

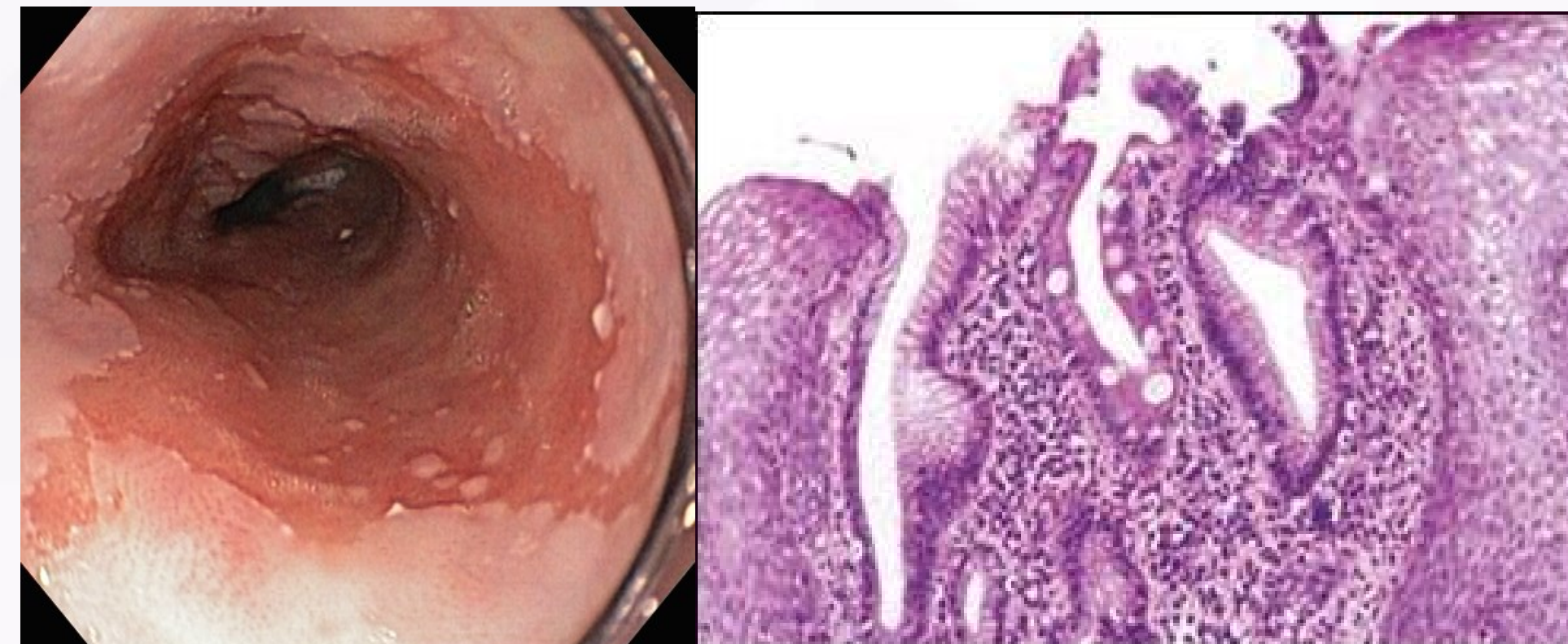
¿Cómo optimizar el diagnóstico de displasia en Esófago de Barrett?

María Jesús Fuenzalida

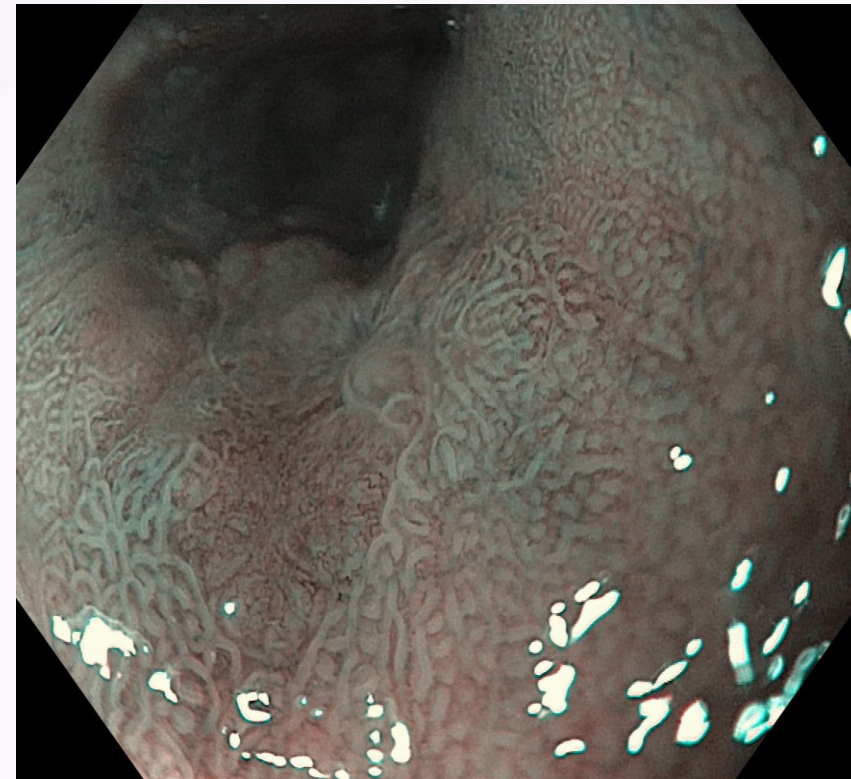
Gastroenteróloga Hospital Clínico Dra. Eloísa Díaz

Esófago de Barrett (EB)

- El cambio metaplásico del esófago distal
- El epitelio escamoso normal es sustituido por un epitelio columnar con **células caliciformes** → denominado metaplasia columnar
- En la **endoscopia** se extiende por al menos 1 cm sobre la unión gastroesofágica (UGE)



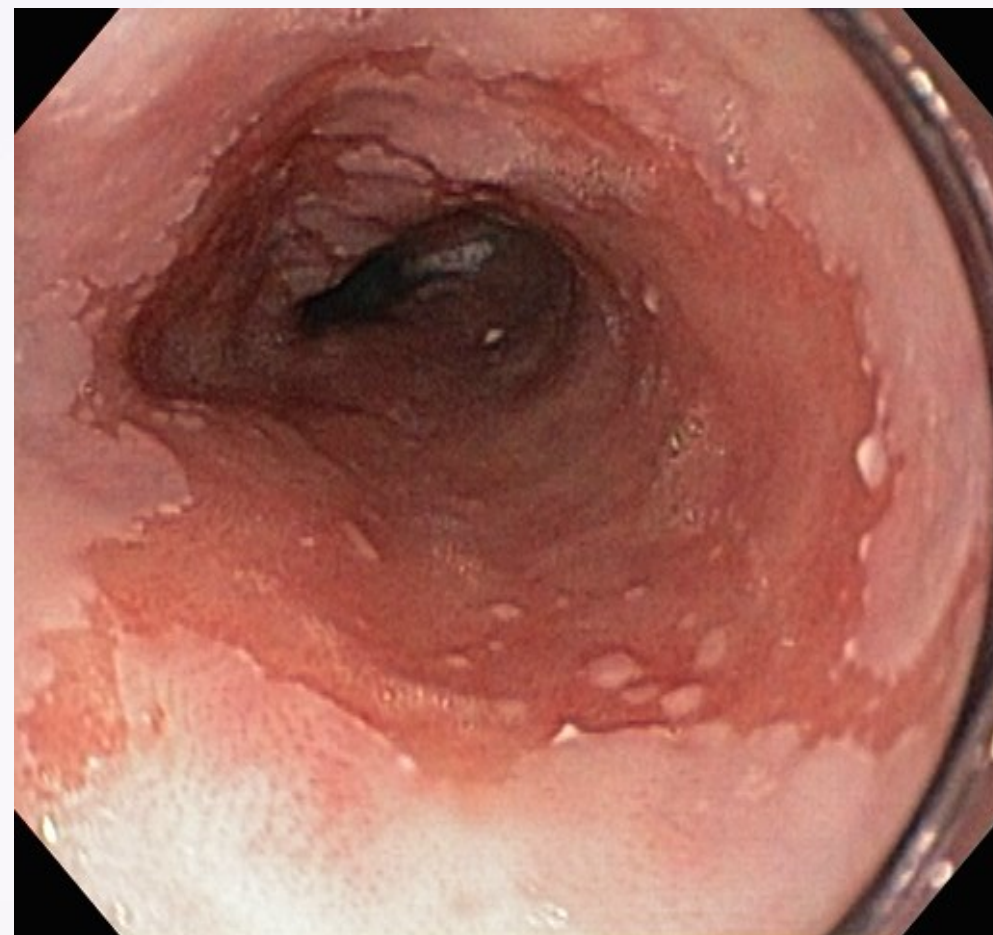
Prevalencia



EB

- **1% de la población general**
- **Hasta en un 14% de los pacientes con enfermedad por reflujo gastroesofágico (ERGE)**

Prevalencia



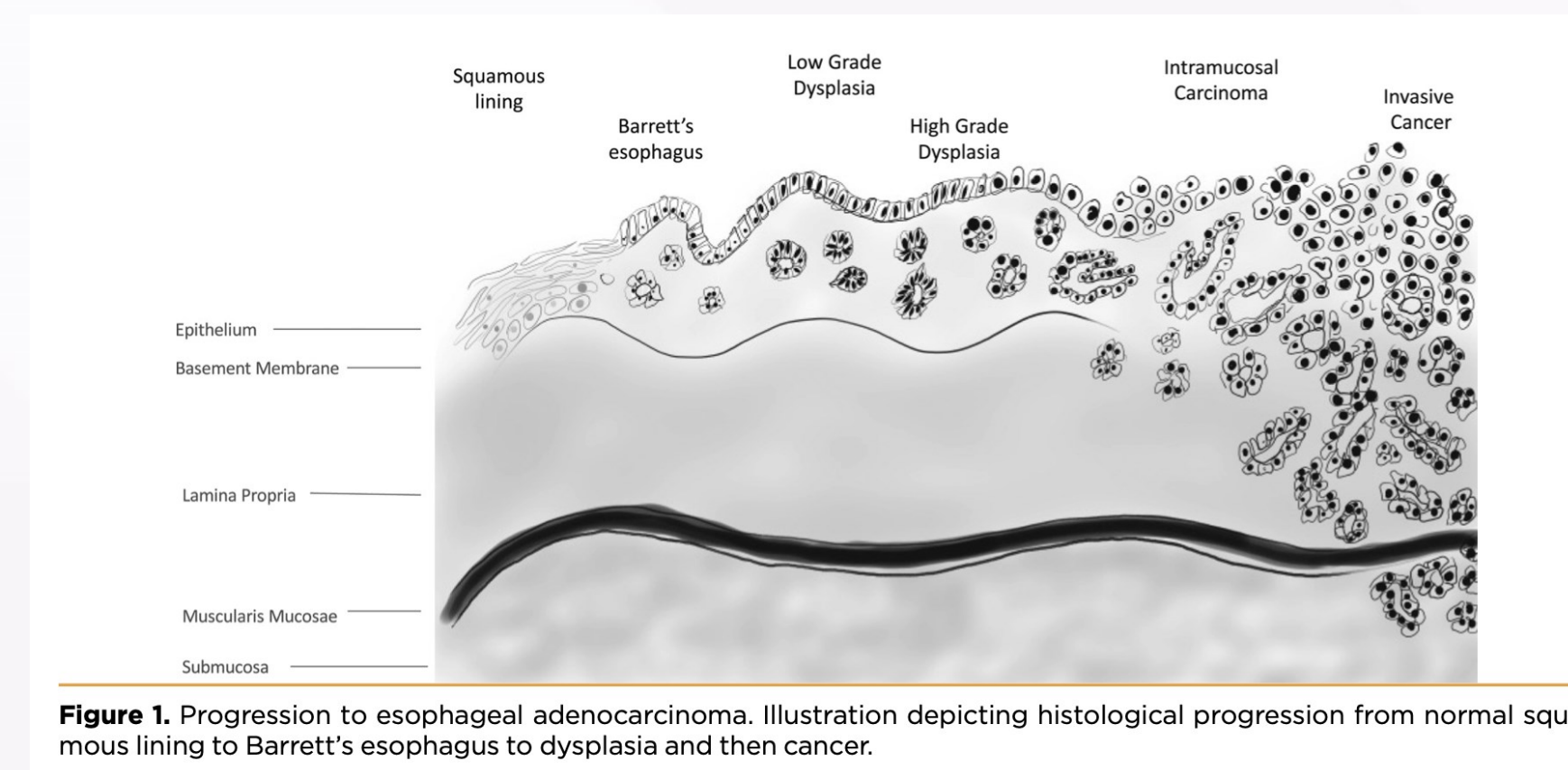
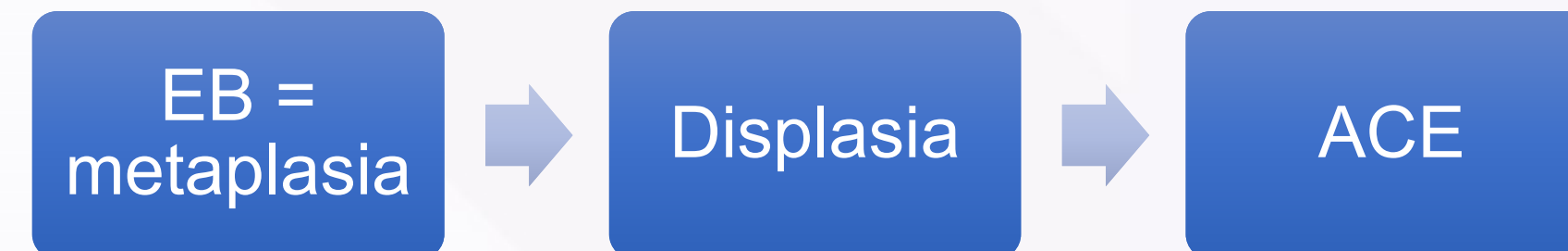
EB

- 13,9% Displasia
 - 81% DBG y 19% DAG
- ACE 1,2%

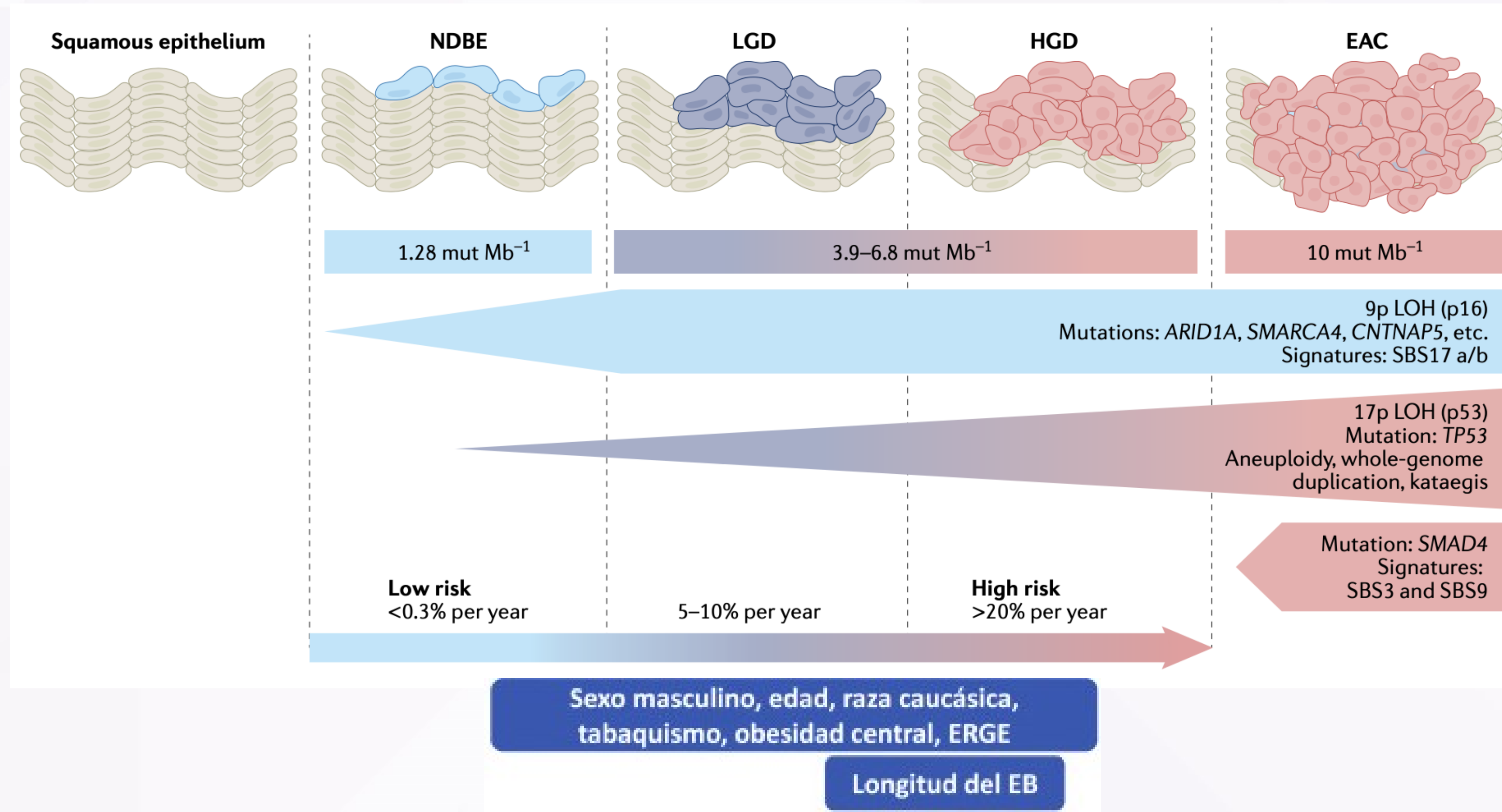
Progresión

El EB es el **único precursor** conocido del adenocarcinoma esofágico (ACE)

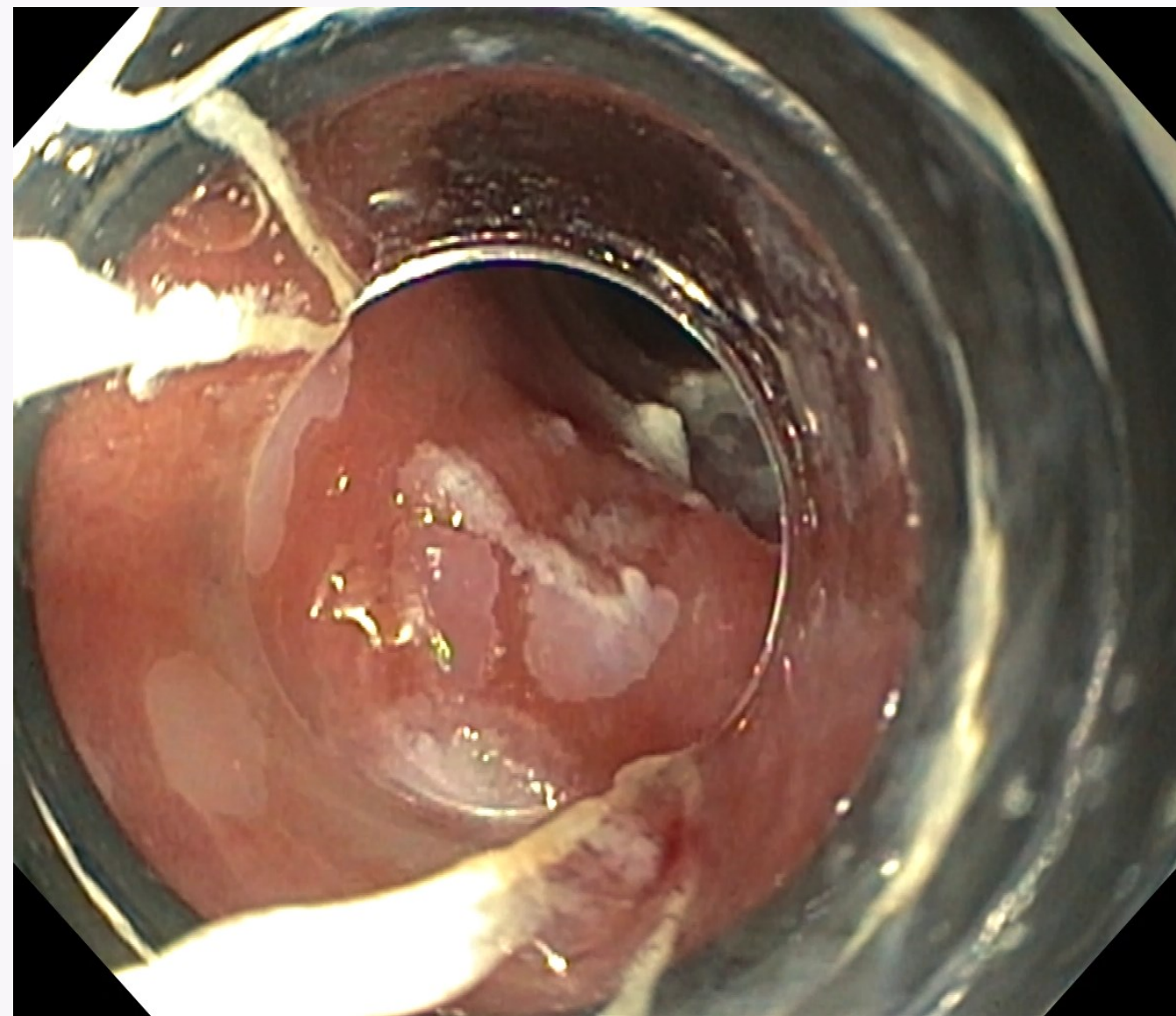
Neoplasia **en aumento** en países occidentales



Progresión



Tratamiento del EB con displasia o cáncer



Erradicación endoscópica
→ resección y ablación
muestra un éxito cercano al
90%



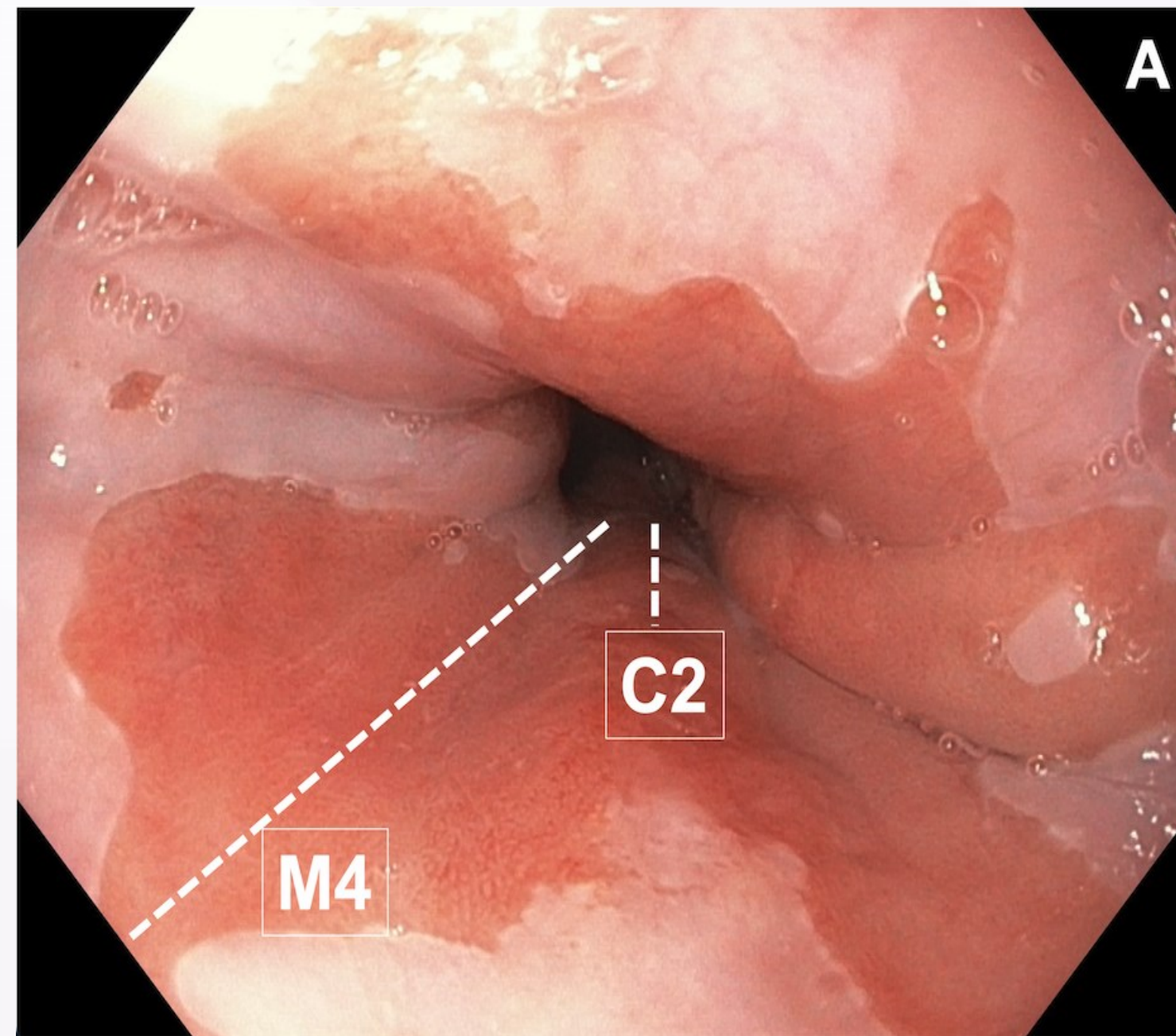
Endoscopía de alta calidad

- Adecuada sedación
- Limpieza
- Insuflación
- Inspección
- ❖ Ergonomía 😊



Endoscopía de alta calidad

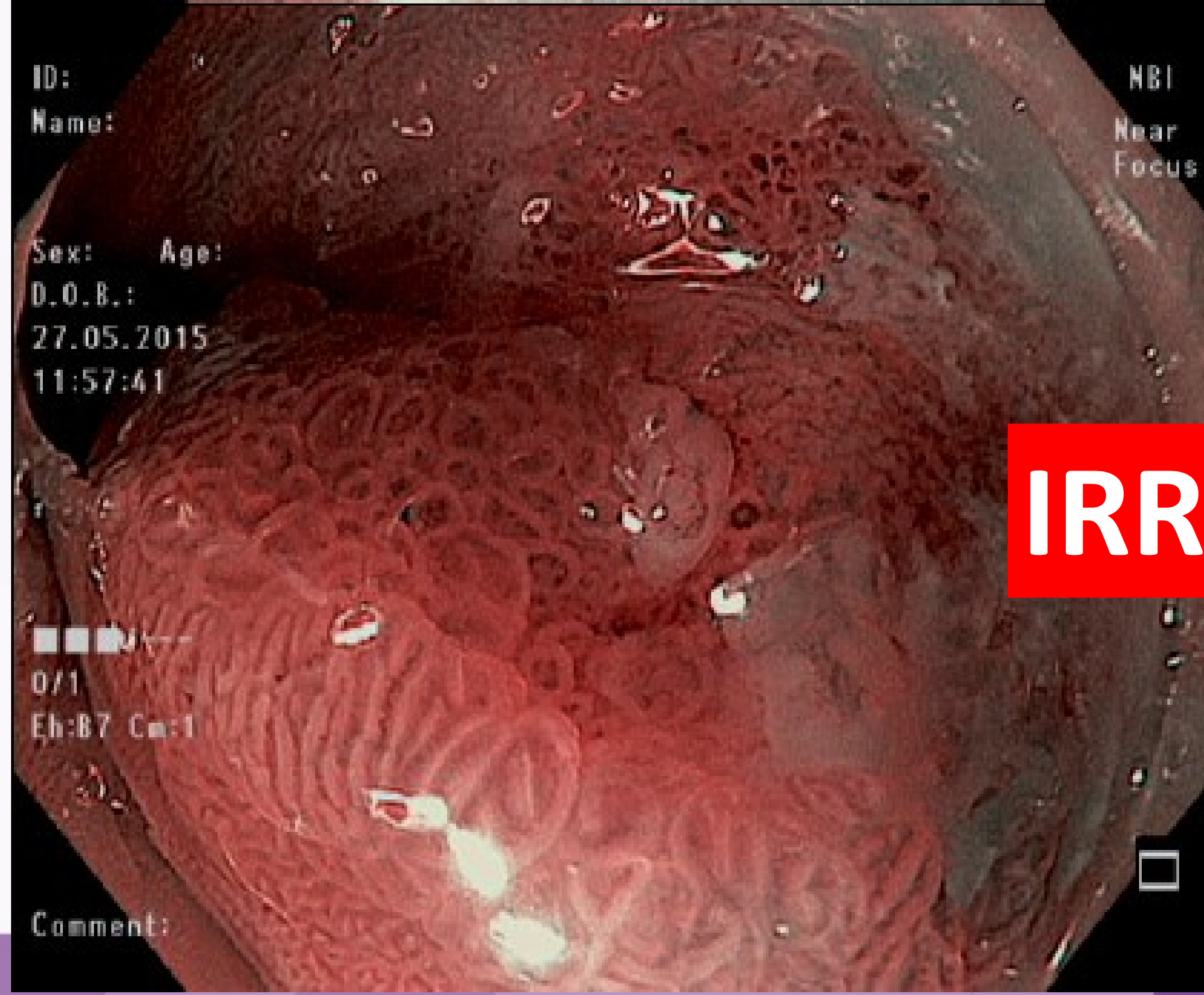
- Usar Clasificaciones:
 - París
 - Praga



Criteria BING - NBI



REGULAR



IRREGULAR



Endoscopía de alta calidad

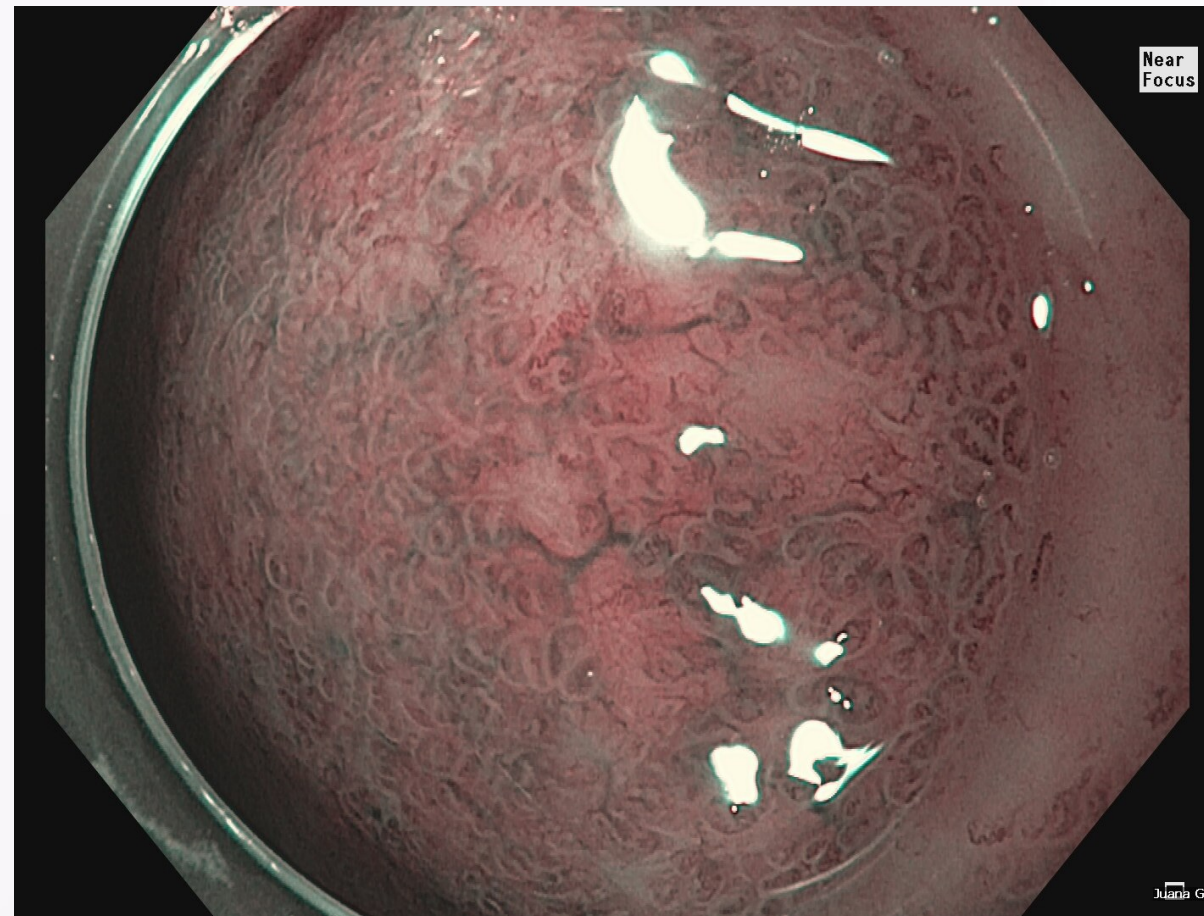
- BIT (Barrett's inspection time)



- A mayor tiempo de inspección, mayor detección de lesiones
- Hay correlación directa entre el tiempo de inspección por cm de Barrett y la detección de neoplasia
- 1 minuto por cm de Barrett al menos (54.2 % vs. 13.3 %; $P = 0.04$)

Endoscopía de alta calidad

- NDR (neoplasia detection rate)
 - ACE y DAG en EDA índice
- Revisiones sistemáticas y metaanálisis 27.894
- 5-7%



IA?

AI for evaluation of Barrett's neoplasia – a randomized study

557 patients → 51 273 images → AI-based clinical decision support system



Tandem, randomized video trial:
• 22 endoscopists
• 96 video cases

96 videos of Barrett's esophagus

Group A
1. Without AI
2. With AI

Group B
1. With AI
2. Without AI



Stand-alone AI performance

Sensitivity	92%
Specificity	69%

Performance Barrett's nonexperts (group A)

	Without AI	With AI
Sensitivity	70%	78%
Specificity	67%	73%

AI improved the performance of nonexpert endoscopists

Endoscopy

AI, artificial intelligence.



PERSPECTIVAS FUTURAS EN GASTROENTEROLOGÍA



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AP&T Alimentary Pharmacology & Therapeutics WILEY

Systematic review with meta-analysis: neoplasia detection rate and post-endoscopy Barrett's neoplasia in Barrett's oesophagus

Nour Hamade¹ | Amrit K. Kamboj² | Rajesh Krishnamoorthi³ | Siddharth Singh⁴ | Leslie C. Hassett⁵ | David A. Katzka² | Charles J. Kahi¹ | Hala Fatima¹ | Prasad G. Iyer²

Oesophagus

ORIGINAL ARTICLE

Estimating neoplasia detection rate (NDR) in patients with Barrett's oesophagus based on index endoscopy: a systematic review and meta-analysis

Sravanthi Parasa¹,^{*} Madhav Desai,² Anusha Vittal,³ Viveksandeep T Chandrasekar,³ Asad Pervez,³ Kevin F Kennedy,⁴ Neil Gupta,⁵ Nicholas J Shaheen,⁶ Prateek Sharma⁷

ORIGINAL ARTICLE

Artificial intelligence using convolutional neural networks for real-time detection of early esophageal neoplasia in Barrett's esophagus (with video)

Rintaro Hashimoto, MD,¹ James Requa,² Dao Tyler,² Andrew Ninh,² Elise Tran,¹ Daniel Mai,¹ Michael Lugo,¹ Nabil El-Hage Chehade, MD,¹ Kenneth J. Chang, MD,¹ Williams E. Karnes, MD,¹ Jason Samarasena, MD¹

Orange, Irvine, California, USA

CLINICAL GASTROENTEROLOGY AND HEPATOLOGY 2013;11:1562-1570

SYSTEMATIC REVIEWS AND META-ANALYSES

Fasiha Kanwal, Section Editor

Advanced Imaging Technologies Increase Detection of Dysplasia and Neoplasia in Patients With Barrett's Esophagus: A Meta-analysis and Systematic Review

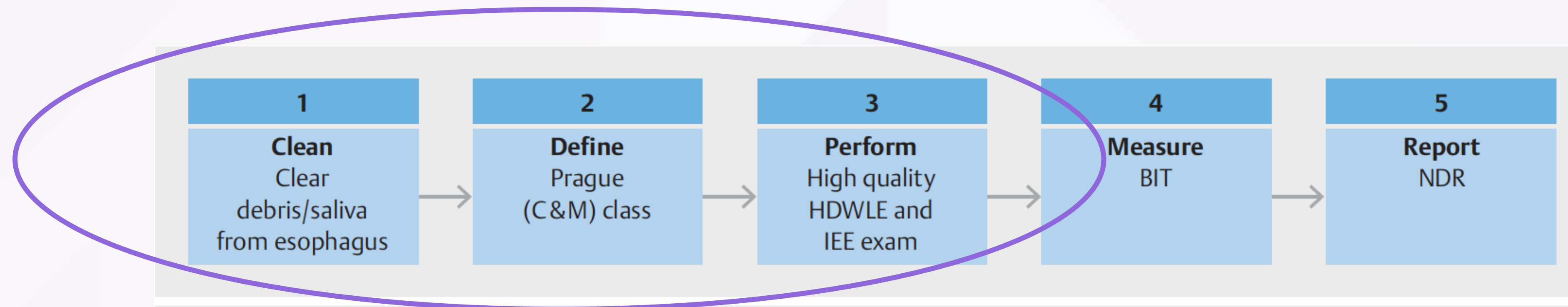
BASHAR J. QUMSEYA,^{*} HAIBO WANG,[†] NICOLE BADIE,[§] ROSEMARY N. UZOMBA,^{||} SRAVANTHI PARASA,[¶] DONNA L. WHITE,^{**} HERBERT WOLFSEN,^{**} PRATEEK SHARMA,^{**} and MICHAEL B. WALLACE^{**}

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PERSPECTIVAS FUTURAS EN GASTROENTEROLOGÍA



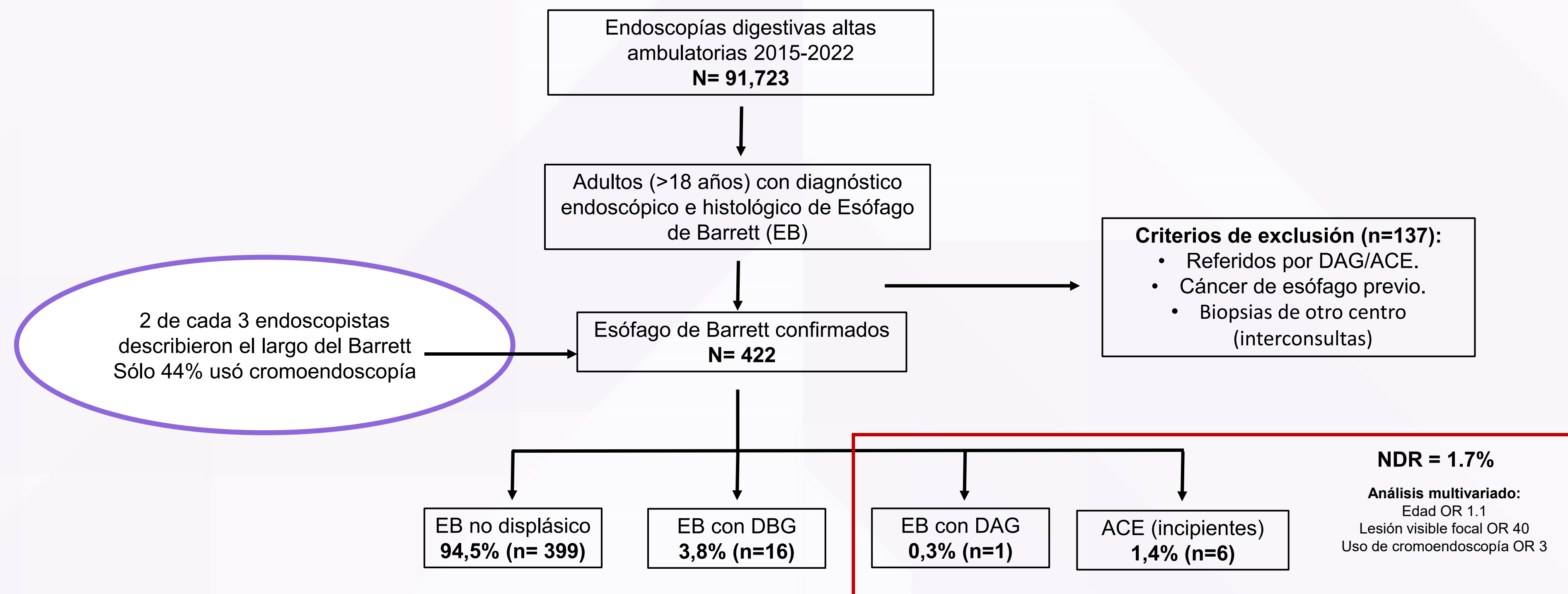
Endoscopia de alta calidad



► **Fig. 1** Components of a high quality Barrett's endoscopy. C&M, maximum circumferential length and maximum Barrett's length; HDWLE, high definition white-light endoscopy; IEE, image-enhanced endoscopy; BIT, Barrett's inspection time; NDR, neoplasia detection rate.

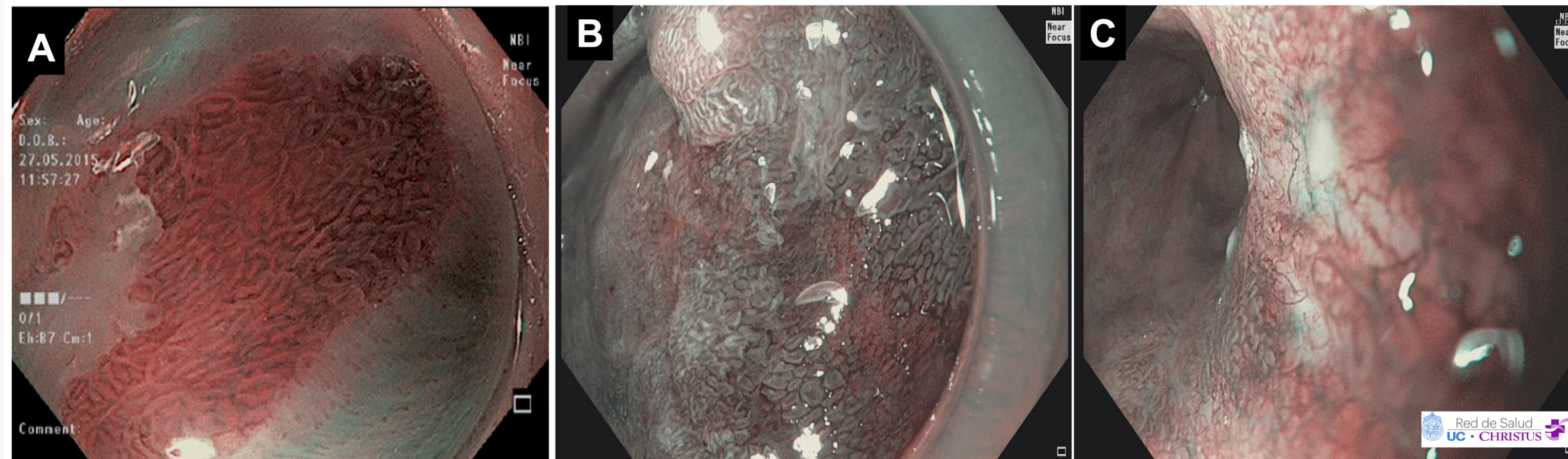


Esófago de Barrett en Chile: Caracterización de una cohorte endoscópica y factores de riesgo asociados con detección de displasia y cáncer



Mensajes para la casa

- Praga, BING, París, NDR, IA
- Sin la calidad endoscópica básica no podemos asegurar un adecuado diagnóstico y seguimiento a los pacientes, por lo tanto es necesario poner énfasis en la **oportunidad de la primera endoscopia de calidad**



¿Cómo optimizar el diagnóstico de displasia en Esófago de Barrett?

María Jesús Fuenzalida

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