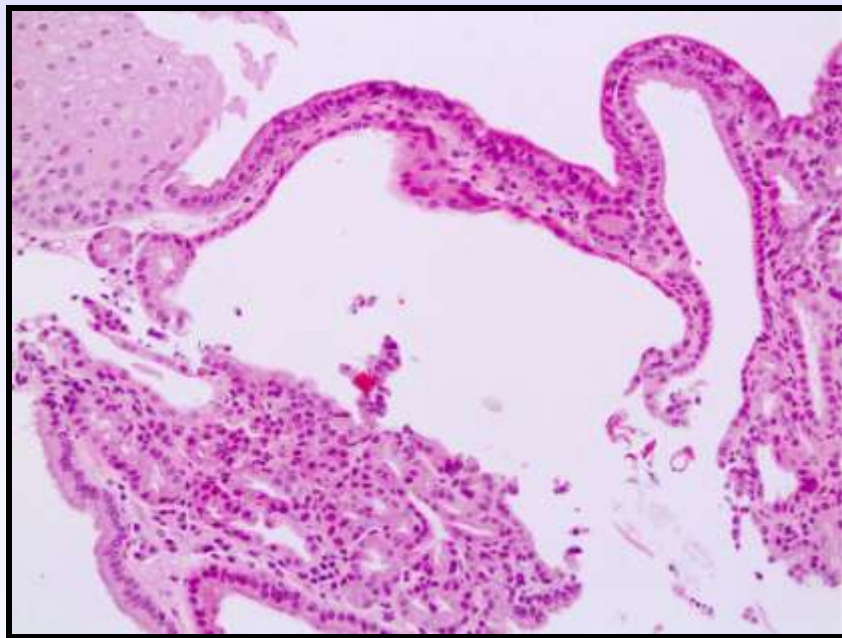
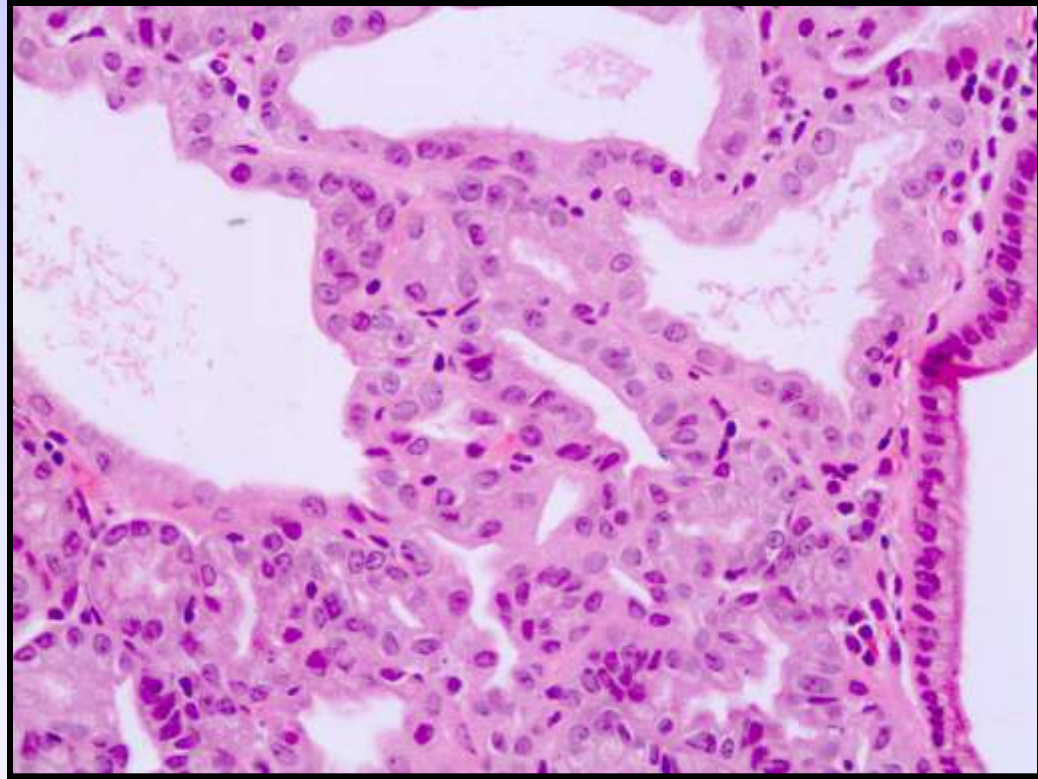
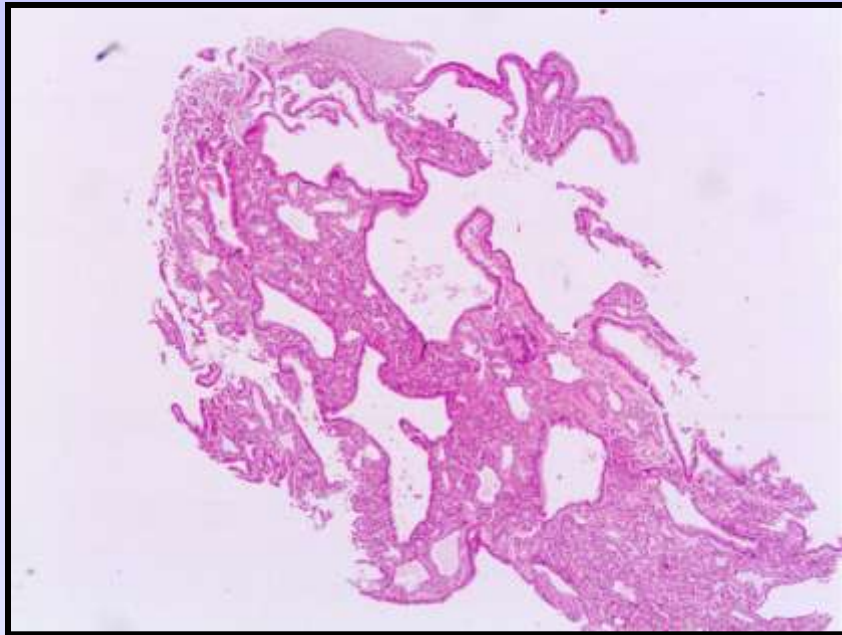
Hallazgos incidentales

**Caso 1**





## Caso 2



# Pólipos epiteliales gástricos

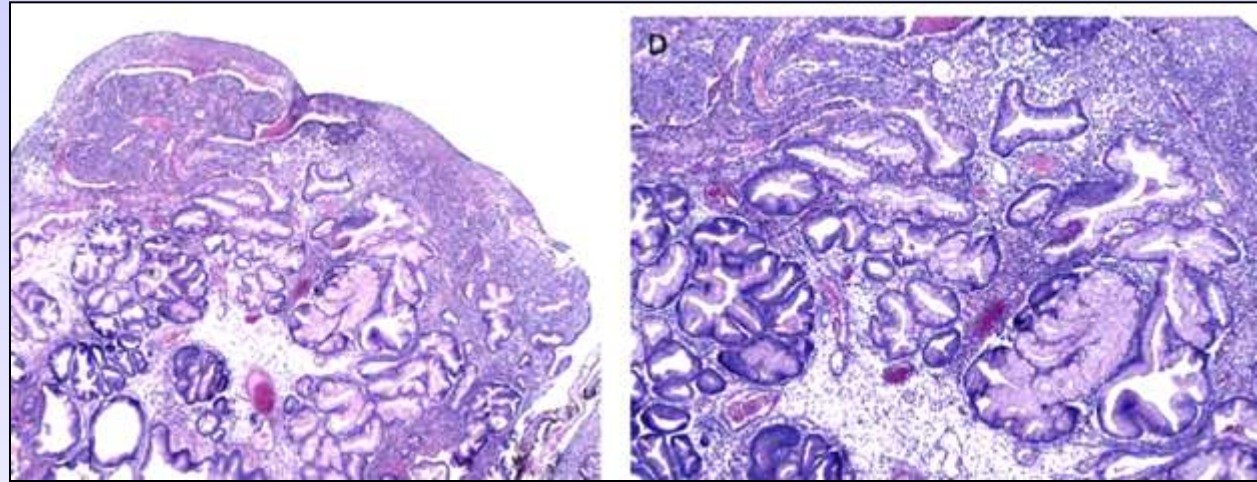
- Hiperplásicos
- Heterotópicos
- Hamartomatosos
  - Pólipo de glándulas fúndicas¿?
  - Peutz-Jeghers
  - Juvenil
  - Cronkhte-Canada
- Adenomas

# Gastric Hyperplastic Polyps: A Heterogeneous Clinicopathologic Group Including a Distinct Subset Best Categorized as Mucosal Prolapse Polyp

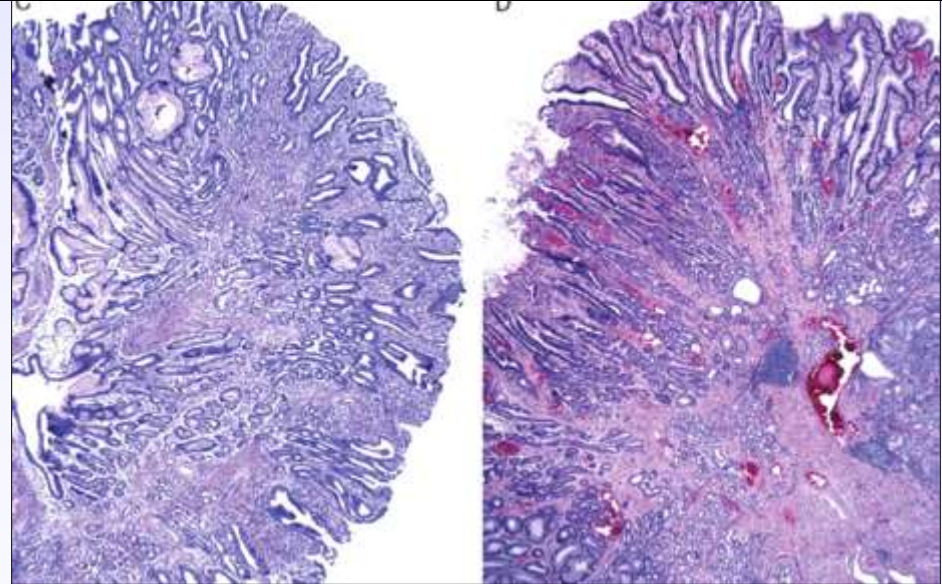
*Elvira Gonzalez-Obeso, MD,\*† Hiroshi Fujita, MD,‡ Vikram Deshpande, MD,§  
Fumihiro Ogawa, MD,\*†§ Mikhail Lisovsky, MD,|| Muriel Genevay, MD,¶  
Krzysztof Grzyb, MD,§# William Brugge, MD,\*\* Jochen K. Lennerz, MD, PhD,§  
Michio Shimizu, MD, †† Amitabh Srivastava, MD,|| and Gregory Y. Lauwers, MD§*

*(Am J Surg Pathol 2011;35:670-677)*

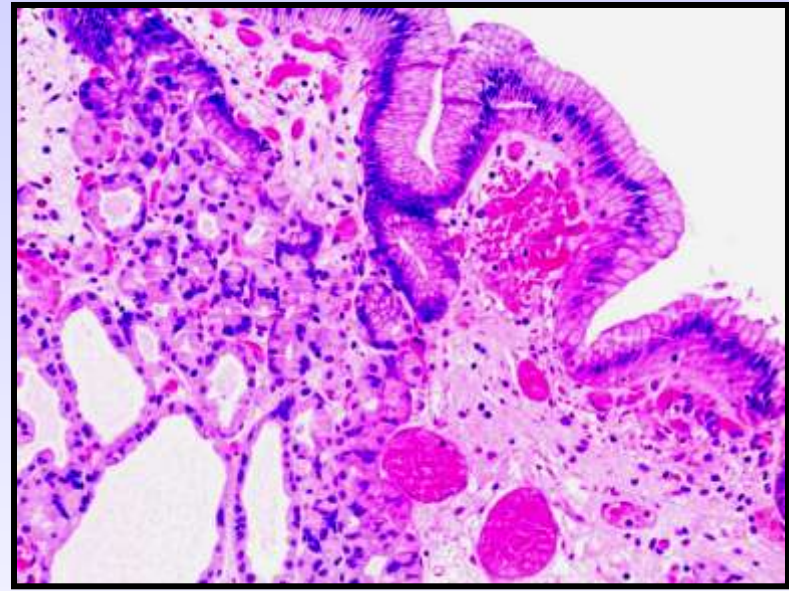
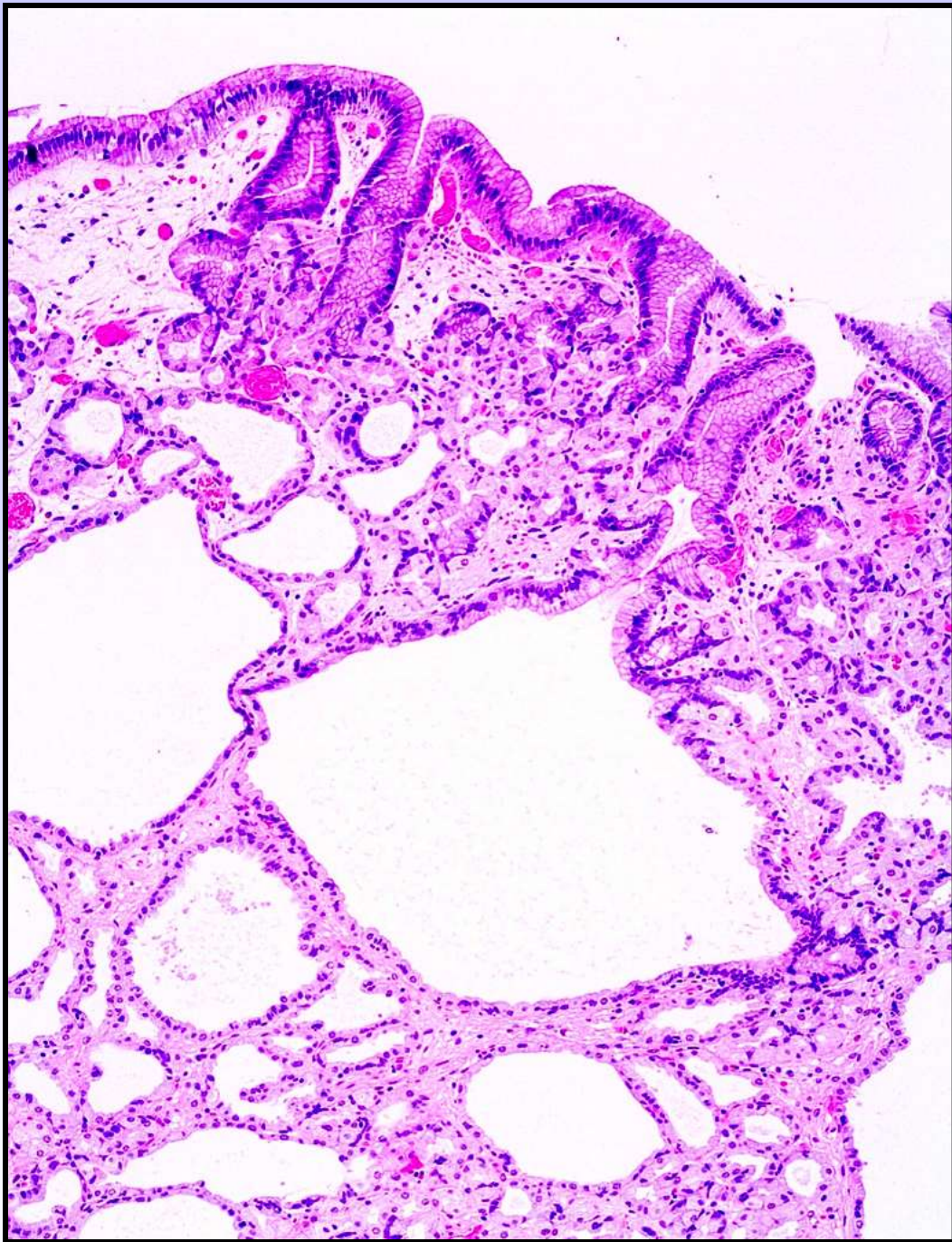
**Pólipo  
hiperplásico**



**Prolapso polipoide  
de mucosa gástrica**



**Pólipo de glándulas fúndicas**





# Displasia-Adenomas Gástricos

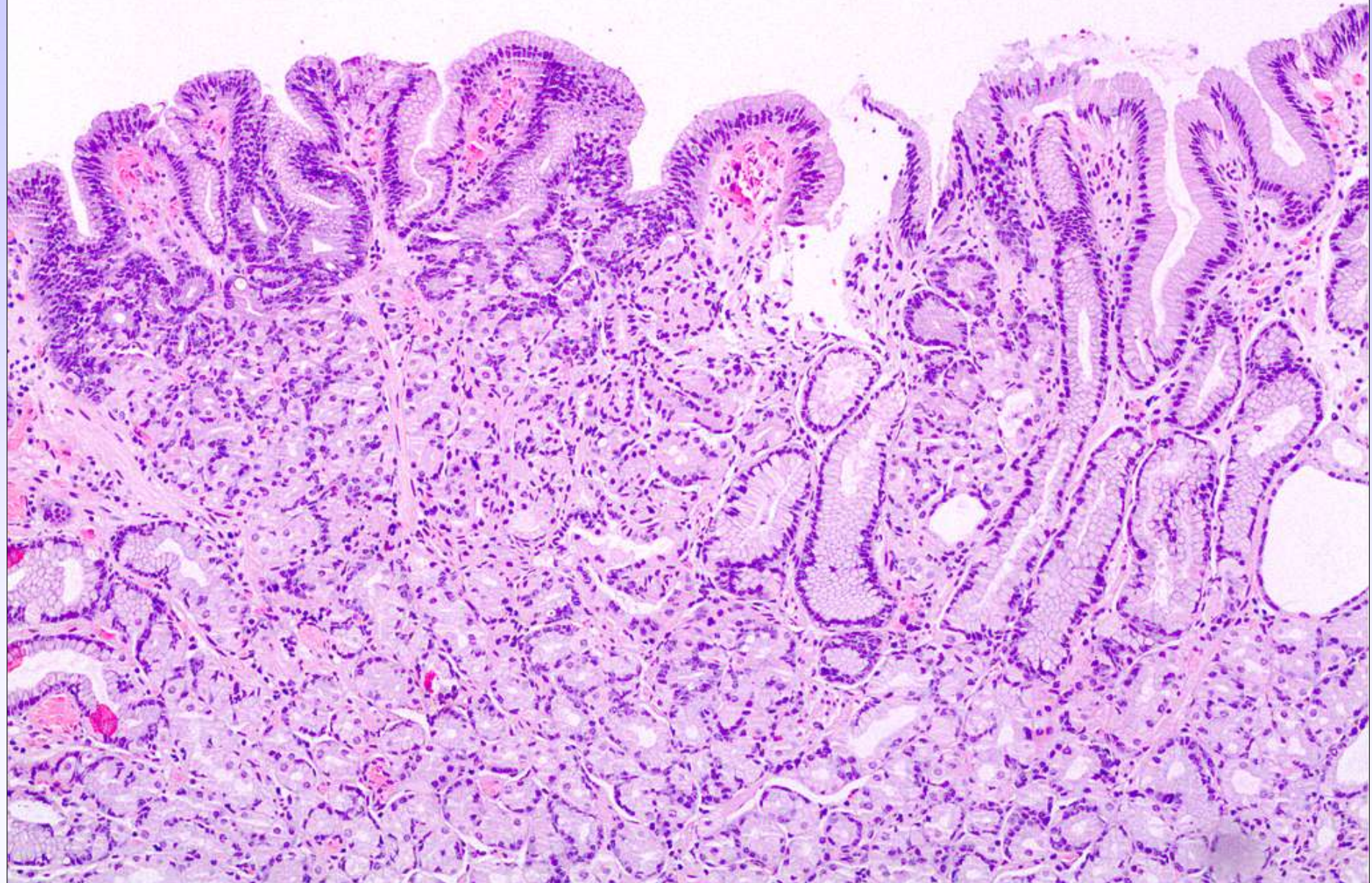
(2-7% de pólipos gástricos)

- Tipo I intestinal (adenomatosa)
- Tipo II gástrica
  - foveolar: Adenoma foveolar
  - pilórica: Adenoma de glándulas pilóricas

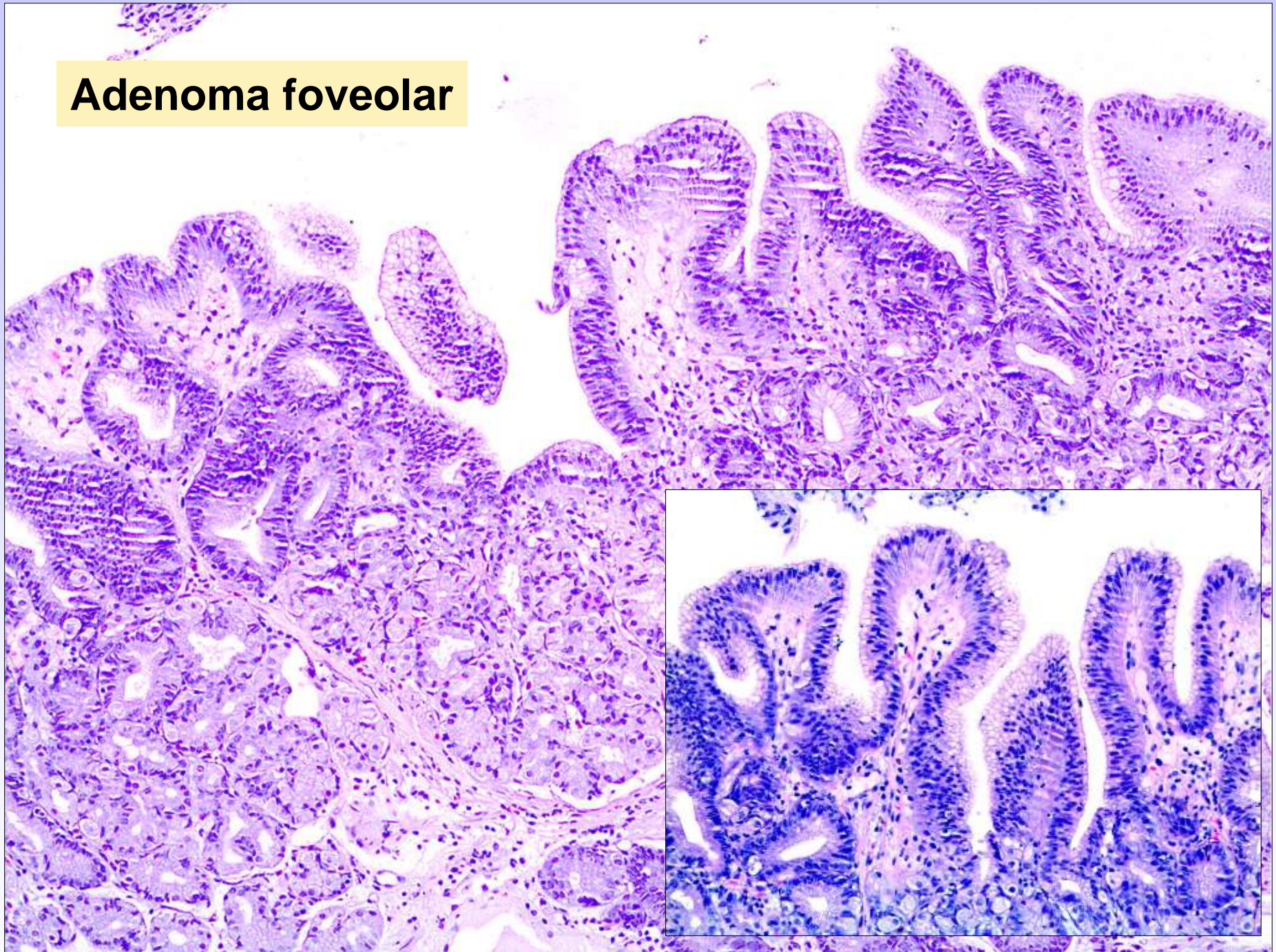
# Displasia foveolar

- Adenoma foveolar – Adenocarcinoma de tipo gástrico bien/extremadamente bien diferenciado.
- Pólipo hiperplásico: 1-20% tienen displasia y en el 78% es de tipo foveolar.
- Pólipo de glándulas fúndicas : displasia en el 1-6% de los esporádicos y en el 30% de los asociados a PAF (alto G<sup>0</sup> 0-12'5%). Malignización rara.

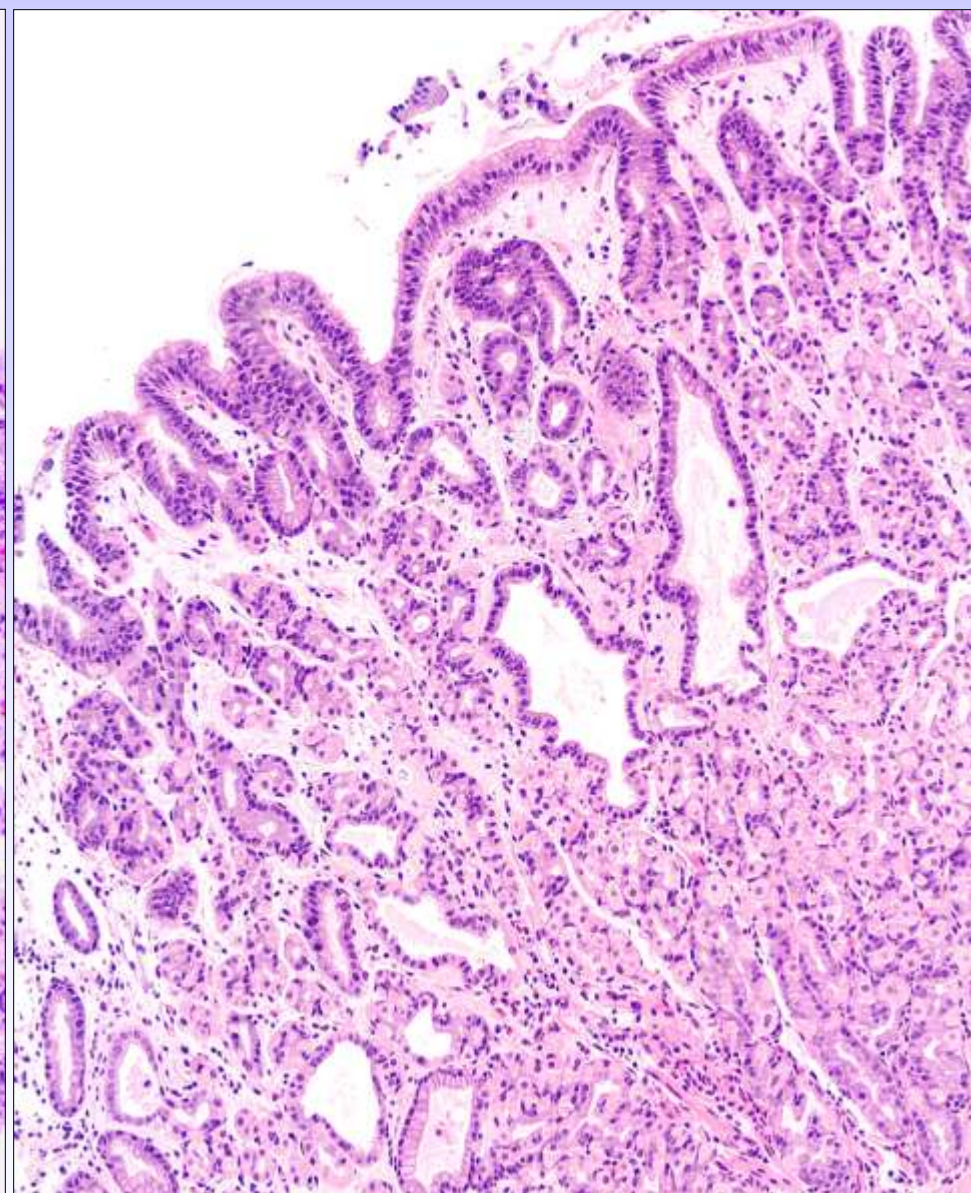
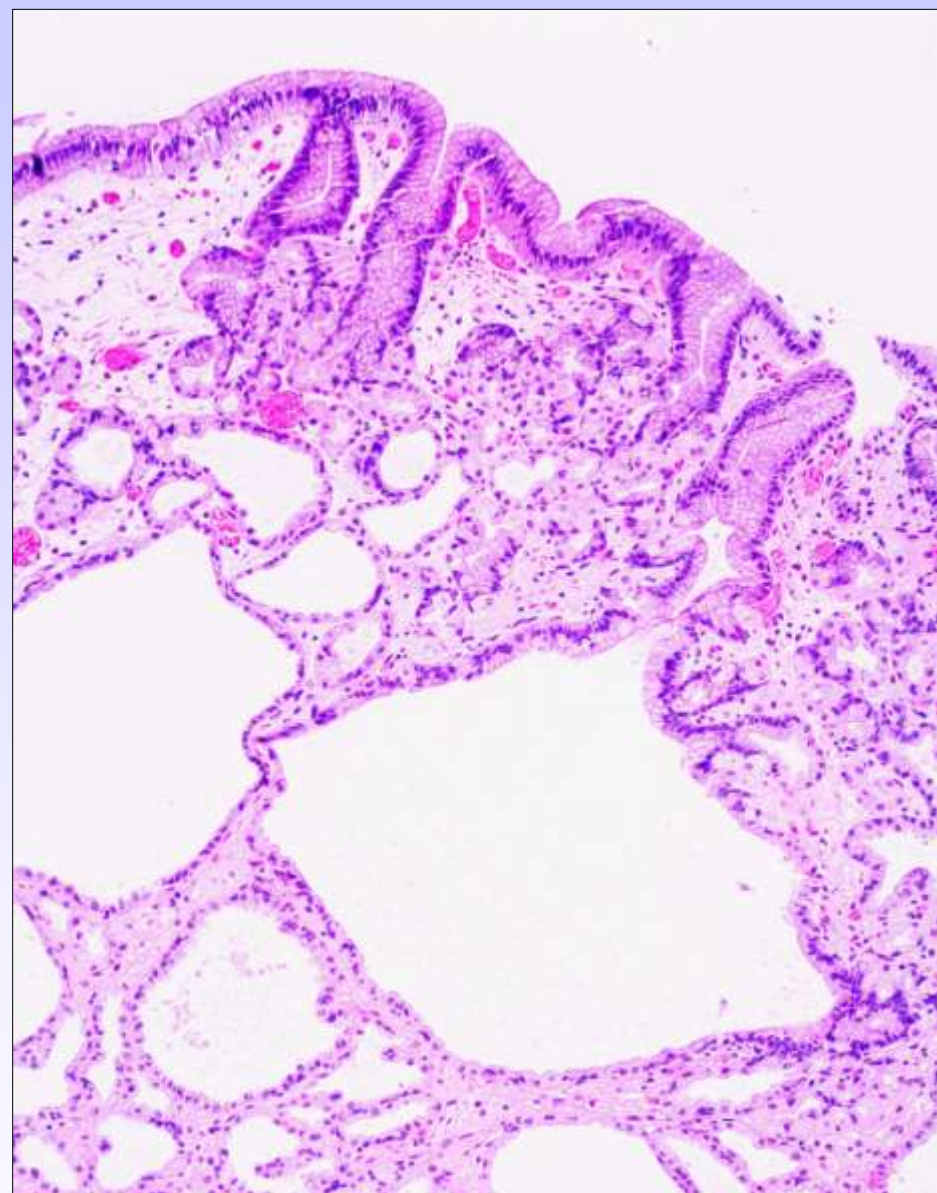
# Adenoma foveolar



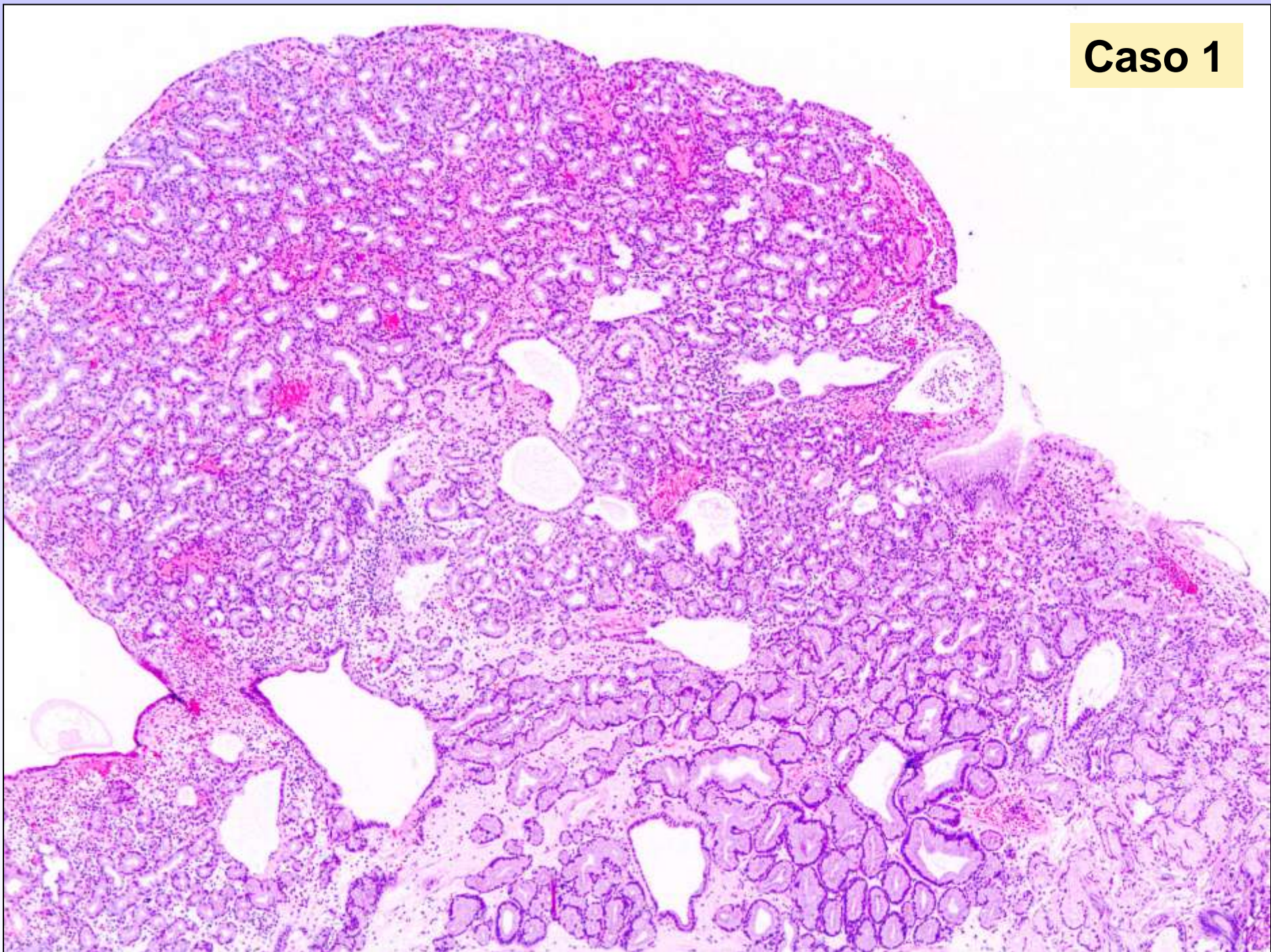
# Adenoma foveolar



# Pólipos de glándulas fúndicas



**Caso 1**



# Displasia-Adenomas Gástricos

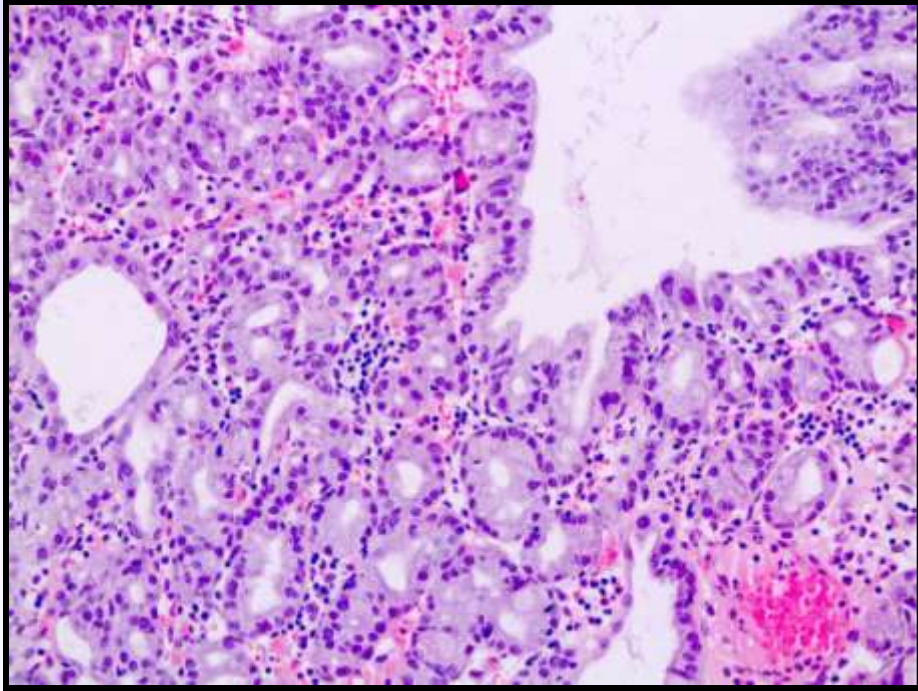
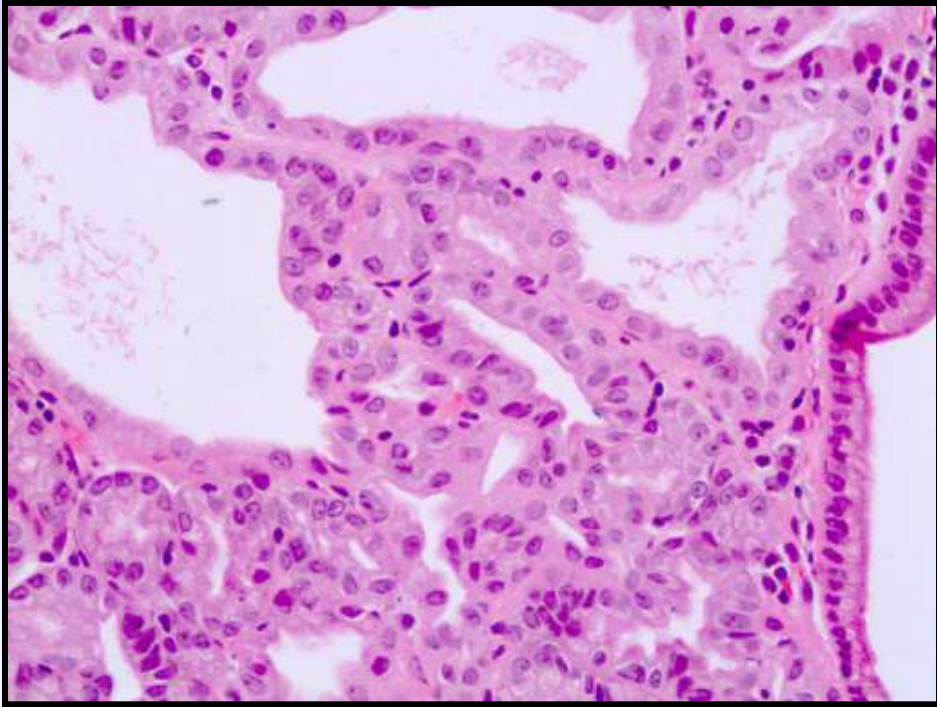
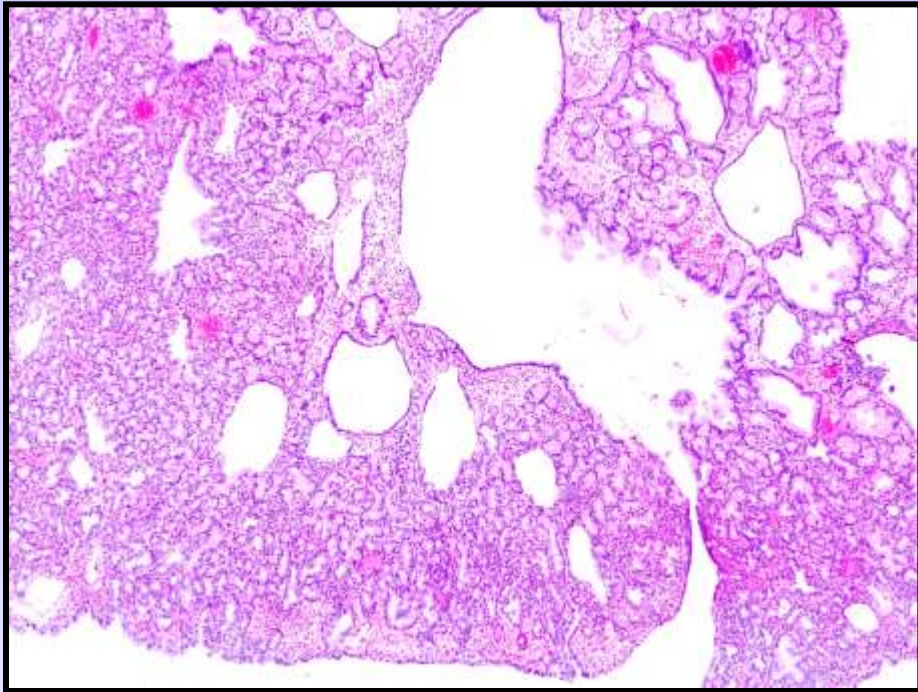
(2-7% de pólipos gástricos)

- Tipo I intestinal (adenomatosa)
- Tipo II gástrica
  - foveolar: Adenoma foveolar
  - pilórica: Adenoma de glándulas pilóricas

# Adenoma de glándulas pilóricas

- Proliferación densa y tubular de glándulas de tipo pilórico, algunas de ellas dilatadas, no orientadas hacia la superficie.
- Una monocapa de células cuboidales de citoplasma claro o levemente eosinófilo y esmerilado. Núcleo con nucleolo y +- atipia.

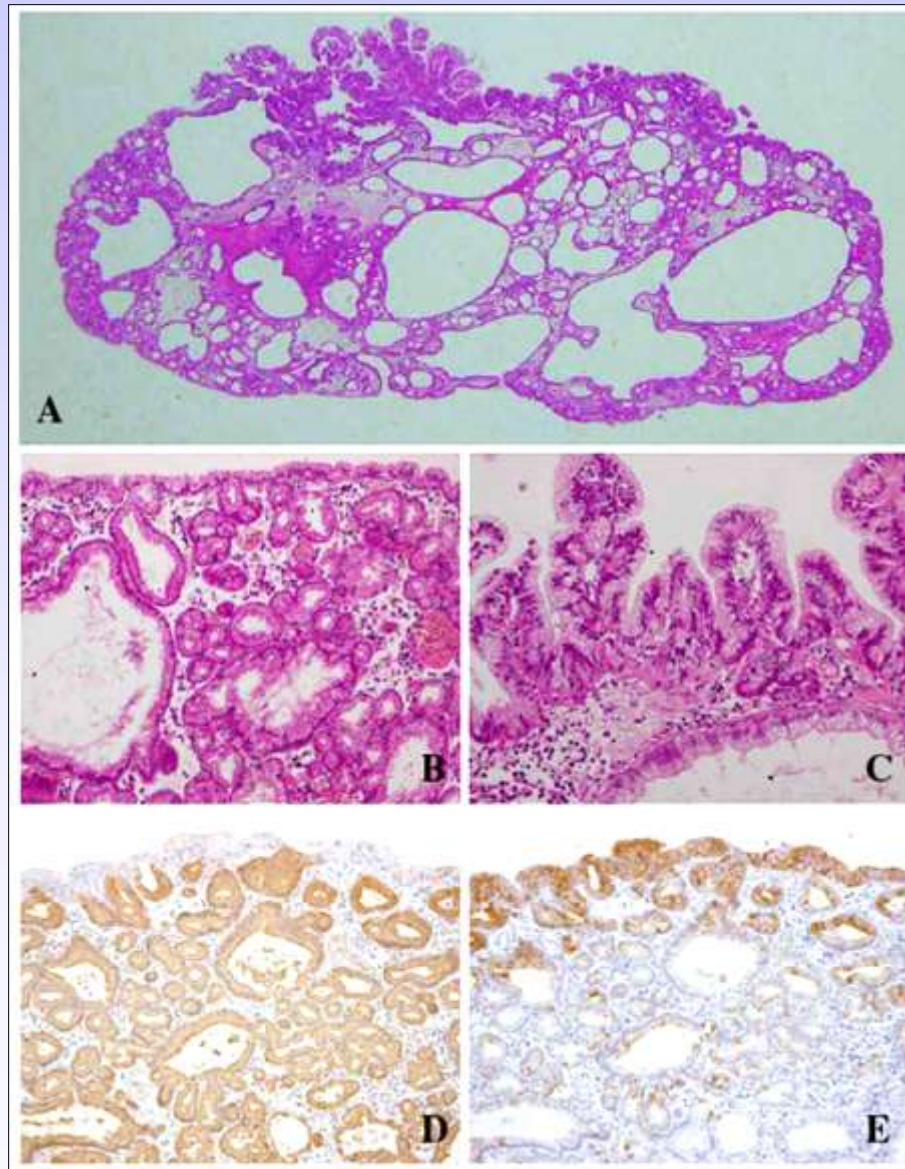




# Gastric-type well-differentiated adenocarcinoma and pyloric gland adenoma of the stomach

RYOJI KUSHIMA<sup>1</sup>, MICHAEL VIETH<sup>2</sup>, FRANZ BORCHARD<sup>3</sup>, MANFRED STOLTE<sup>2</sup>, KEN-ICHI MUKAISHO<sup>4</sup>,  
and TAKANORI HATTORI<sup>4</sup>

Gastric Cancer (2006) 9: 177-184



# Adenoma Gástrico de Glándulas Pilóricas (AGP)

# Revisión de la literatura

- **18 casos hasta el año 2003:**
  - 1976. Elster K.
  - 1986. Borchard F.
  - 1990 Watanabe H. OMS.
  - 1996 Kushima R. Pathol Res Pract: vesícula biliar.
  - 1999 Kushima R. Virchows Arch: duodeno.
  - 1999 Bakotic BW. Am J Surg Pathol: páncreas
  - 1999 Mikami Y. Gynecol Oncol: florid endocervical glandular hyperplasia with intestinal and pyloric gland metaplasia.
  - Otros : colédoco, esófago de Barrett, recto.

# Características clinicopatológicas

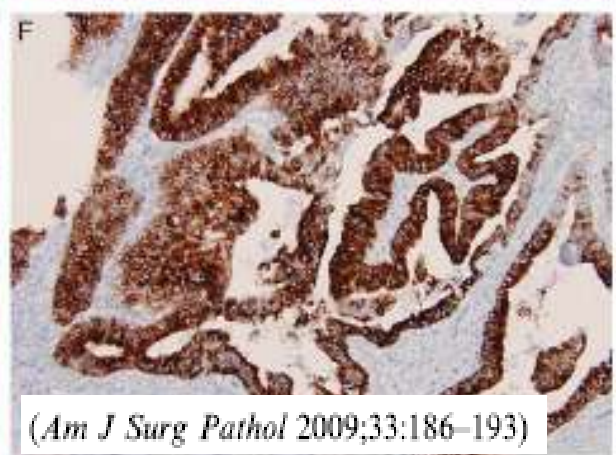
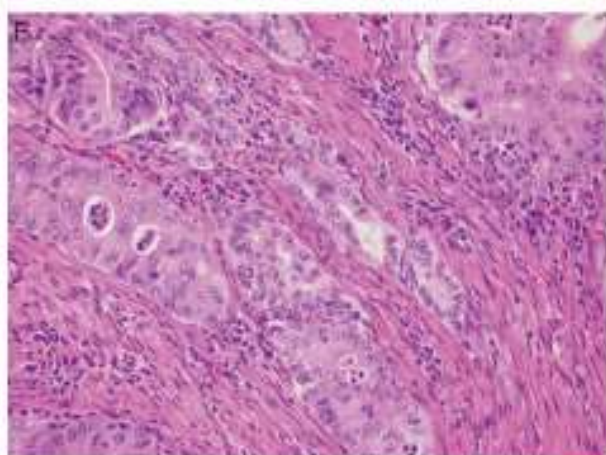
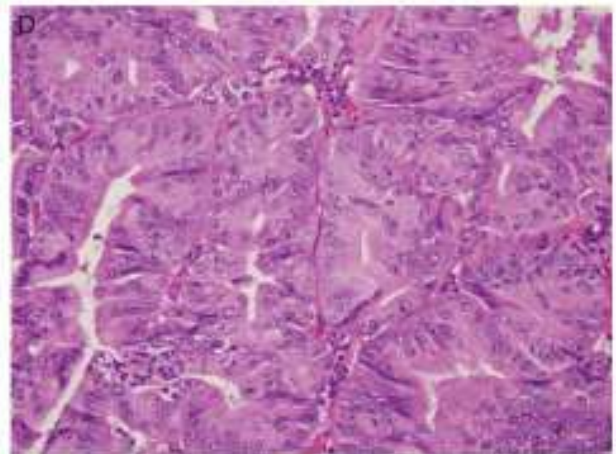
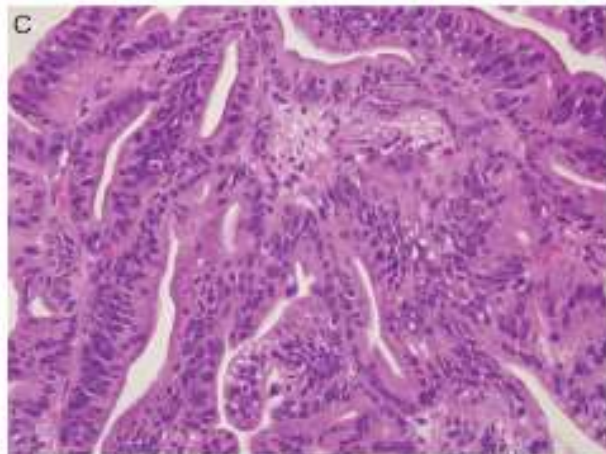
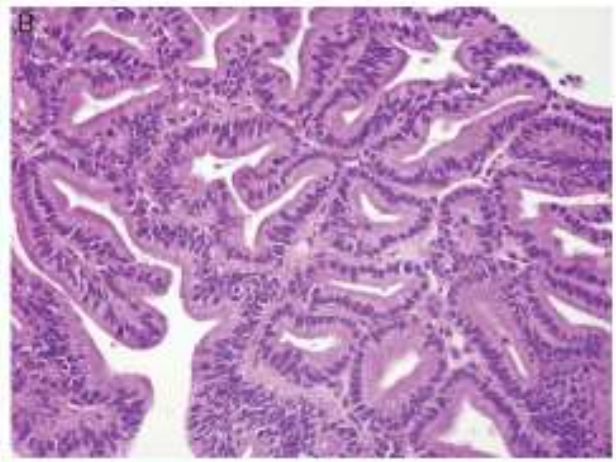
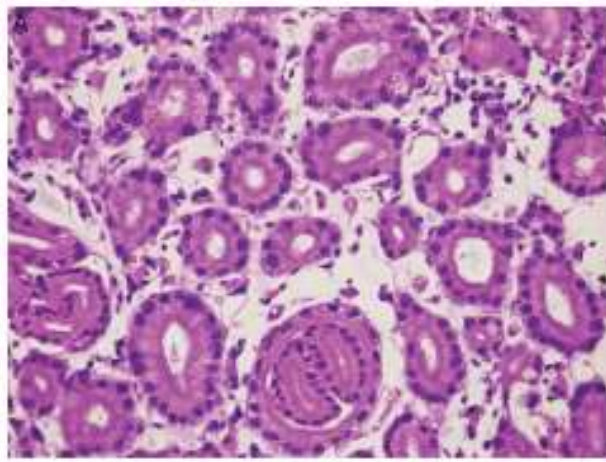
Vieth M et al. 90 casos. Virchows Arch 2003;442:317-321

- **77 pacientes con AGP Gástrico:**
  - 2'3% de pólipos gástricos (3000 en 10 años).
  - Sexo: **Mujer:** Hombre 2'5:1.
  - Edad: **73+- 13.**
  - **Cpo-fundus:** 64%.
  - Pólipo sésil **pequeño:** 1'6+- 0'9 cm.
  - **Gastritis autoinmune** en 34%, H.Pylori 30%, gastritis tipo C 20%, mucosa normal 4%.
  - **Transición a adenocarcinoma en el 30%** (intramucosos, focales, de tipo gástrico). Pérdida y ganancia cromosomas.

# Características clinicopatológicas

Zong-Ming Ch et al. Am J Surg Pathol 2009;33:186-193

- **19 AGP Gástricos:**
  - Similares clínicamente a lo descrito por Vieth M. et al.
  - Clasificación de la displasia:
    - Sin displasia: 33%
    - Displasia de bajo grado: 10%
    - Displasia de alto grado: 40%
    - Carcinoma invasivo: 10%

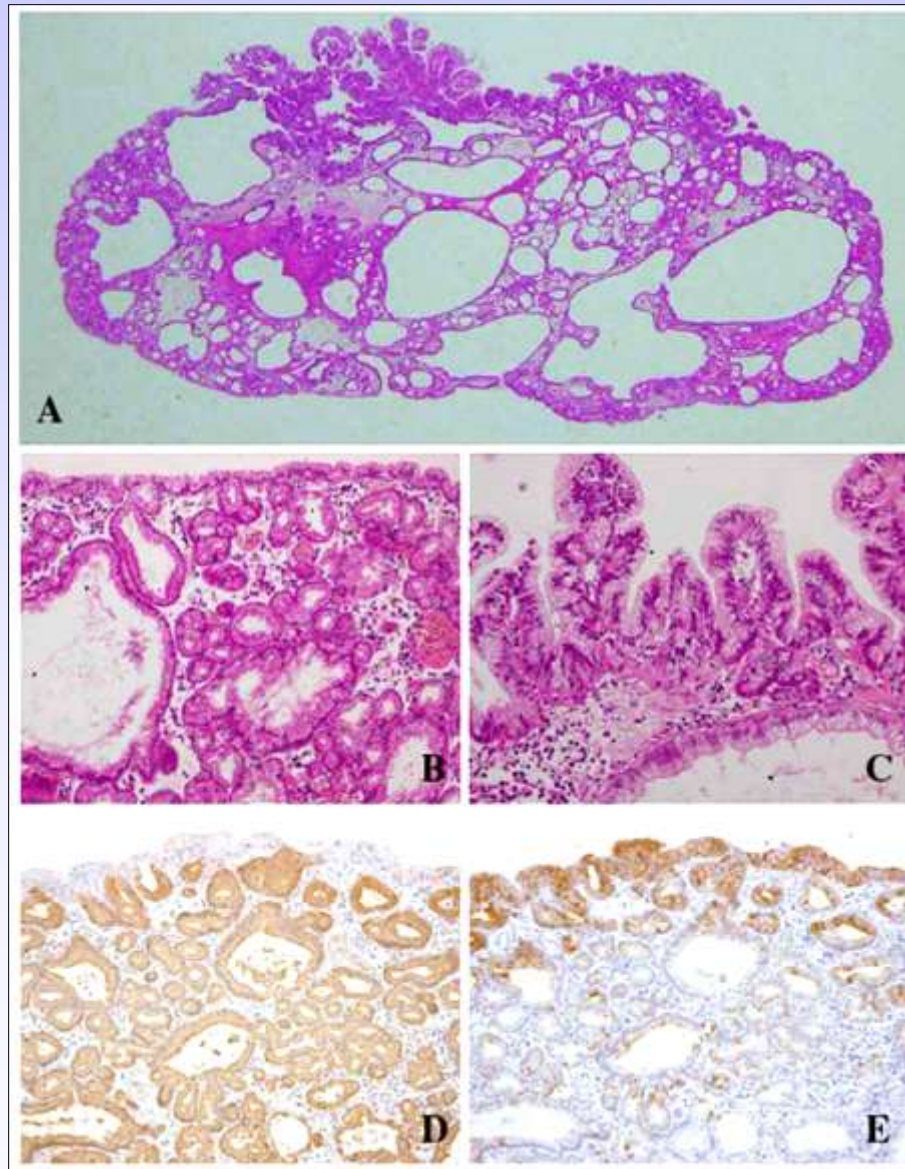


(*Am J Surg Pathol* 2009;33:186–193)

# Gastric-type well-differentiated adenocarcinoma and pyloric gland adenoma of the stomach

RYOJI KUSHIMA<sup>1</sup>, MICHAEL VIETH<sup>2</sup>, FRANZ BORCHARD<sup>3</sup>, MANFRED STOLTE<sup>2</sup>, KEN-ICHI MUKAISHO<sup>4</sup>,  
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Gastric Cancer (2006) 9: 177-184





# Diagnóstico diferencial

Tipo de adenoma	Núcleos	Citoplasma	Mucina	Asociación	DAItoG <sup>0</sup> -Ca
<b>Intestinal</b>	Elongados, hipercromáticos	Caliciformes Paneth	<b>MUC2+</b> MUC5- MUC6-	Gastritis-MI	45% - 25%
<b>Foveolar</b>	Elongados, hipercromáticos	Mucina apical	MUC2- <b>MUC5+</b> MUC6- <b>PAS+</b>	PAF	Muy rara (en PGF de PAF)
<b>Pilórico</b>	Redondos, regulares o con atipia	Esmerilado	MUC2- <b>MUC5+</b> <b>MUC6+</b> <b>PAS-</b>	Gastritis-MI	40% - 10%

# Diagnóstico diferencial

- Adenoma de glándulas de Brunner (MUC5-, localización)
- Adenoma de glándulas submucosas esofágicas

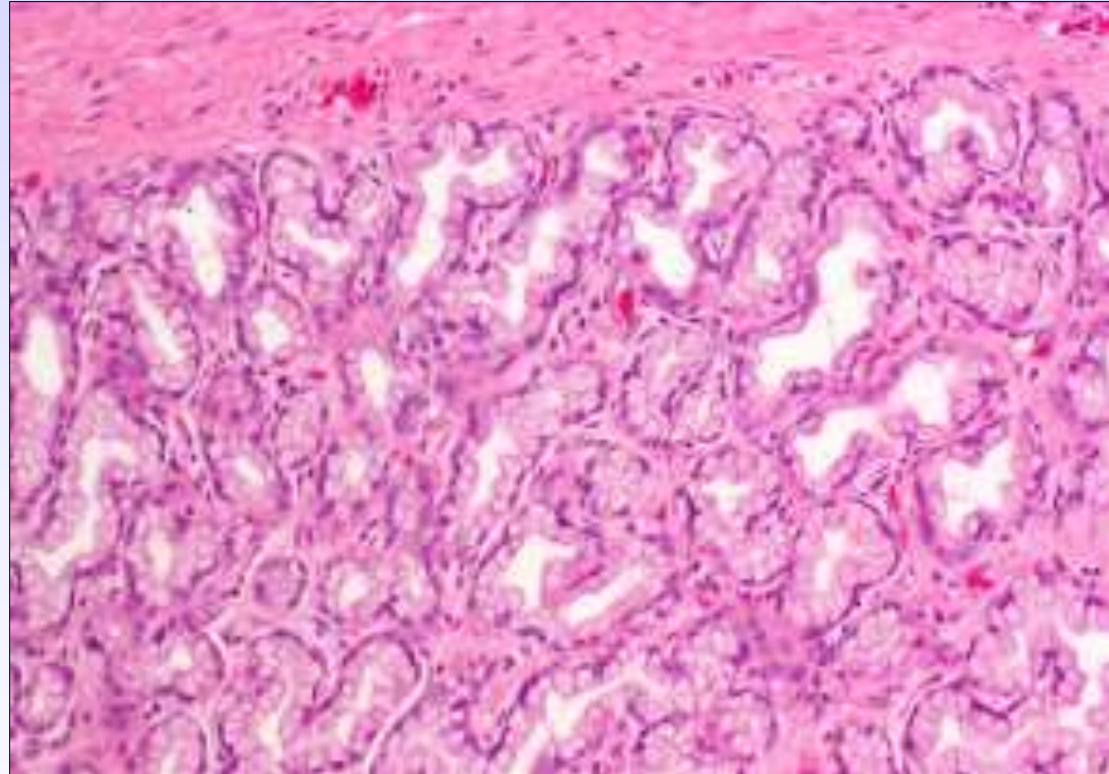
Adenoma de glándulas submucosas esofágicas	Adenoma de glándulas pilóricas
Patrón tubular y papilar	Patrón tubular
Dos capas de células	Una única capa de células
Capa externa mioepitelial	No hay mioepitelio
Capa interna con citoplasma eosinófilo	Citoplasma pálido eosinófilo

Case report

## **Surgical management of giant Brunner's gland hamartoma: case report and literature review**

Zoe A Stewart<sup>1</sup>, Ralph H Hruban<sup>2</sup>, Elliot F Fishman<sup>3</sup> and  
Christopher L Wolfgang\*<sup>1</sup>

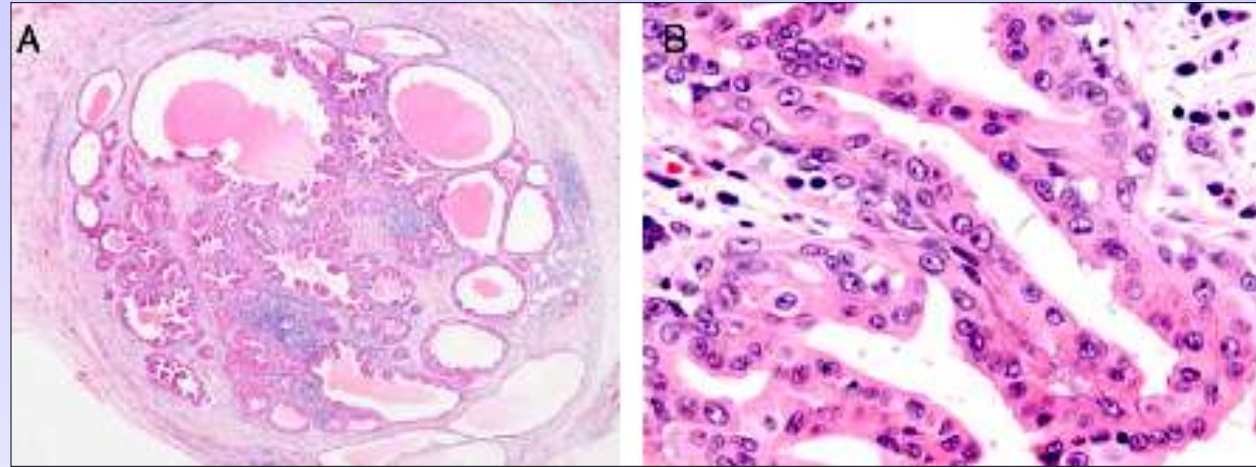
*World Journal of Surgical Oncology* 2009, **7**:68 doi:10.1186/1477-7819-7-68



# Esophageal Gland Duct Adenoma: Immunohistochemical Comparison With the Normal Esophageal Gland and Ultrastructural Analysis

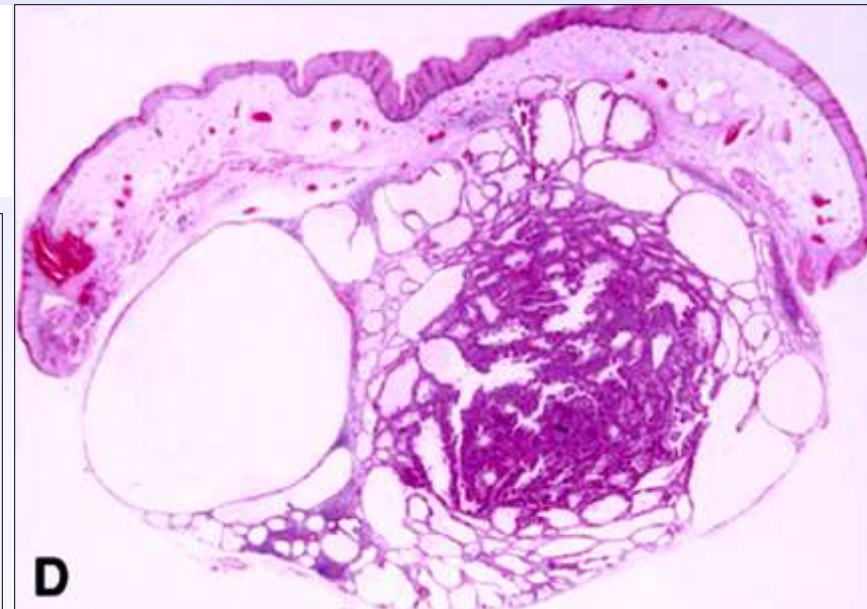
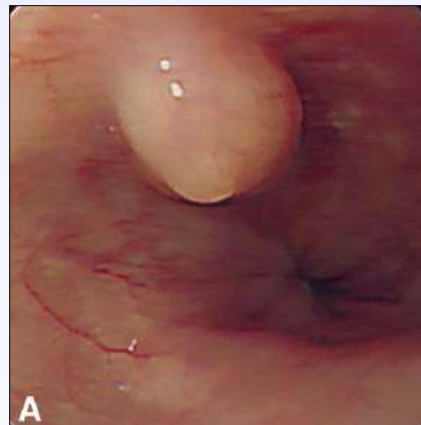
*Oi Harada, MD,\* Hiroyoshi Ota, MD, PhD,† Tsutomu Katsuyama, MD, PhD,‡  
Eiko Hidaka, PhD,‡ Katsuhiko Ishizaka, MD, PhD,§ and Jun Nakayama, MD, PhD\**

*Am J Surg Pathol* 2007;31:469-475



## Esophageal submucosal gland duct adenoma

Gastrointestinal Endoscopy - Volume 60, Issue 5 (November 2004)



# Bibliografía

- R. Kushima et al. Gastric-type well-differentiated adenocarcinoma and pyloric gland adenoma of the stomach. *Gastric Cancer* 2006;9:177
- M. Vieth et al. Pyloric gland adenoma: a clinico-pathological analysis of 90 casos. *Virchows Arch* 2003;442:317
- SC Abraham et al. Gastric adenomas. *Am J Surg Pathol* 2002;26:1276
- Ch Zong-Ming et al. Pyloric Gland adenoma. *Am J Surg Pathol* 2009;33:186

## Pyloric Gland Adenoma

### *An Entity Distinct From Gastric Foveolar Type Adenoma*

*Zong-Ming Chen, MD, PhD, Jennifer R. Scudiere, MD, Susan C. Abraham, MD,  
and Elizabeth Montgomery, MD*

**TABLE 3.** Classification of Pyloric Gland Adenomas for This Study

Dysplasia Category	Architectural Features	Nuclear Features	Cytoplasmic Features
No dysplasia	Uniform tubular-shaped glands	Monolayer of small round nuclei Inconspicuous nucleoli Open chromatin Uniform nuclear membranes	Eosinophilic, ground glass with no apical mucin cap
Low-grade dysplasia	Irregularly shaped glands	Elongated nuclei Slight pseudostratification Inconspicuous nucleoli Open chromatin Uniform nuclear membranes Some with mild nuclear hyperchromasia	Eosinophilic, ground glass with no apical mucin cap
High-grade dysplasia	Complex glands, some cribriform architecture	Enlarged rounded nuclei with loss of nuclear polarity Scattered enlarged nucleoli Mild nuclear membrane irregularity Nuclear pleomorphism	Eosinophilic, ground glass with no apical mucin cap

**Caso 3**

