

Dudas frecuentes en Gastroenterología

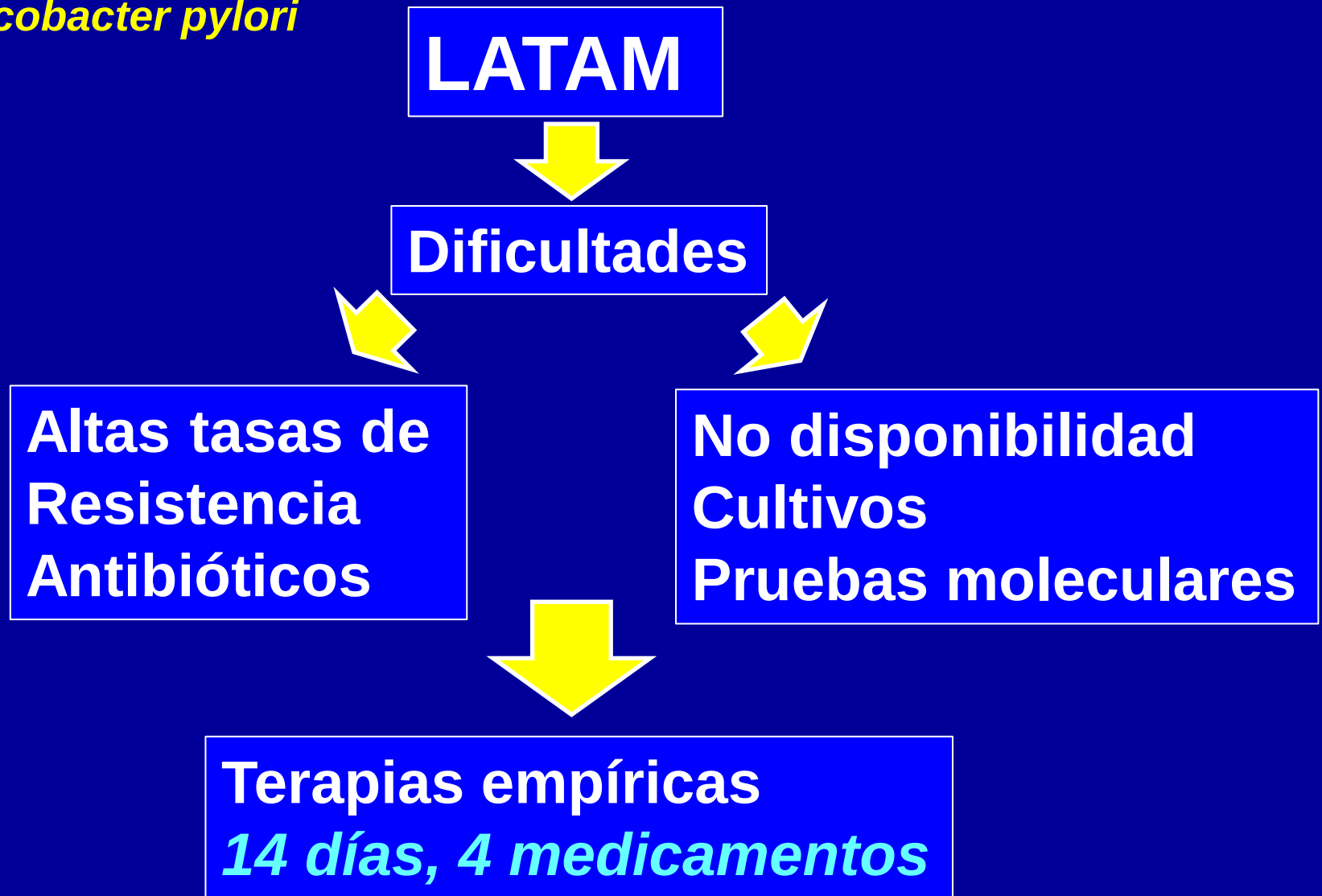
**William Otero R, MD, FAGA, FACP
Profesor Titular de Medicina,
Universidad Nacional de Colombia
Hospital Universitario Nacional de Colombia
Miembro Honorario SOVED
Miembro Honorario Sociedad Venezolana de
Gastroenterología**



***Nunca sabré si soy digno de que
Mis hermanos Venezolanos Me
honren con estas importantes
Membresías***

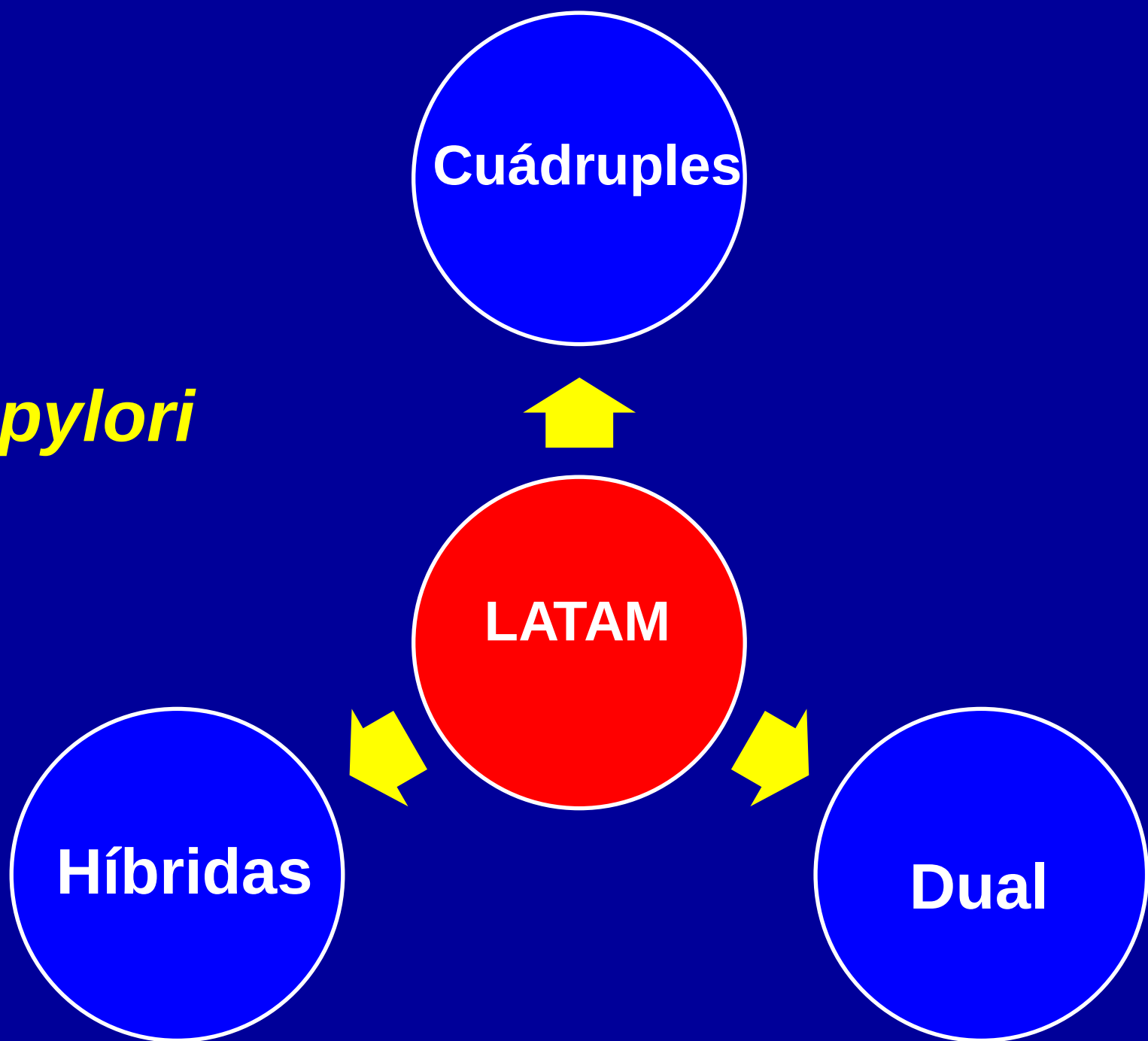
**Cuál es el mejor tratamiento erradicador
Para *Helicobacter pylori* en LATAM ?**

Helicobacter pylori

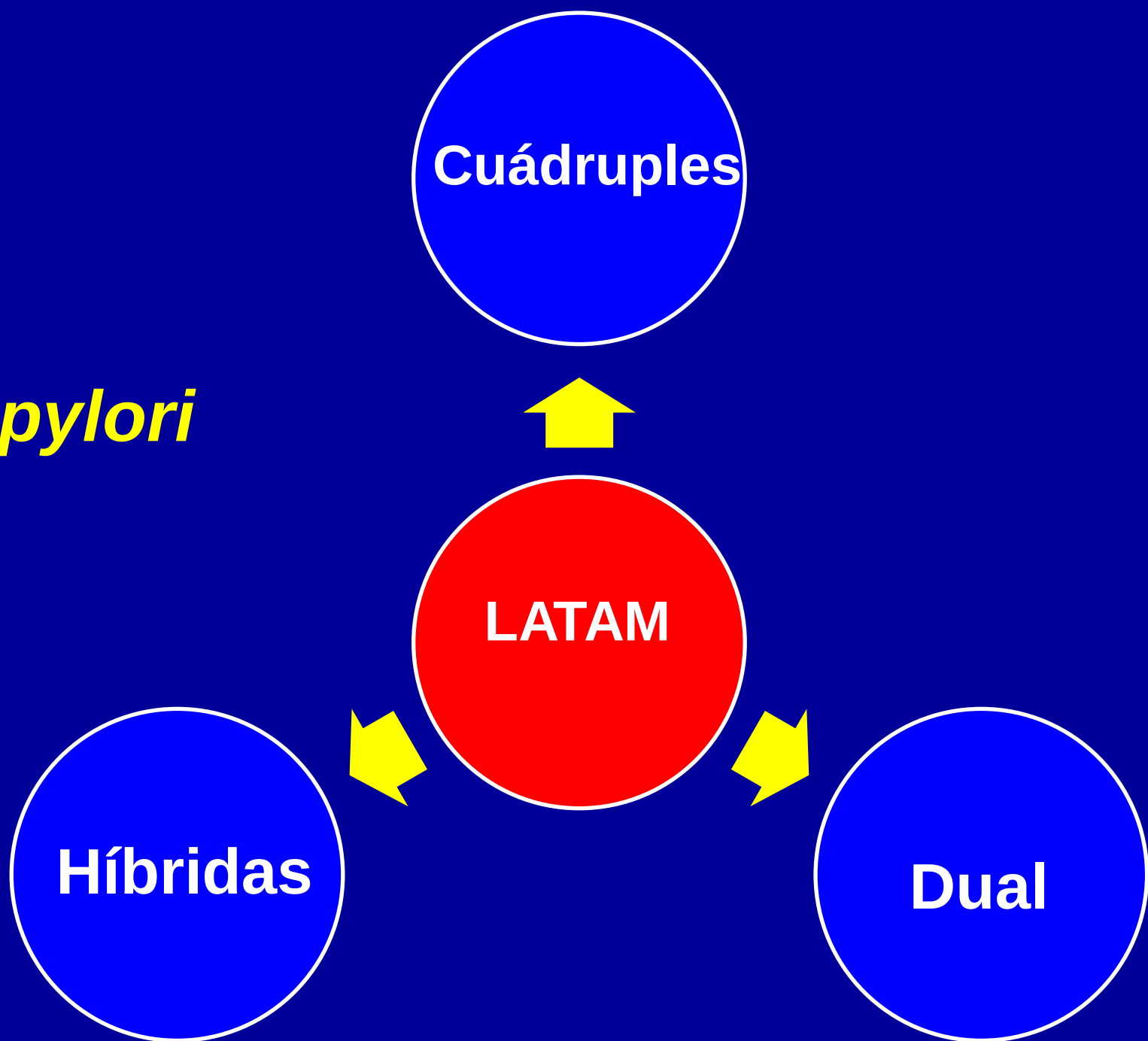


Otero W, et al. Revista GEN (Venezuela) 2019; 73: 90-98.

H.pylori



H.pylori



LATAM *Helicobacter* 1er tratamiento

**Cuádruples
Con bismuto**

Clásica

IBP: ayunas, antes de cena

Tetraciclina 500 mg C/6 h

Metronidazol 500 mg C/6 h

Furazolidona 100 mg 3vdía (Rescate)

Subsalicilato bismuto

2 Tabl desayuno y cena

Esomeprazol 40 mg 2v/d
Amoxicilina 1gr 3v/día
Claritromicina 500 mg 2v/día
Bismuto 2 tabl, 2v/día

Híbridas
Clásica
Reversa

Otras

IBP: ayunas,

Amoxicilina 1gr 3v/d

Tetraciclina 500 mg C/6 h

Bismuto 2 tabl (Subsalicilato)

IBP: ayunas, antes de cena

Amoxicilina 1gr 3v/d

Metronidazol 500 mg 4v/d

Bismuto 2 tabl 2v/d (Subsalicilato)

**Amoxicilina
Resistencia <5%**

Esomeprazol 40 mg 2v/d 14 d

Amoxicilina 1gr 3v/día

Última semana:

Tetraciclina 500 mg 2v/d

Bismuto 2 tabl, 2v/día

Reversa: 1era semana
4 medicamentos

PPI-amoxicillin dual therapy for *Helicobacter pylori* infection: An update based on a systematic review and meta-analysis

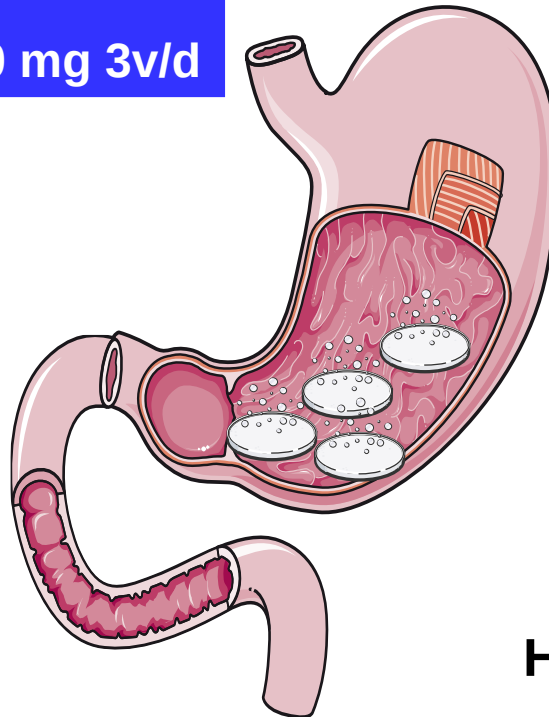
Cai-Ping Gao¹ | Di Zhang¹ | Ting Zhang¹ | Jin-Xia Wang¹ | Sheng-Xi Han¹ |
David Y. Graham²  | Hong Lu^{3,4} 

Dual

Amoxicilina

1gr 3v/dia o 750 mg cada 6h?

Dosis altas IBP
Esomeprazol 40 mg 3v/d



Helicobacter 2020, Mayo 25



Otero W, et al. Revista GEN (Venezuela) 2019;73:90-8.

Terapias de rescate

Terapias de salvamento o rescate (1)

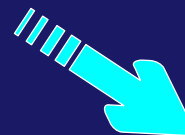
Tres tratamientos previos fallidos



**Cuádruple
Furazolidona
14 días**



**IBP 2v/d +
FZLD 100 mg 3v/día +
Tetraciclina o Amoxi 3-4 v/d
Bismuto 2v/día**



**Rifabutina
Triple o cuádruple
10 días**



**IBP 2 v/día +
Rifabutina 150 mg 2v/día +
Amoxi 3-4v/d
Bismuto 2v/d 96.6%**

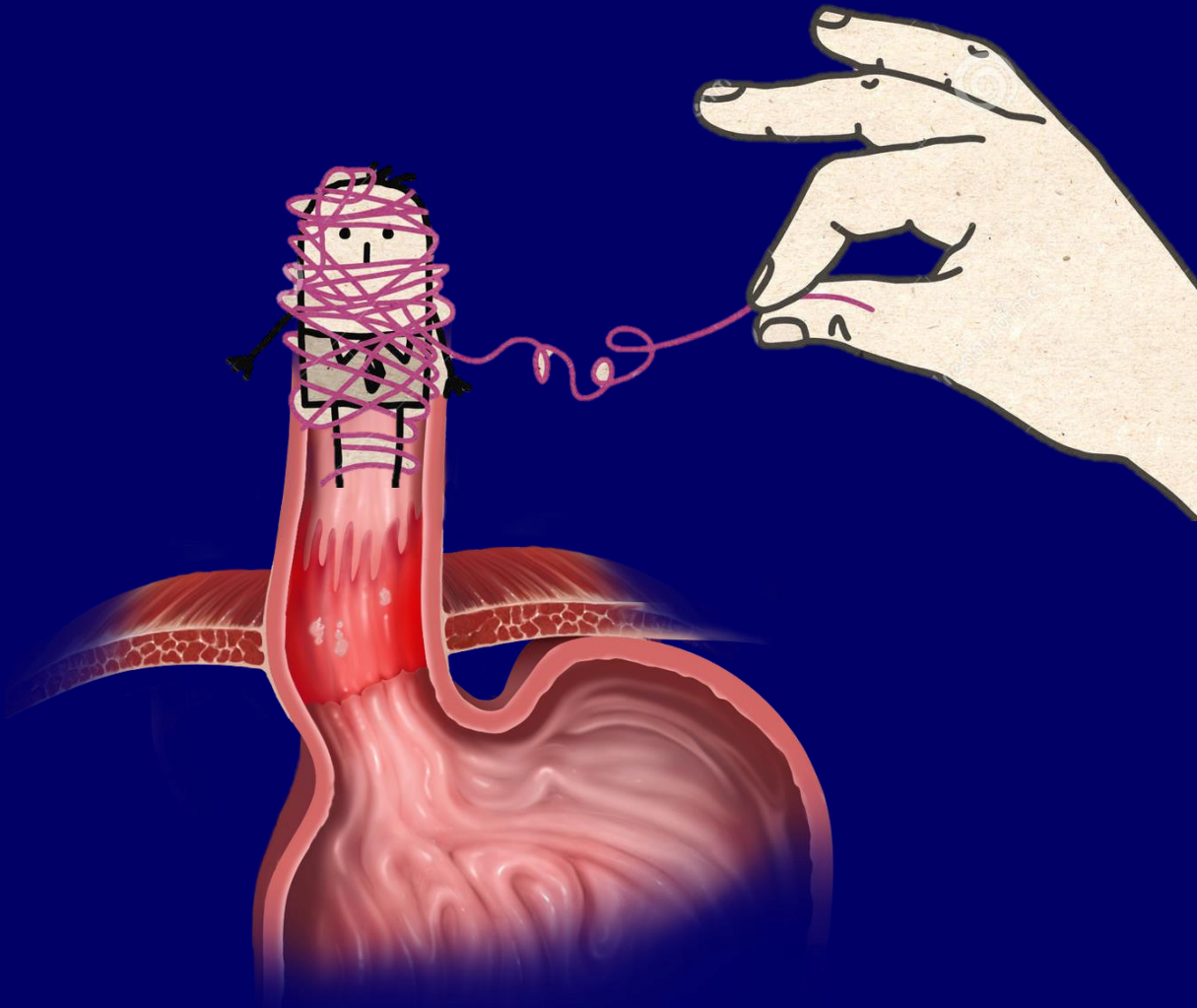
H. pylori
Erradicación

Quinolonas

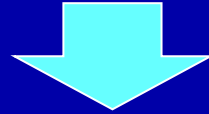
**Solamente si no hay
Otros antibióticos**

Pirosis funcional VS ERGE Refractario

Qué hacer en cada caso ?



**ERGE
Refractario**



**IBP 2V/día
8-12 semanas**



**Causa más frecuente de
Remisión gastroenterología**

Yadlapati R, Med Clin North Am 2019;103:15–27.

Sifrim D,. Gut 2012;61:1340–54

Spechler SJ, Gastrointest Endoscopy Clin N Am 2020;30:343–59

Pirosis falta de respuesta a IBP

EVDA con biopsias,
excluir Esofagitis Eo

Anormal → Tratar EEO

Normal

pH-metría o pH-Impedanciometría

Anormal

Evidencia
Adicional
Reflujo

Tiempo EA
Límite 4-6%

Patológico
TEA >6%

Positivo

ERGE

ERGE

Fisiológico <4%
Asociación
Síntomas (-)

Fisiológico <4%
Asociación
Síntomas (+)

Manometría alta resolución con
O Sin impedanciometría

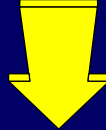
No desorden
Motor Mayor
Acalasia pirosis 35%

Hipersensibilidad
Al Reflujo

Negativo

Pirosis
Funcional

***ERGE Sin
Respuesta a IBP***



Impedanciometría pH-metría !

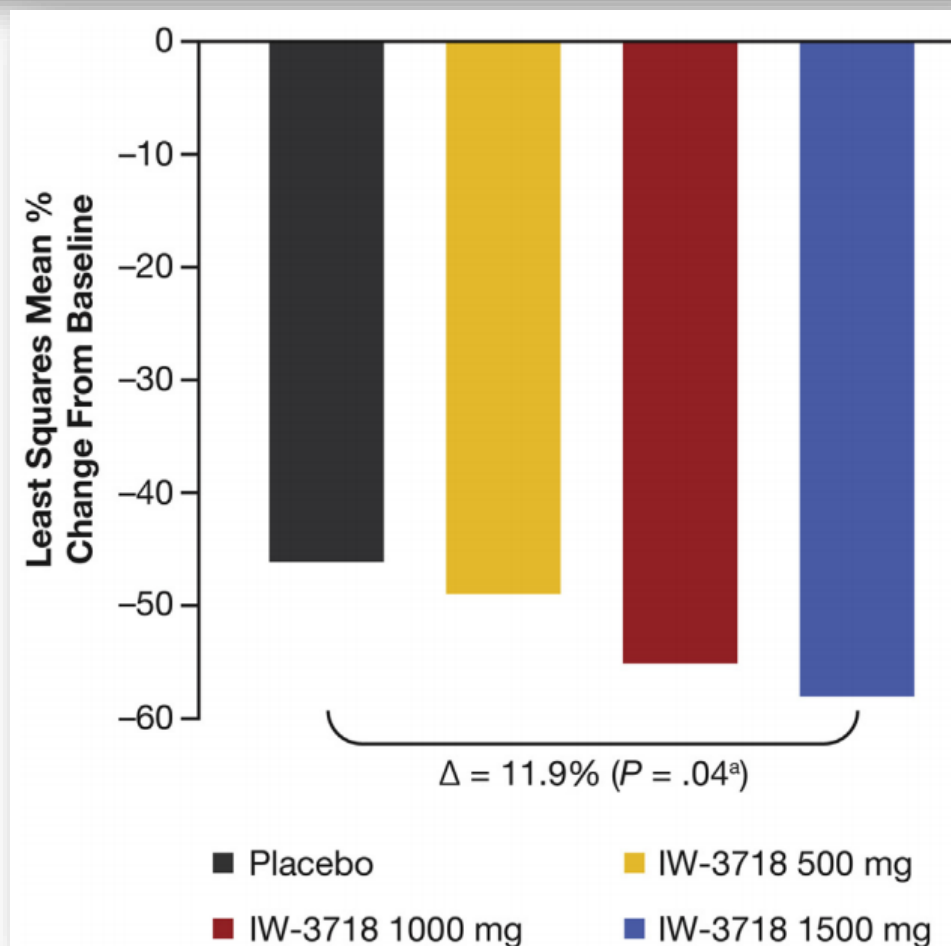


IW-3718 Reduces Heartburn Severity in Patients With Refractory Gastroesophageal Reflux Disease in a Randomized Trial



Michael F. Vaezi,¹ Ronnie Fass,² Nimish Vakil,³ David S. Reasner,⁴ Robert S. Mittleman,⁴ Michael Hall,⁴ James Z. Shao,⁴ Yan Chen,⁴ Lara Lane,⁴ Amy M. Gates,⁴ and Mark G. Currie⁴

**Colesevelam (Secuestrador de Ácidos biliares) liberado y retenido en el estómago
Adicionado a IBP 1v/dia
En pacientes sin respuesta
Al IBP.
El colesvelam atrapa ácidos biliares e impide que lleguen al esófago**



ERGE Sin Respuesta a IBP

**Esófago
Normal?**

**IMC
>25**

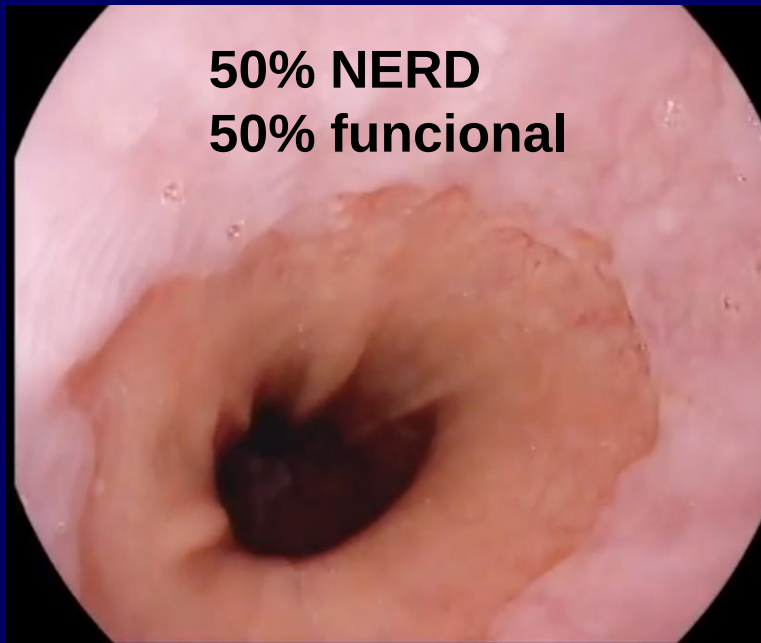
Tabaco

Estrés?

**Prescripción
Correcta ?**

**Doblar
La dosis**

**Cambiar a
Otro IBP**



Lozano J, Otero W, 2018-2020, en curso

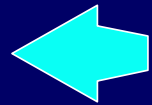
ERGE: Abordaje Terapéutico

Universidad Nacional de Colombia

Pirosis 2v/semana



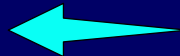
Erosiones
C o D 34%



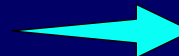
Endoscopia



NERD 50%



Normal 70%



Funcional
PF 60%
HS 40%



IBP 1v/día

(+)



(-)



86%, Lozano, Otero, Marulanda
Sometido a publicación

Optimizar manejo, IBP
<Peso, tabaco, estrés
2da dosis IBP
Neuromoduladores
Impedanciometría/pH ?

Antecedentes

Pirosis-Agrieras Endoscopia (-)

Verdadero NERD: 40-45%
Impedacio-pH (+)

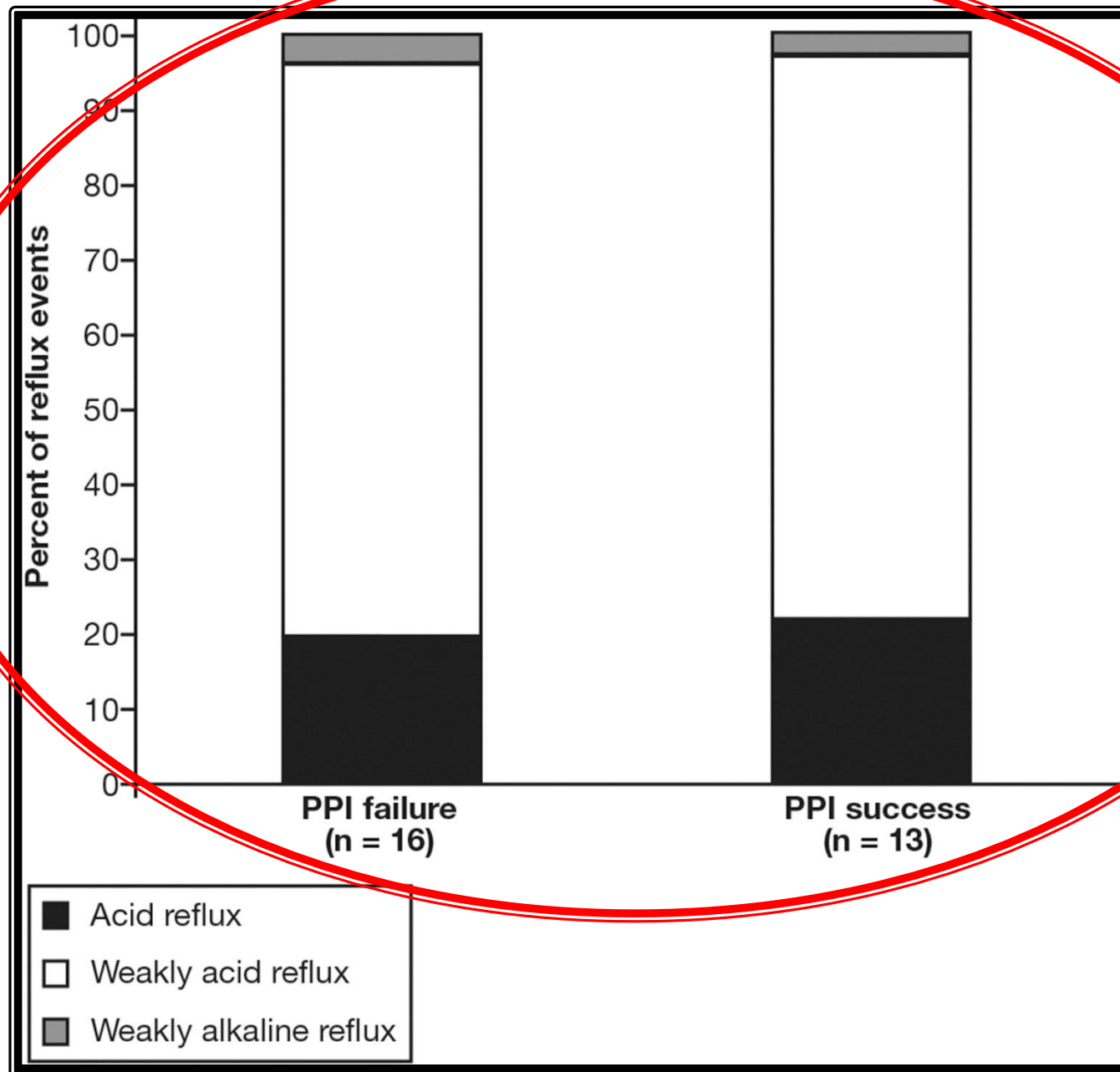
Pirosis funcional 20-25%
IPDM-pH (-) Correlación (-)

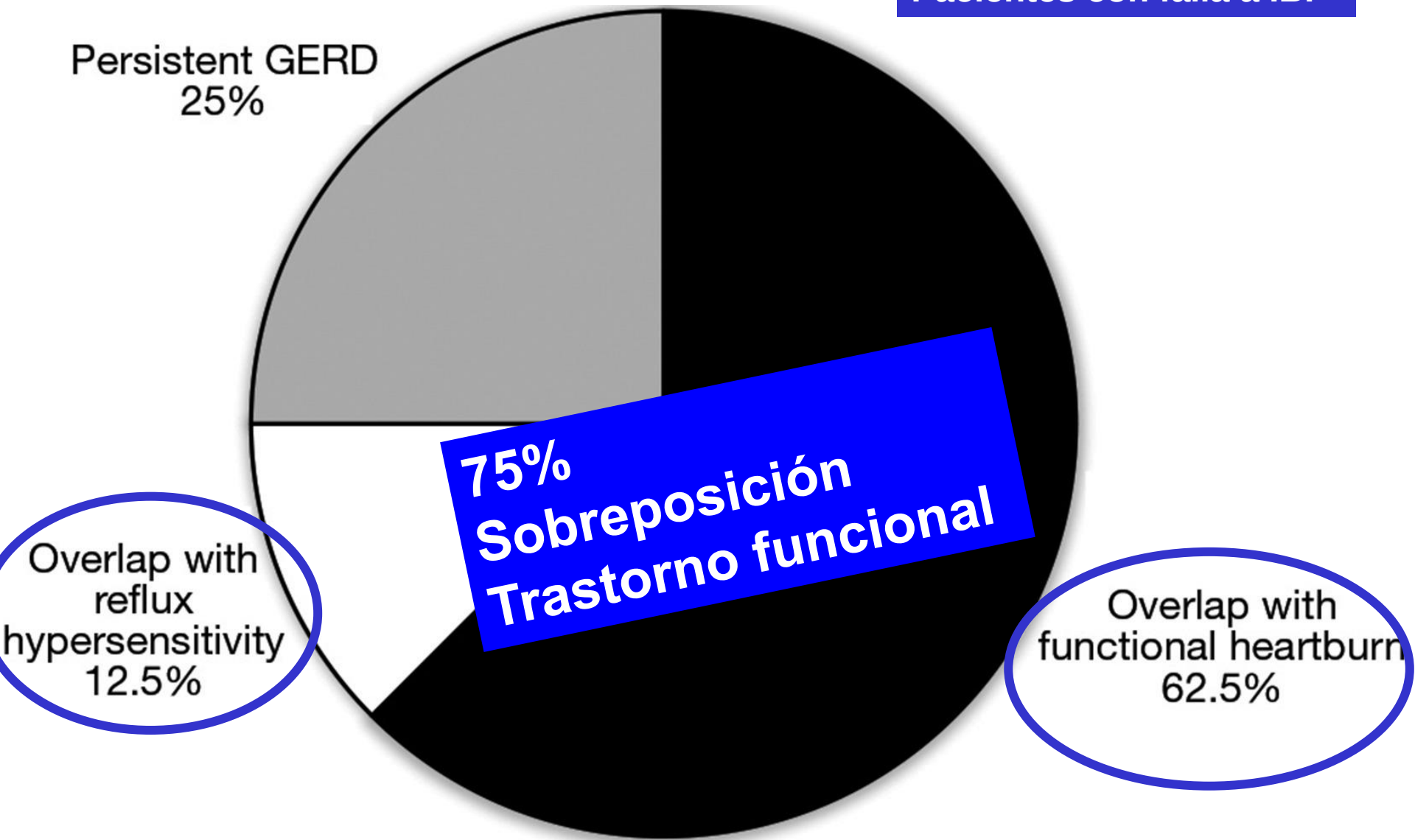
**Hipersensibilidad a
Reflujo 27-35%**
Impedancio-pH (-)
**Correlación +
Síntomas**

**Pirosis Persistente
Con IBP 2v/d**
90%
Trastorno funcional

Roma IV, 2016







Pirosis funcional Tratamiento



```
graph TD; A[Pirosis funcional Tratamiento] --> B[Medicina Alternativa Complementaria ?]; A --> C[Neuro Moduladores Viscerales];
```

**Medicina
Alternativa
Complementaria ?**

**Neuro
Moduladores
Viscerales**

Fass R, Gastroenterology 2020;158:2286–2293

Spechler SJ, Gastrointest Endoscopy Clin N Am 2020;30:343–59



Neuromoduladores Viscerales

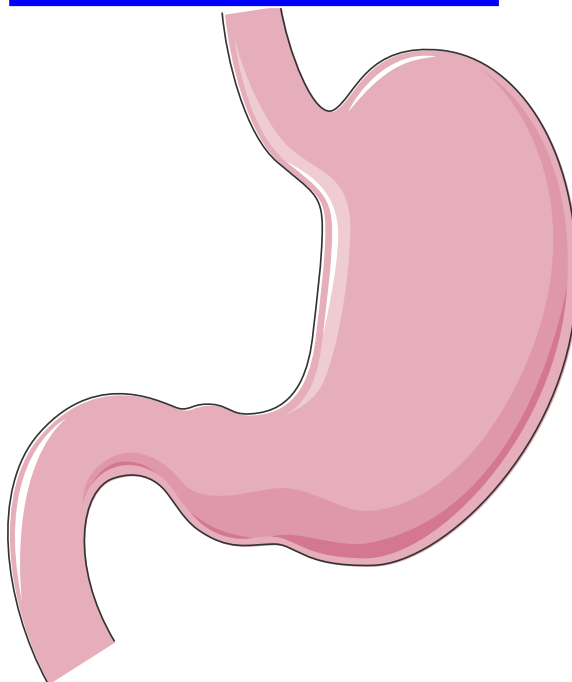


TABLE 2

Neuromodulators to treat functional esophageal disorders

Tricyclic antidepressants

(in descending order of efficacy and descending order of anticholinergic effects)

Imipramine
Amitriptyline
Desipramine
Nortriptyline

Dosing: Start at 10 mg every night at bedtime; increase by 10 mg every 2–4 weeks

Selective serotonin reuptake inhibitors

Citalopram
Fluoxetine
Sertraline

Dosing: Start at lowest dose; increase after 4–6 weeks

Trazodone

Dosing: Start at 50 mg every night at bedtime; increase by 50 mg every 2–4 weeks

Serotonin and norepinephrine reuptake inhibitors

Venlafaxine
Duloxetine

Dosing: Start at lowest dose; increase every 4–6 weeks as needed

Tratamiento no farmacológico

Asociación

Insomnio

Estrés

Ansiedad

Burnout



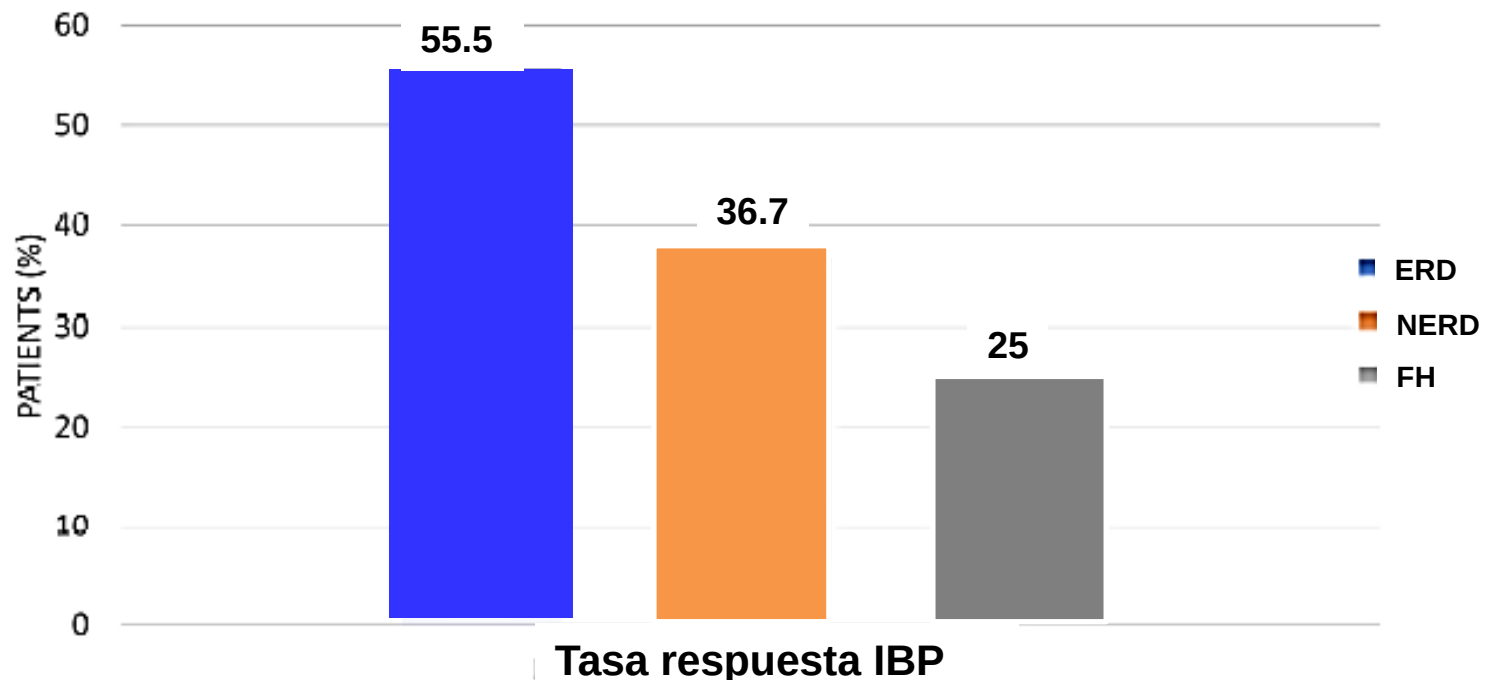
Educación

Curso benigno

Traquilidad es la clave

Pirosis funcional tratamiento

~~Medidas anti reflujo
Cirugía
IBP~~



Esofagitis eosinofílica

Cómo se diagnostica ?

Cómo se trata ?

Esofagitis eosinofílica

Attwood SE, J Allergy Clin Immunol 993;128:3-20

50-100 casos
 10^5 personas

3

50-100 casos
 10^5 personas

1

Niños 5.4-9.9 años
Adultos 30-50 años

Similar a
EII !!

Gómez-Torrijoas E, Front Med 2018;5:247
Dellon ES, Gastroenterology 2018;154:319-32

AGA Institute and the Joint Task Force on Allergy-Immunology Practice Parameters Clinical Guidelines for the Management of Eosinophilic Esophagitis



Ikuo Hirano,¹ Edmond S. Chan,² Matthew A. Rank,³ Rajiv N. Sharaf,⁴ Neil H. Stollman,⁵ David R. Stukus,⁶ Kenneth Wang,⁷ Matthew Greenhawt,⁸ and Yngve T. Falck-Ytter,⁹ on behalf of the AGA Institute Clinical Guidelines Committee and the Joint Task Force on Allergy-Immunology Practice Parameters

Gastroenterology 2020;158:1776–1786

REVIEWS IN BASIC AND CLINICAL GASTROENTEROLOGY AND HEPATOLOGY

Douglas J. Robertson and Vincent W. Yang, Section Editors

Approaches and Challenges to Management of Pediatric and Adult Patients With Eosinophilic Esophagitis



Ikuo Hirano¹ and Glenn T. Furuta²

Gastroenterology 2020;158:840–851

Approaches and Challenges to Management of Pediatric and Adult Patients With Eosinophilic Esophagitis

Ikuo Hirano¹ and Glenn T. Furuta²

Gastroenterology 2020;158:840–851

Clinica

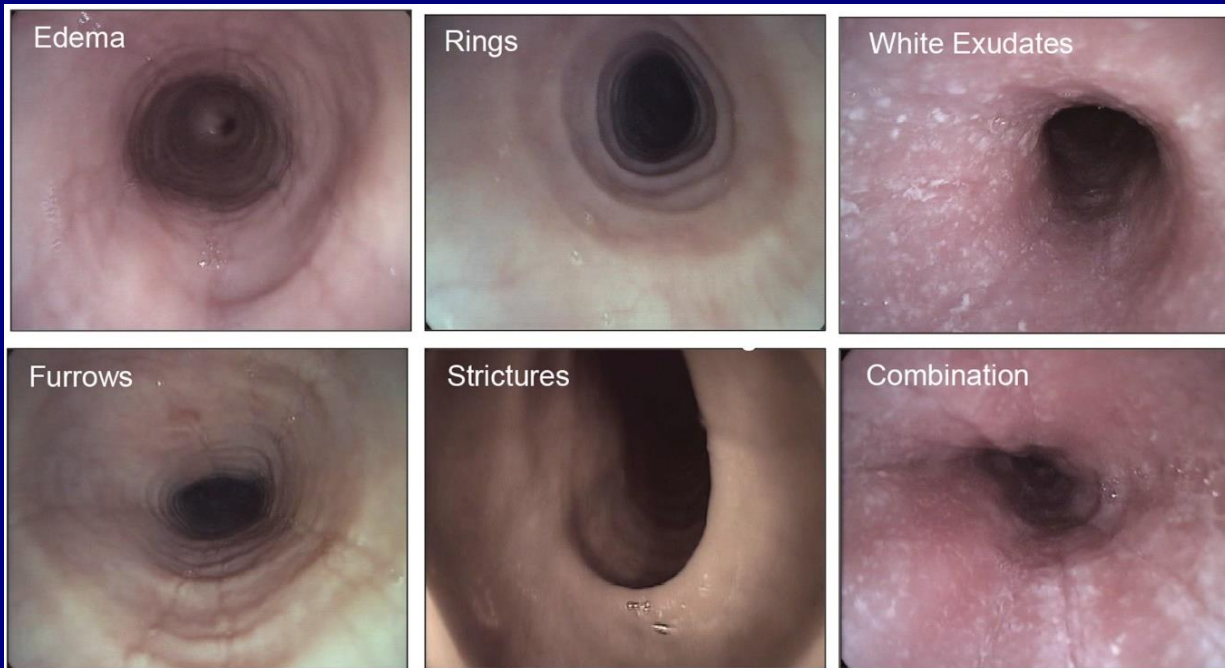
**Adolescentes
Adultos**

Disfagia, Impactación, Alimentos
Pirosis refractaria

Niños

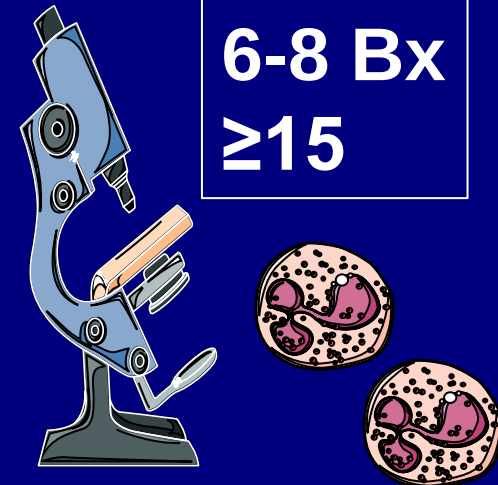
<Crecimiento, Vómito, pirosis
Malestar abdominal

Endoscopia



Histología

**6-8 Bx
≥15**



EEo-Tratamiento

Respuesta estandarizada

No existe

FDA

Histopatología
Síntomas

Endoscopia

Objetivo
Secundario

Lyond E, Gastroenterology 2019;157:275-77
Dellon ES, Clin Gastroenterol Hepatol 2019;17:2149-60
Hirano I, Clin gastroenterol,Hepatol 2017;15:1173-83

Esofagitis eosinofílica

Tratamiento

IBP

Esteroides tópicos

Dieta

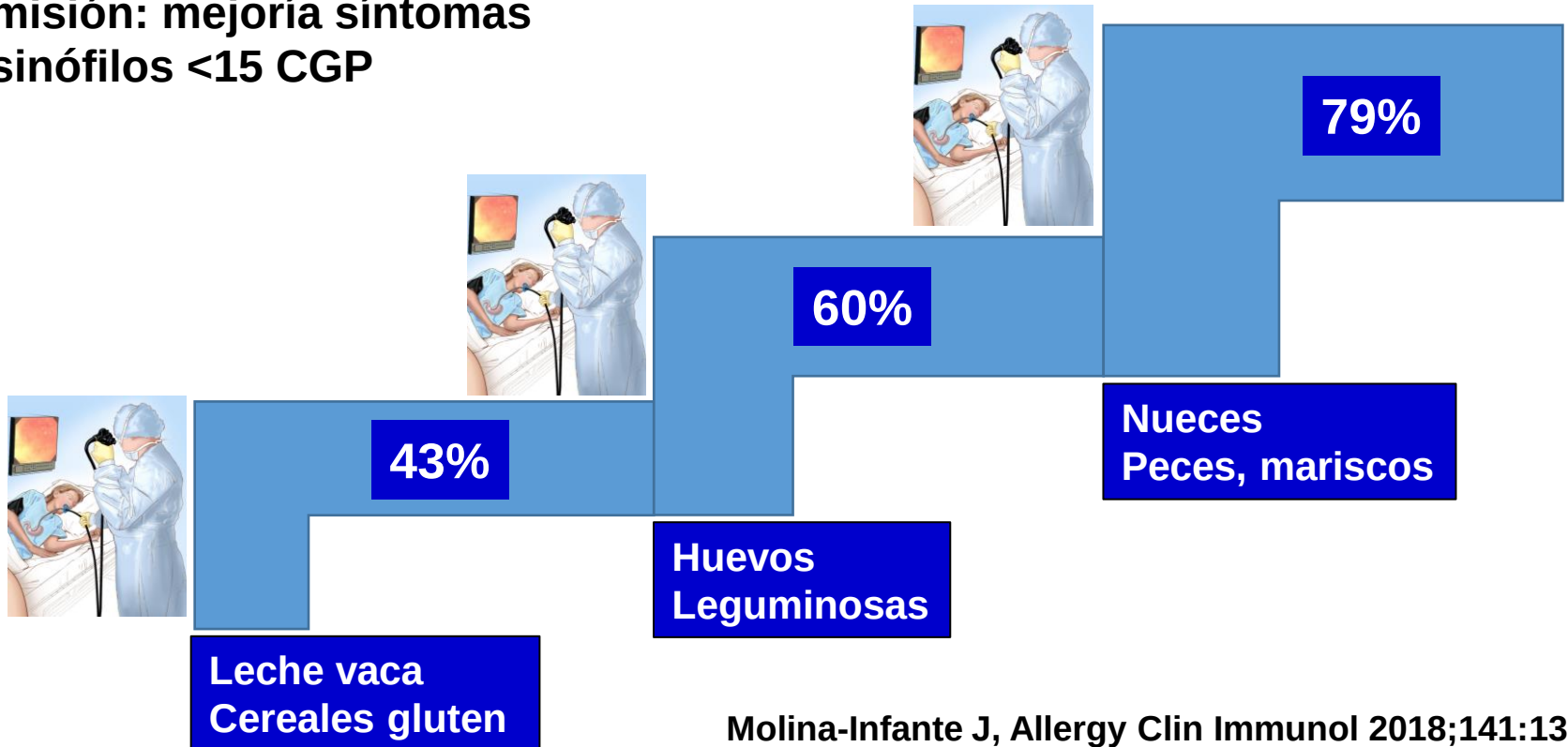
Step-up empiric elimination diet for pediatric and adult eosinophilic esophagitis: The 2-4-6 study

Javier Molina-Infante, MD, PhD,^{a,b} Ángel Arias, MSc, BSc,^{b,c} Javier Alcedo, MD, PhD,^d
Ruth Garcia-Romero, MD, PhD,^e Sergio Casabona-Frances, MD,^f Alicia Prieto-Garcia, MD, PhD,^g
Ines Modolell, MD, PhD,^h Pedro L. Gonzalez-Cordero, MD,^a Isabel Perez-Martinez, MD, PhD,ⁱ
Jose Luis Martin-Lorente, MD, PhD,^j Carlos Guarner-Argente, MD, PhD,^k Maria L. Masiques, MD,^l
Victor Vila-Miravet, MD,^m Roger Garcia-Puig, MD,ⁿ Edoardo Savarino, MD, PhD,^o
Carlos Teruel Sanchez-Vegazo, MD,^p Cecilio Santander, MD, PhD,^{b,f} and Alfredo J. Lucendo, MD, PhD^b.

130 pacientes

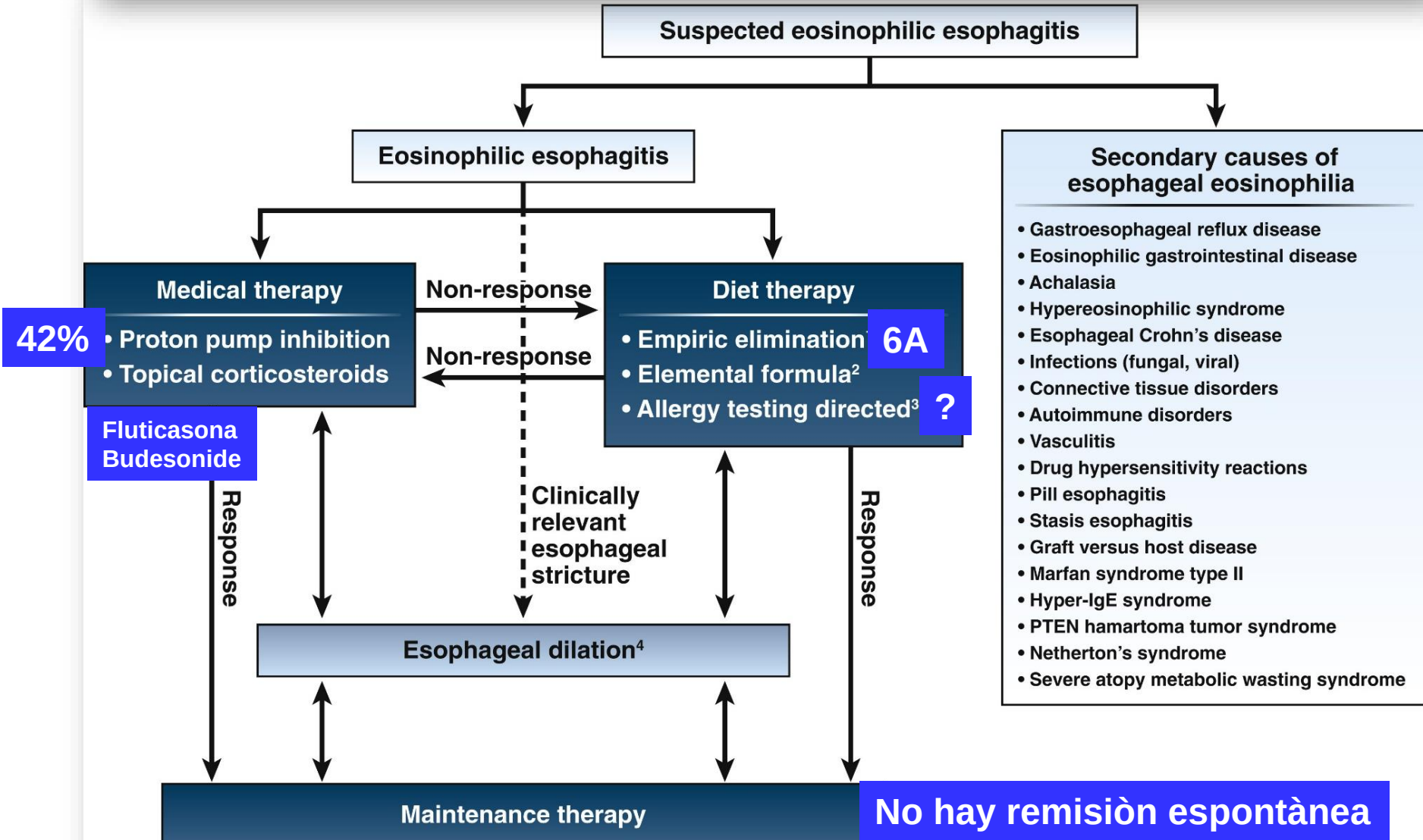
Remisión: mejoría síntomas

Eosinófilos <15 CGP



Treatment of Eosinophilic Esophagitis (EoE)

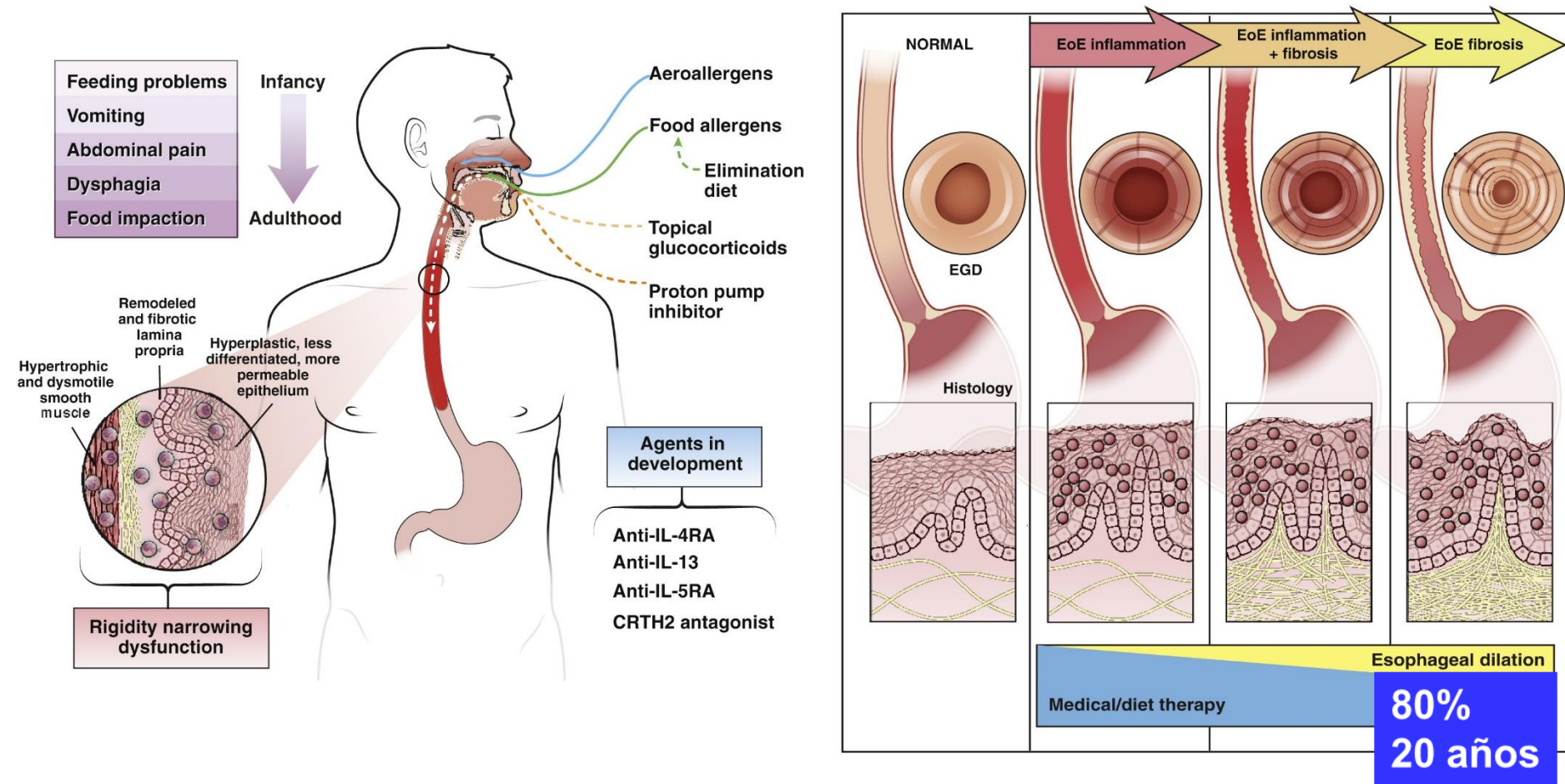
Clinical Decision Support Tool



Spotlight: Treatment of Eosinophilic Esophagitis (EoE)

Ikuo Hirano, MD¹; Ravi Sharaf, MD²; Neil Stollman, MD³; Kenneth Wang, MD⁴; Yngve Falck-Ytter, MD, AGAF⁵

Collaborators: Edmond Chan, MD⁶; Matthew Rank, MD⁷; David Stukus, MD⁸; Matthew Greenhawt, MD, MBa, MSc⁹



Gastrotección

Lo estamos haciendo bien ?



REVISTA DE GASTROENTEROLOGÍA DE MÉXICO

www.elsevier.es/rgmx

GUÍAS Y CONSENSOS

Consenso mexicano sobre diagnóstico, prevención y tratamiento de la gastropatía y enteropatía por antiinflamatorios no esteroideos

M.V. Bielsa-Fernández^{a,*}, J.L. Tamayo-de la Cuesta^b, J. Lizárraga-López^c, J.M. Remes-Troche^d, R. Carmona-Sánchez^e, J.M. Aldana-Ledesma^f, J.M. Avendaño-Reyes^g, M.A. Ballesteros-Amozorrutia^h, M. De Ariñoⁱ, L. de Giau-Triulzi^j, R. Flores-Rendón^j, H. Huerta-Guerrero^k, J.A. González-González^l, A. Hernández-Guerrero^m, E. Murcio-Pérezⁿ, J.O. Jáquez-Quintana^l, A. Meixueiro-Daza^d, J.R. Nogueira-de Rojas^o, H. Rodríguez-Hernández^p, R. Santoyo-Valenzuela^q, S.C. Solorzano-Olmos^r, L.F. Uscanga-Domínguez^s y F. Zamarripa-Dorsey^t

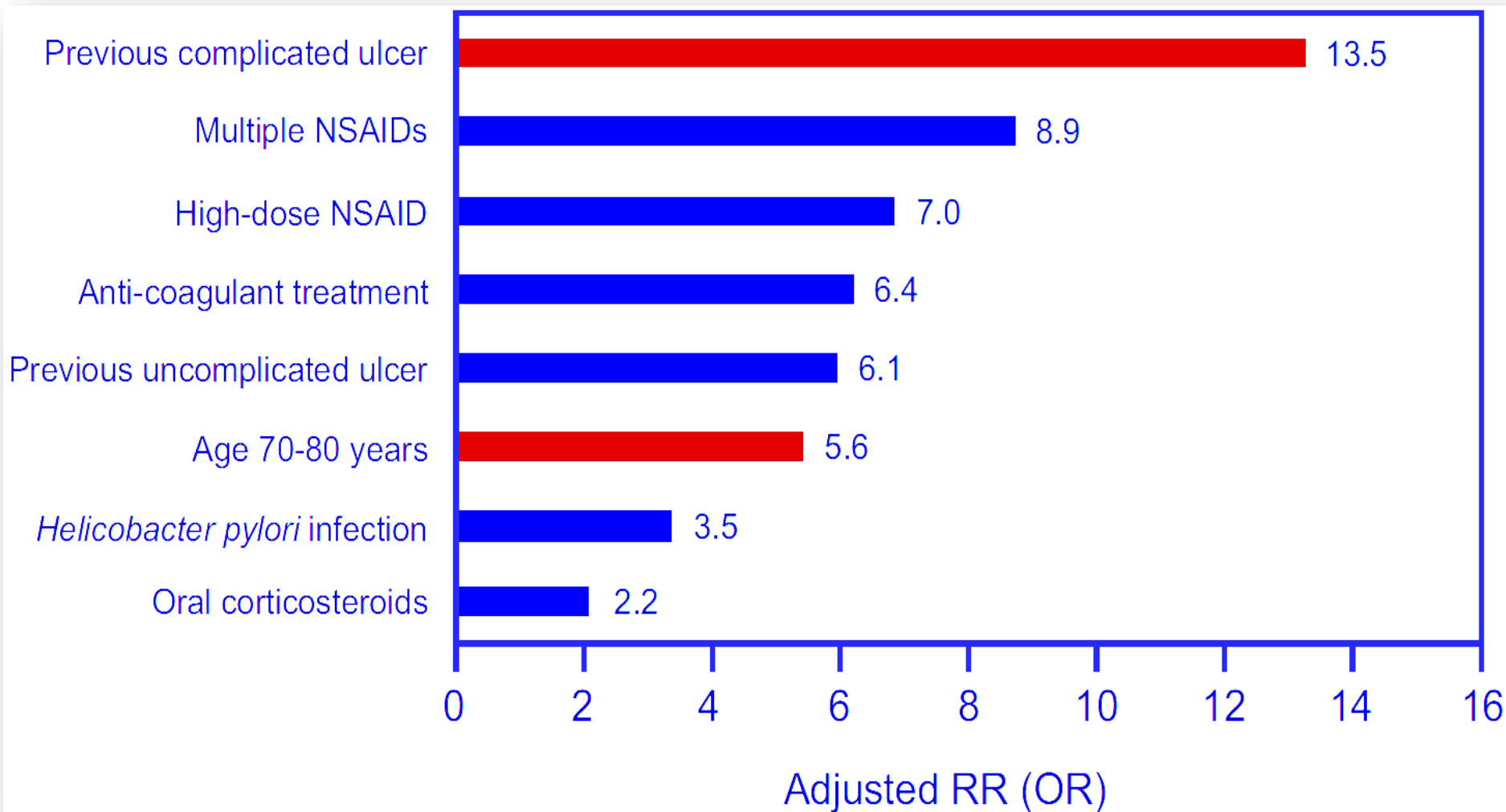
AINES y patología GI Superior

Necesidad de IBP profilactico

>30 millones consumen AINES

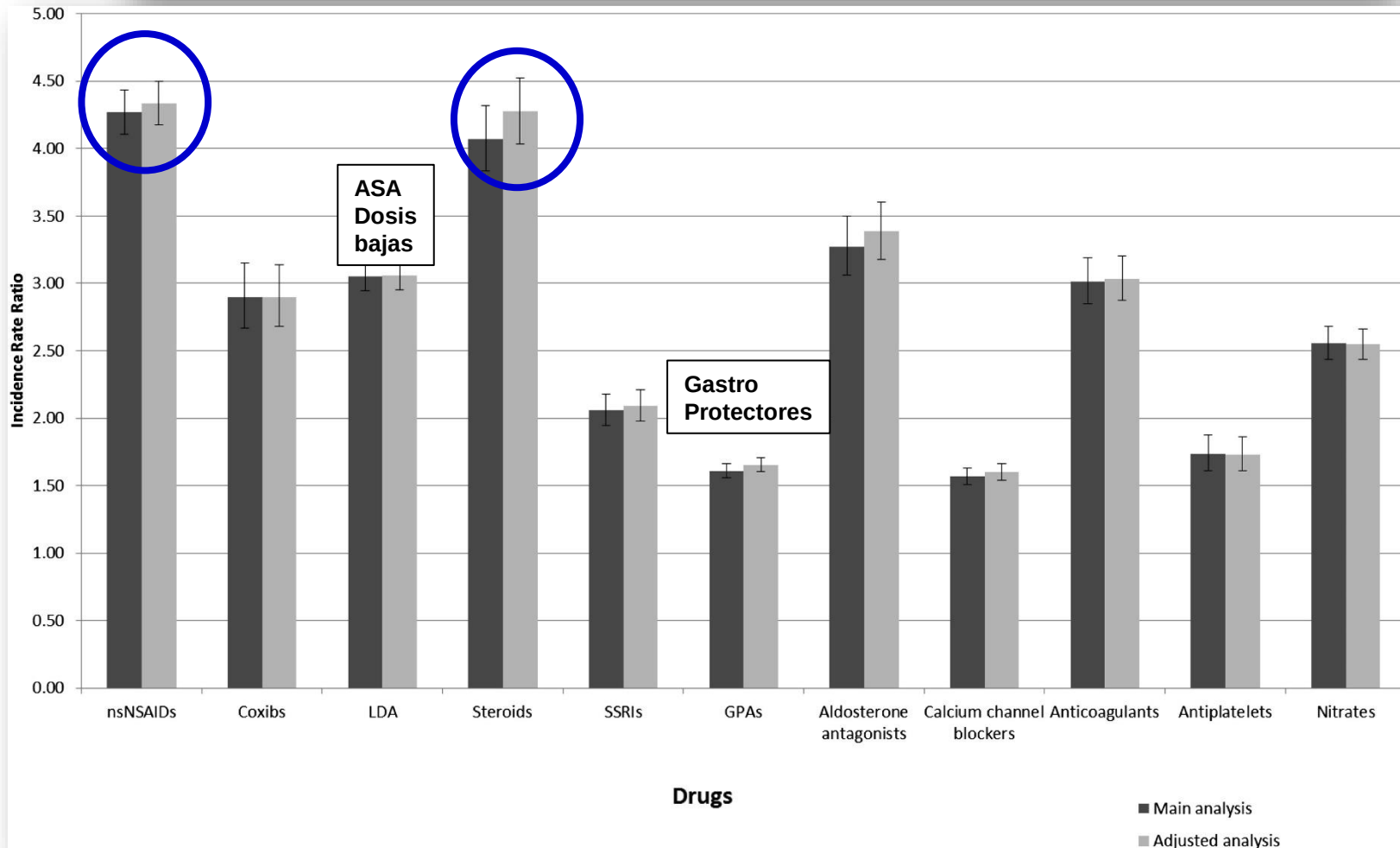
Singh G, J Rheumatol. 1999;56:18-24

Factores de riesgo para HVDA



Risk of Upper Gastrointestinal Bleeding From Different Drug Combinations

Gwen M. C. Masclee,^{1,2} Vera E. Valkhoff,^{1,2} Preciosa M. Coloma,¹ Maria de Ridder,^{1,3} Silvana Romio,¹ Martijn J. Schuemie,¹ Ron Herings,^{1,4} Rosa Gini,^{1,5} Giampiero Mazzaglia,⁶ Gino Picelli,⁷ Lorenza Scotti,⁸ Lars Pedersen,⁹ Ernst J. Kuipers,^{2,10} Johan van der Lei,¹ and Miriam C. J. M. Sturkenboom^{1,11}



Guidelines for Prevention of NSAID-Related Ulcer Complications

Frank L. Lanza, MD, FACG^{1,2}, Francis K.L. Chan, MD, FRCP, FACG³, Eamonn M.M. Quigley, MD, FACG⁴ and the Practice Parameters Committee of the American College of Gastroenterology

Table 1. Patients at increased risk for NSAID GI toxicity

High risk

1. History of a previously complicated ulcer, especially recent
2. Multiple (>2) risk factors

Moderate risk (1–2 risk factors)

1. Age >65 years
2. High dose NSAID therapy
3. A previous history of uncomplicated ulcer
4. Concurrent use of aspirin (including low dose) corticosteroids or anticoagulants

Low risk

1. No risk factors

Table 2. Summary of recommendations for prevention of NSAID-related ulcer complications

	Gastrointestinal risk ^a		
	Low	Moderate	High
Low CV risk	NSAID alone (the least ulcerogenic NSAID at the lowest effective dose)	NSAID+PPI/misoprostol	Alternative therapy if possible or COX-2 inhibitor+PPI/misoprostol
High CV risk ^b (low-dose aspirin required)	Naproxen + PPI/misoprostol	Naproxen + PPI/misoprostol	Avoid NSAIDs or COX-2 inhibitors. Use alternative therapy

^aGastrointestinal risk is stratified into low (no risk factors), moderate (presence of one or two risk factors), and high (multiple risk factors, or previous ulcer complications, or concomitant use of corticosteroids or anticoagulants). ^bHigh CV risk is arbitrarily defined as the requirement for low-dose aspirin for prevention of serious CV events. All patients with a history of ulcers who require NSAIDs should be tested for *H. pylori*, and if the infection is present, eradication therapy should be given.

Lanza FK, Am J Gastroenterol 2009; 104:728 – 738

Profilaxis Gastroduodenal

*Edad > 60 años, / 45 o más**

Esteroides

Anticoagulantes

Antiplaquetarios

NICE 2015

Estrategias para disminuir/evitar Toxicidad gastroduodenal

Inhibidores de COX2 (CV)
Erradicar *H.pylori*
Coterapia profiláctica

Expertos
Asociaciones científicas

Fifth Chinese National Consensus Report on the management of *Helicobacter pylori* infection

Helicobacter 2018;23:e12475

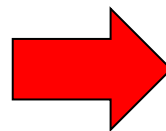
Wen Zhong Liu¹ | Yong Xie² | Hong Lu¹ | Hong Cheng³ | Zhi Rong Zeng⁴ |
Li Ya Zhou⁵ | Ye Chen⁶ | Jiang Bin Wang⁷ | Yi Qi Du⁸ | Nong Hua Lu²  | on behalf
of Chinese Society of Gastroenterology, Chinese Study Group on *Helicobacter pylori* and Peptic
Ulcer

Management of *Helicobacter pylori* infection—the Maastricht V/Florence Consensus Report

Gut 2016;0:1–25

P Malfertheiner,¹ F Megraud,² C A O'Morain,³ J P Gisbert,^{4,5} E J Kuipers,⁶ A T Axon,⁷
F Bazzoli,⁸ A Gasbarrini,⁹ J Atherton,¹⁰ D Y Graham,¹¹ R Hunt,^{12,13} P Moayyedi,¹⁴
T Rokkas,¹⁵ M Rugge,¹⁶ M Selgrad,¹⁷ S Suerbaum,¹⁸ K Sugano,¹⁹ E M El-Omar,²⁰
on behalf of the European Helicobacter and Microbiota Study Group and Consensus panel

AINES/ASA
1era vez



Erradicación
H.pylori

Coterapias con AINES

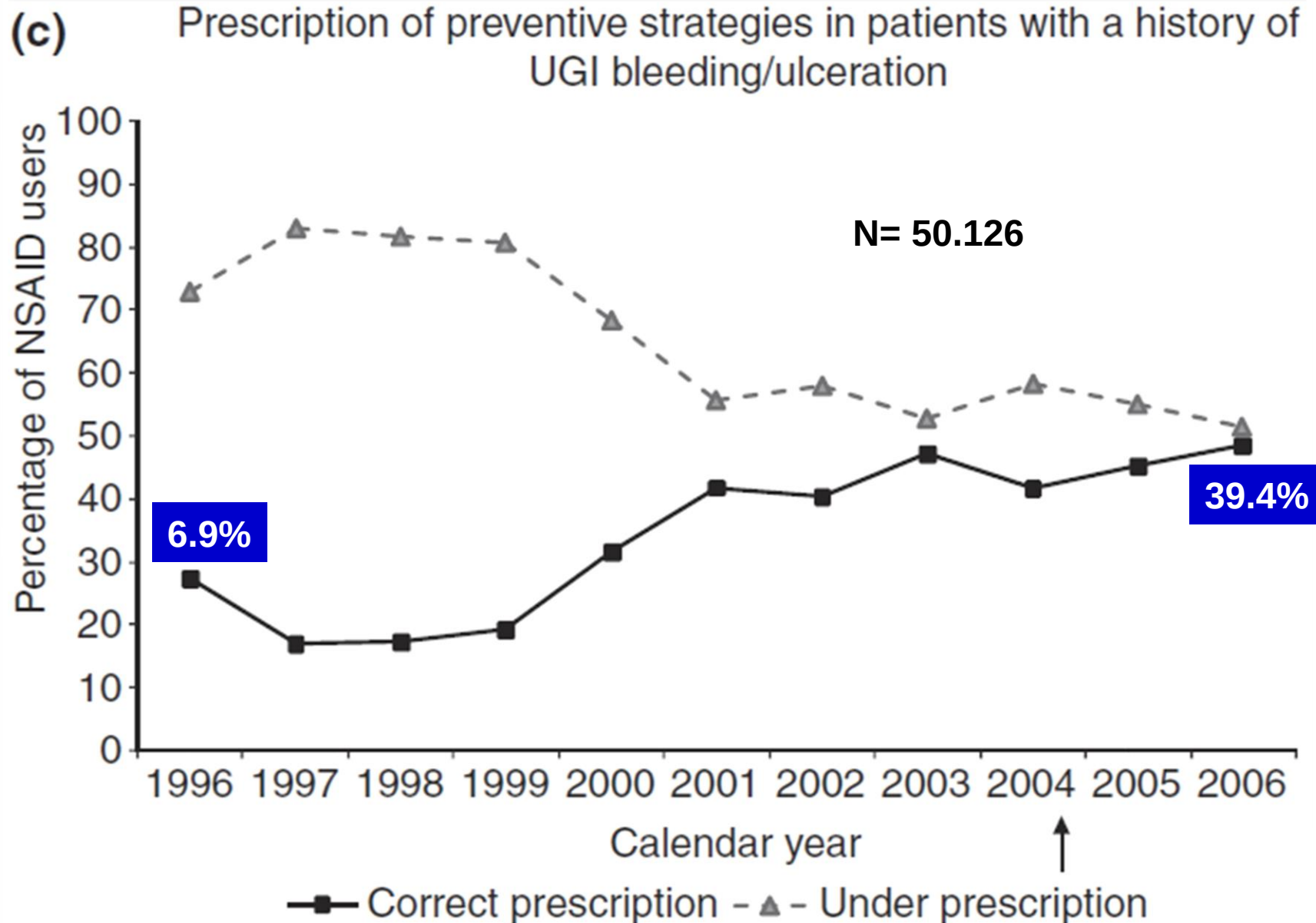
Sucralfate: NO

Antiácidos: No

Anti-H₂: **Úlcera duodenal.**

Misoprostol: **800 mcg/d: Si**
< UD53%, <UG 74%

IBP: **Si**



Enteropatía por AINES

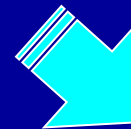
**Cuándo pensar en ella y
Qué hacer ?**

Causas del aumento

IBP + AINES

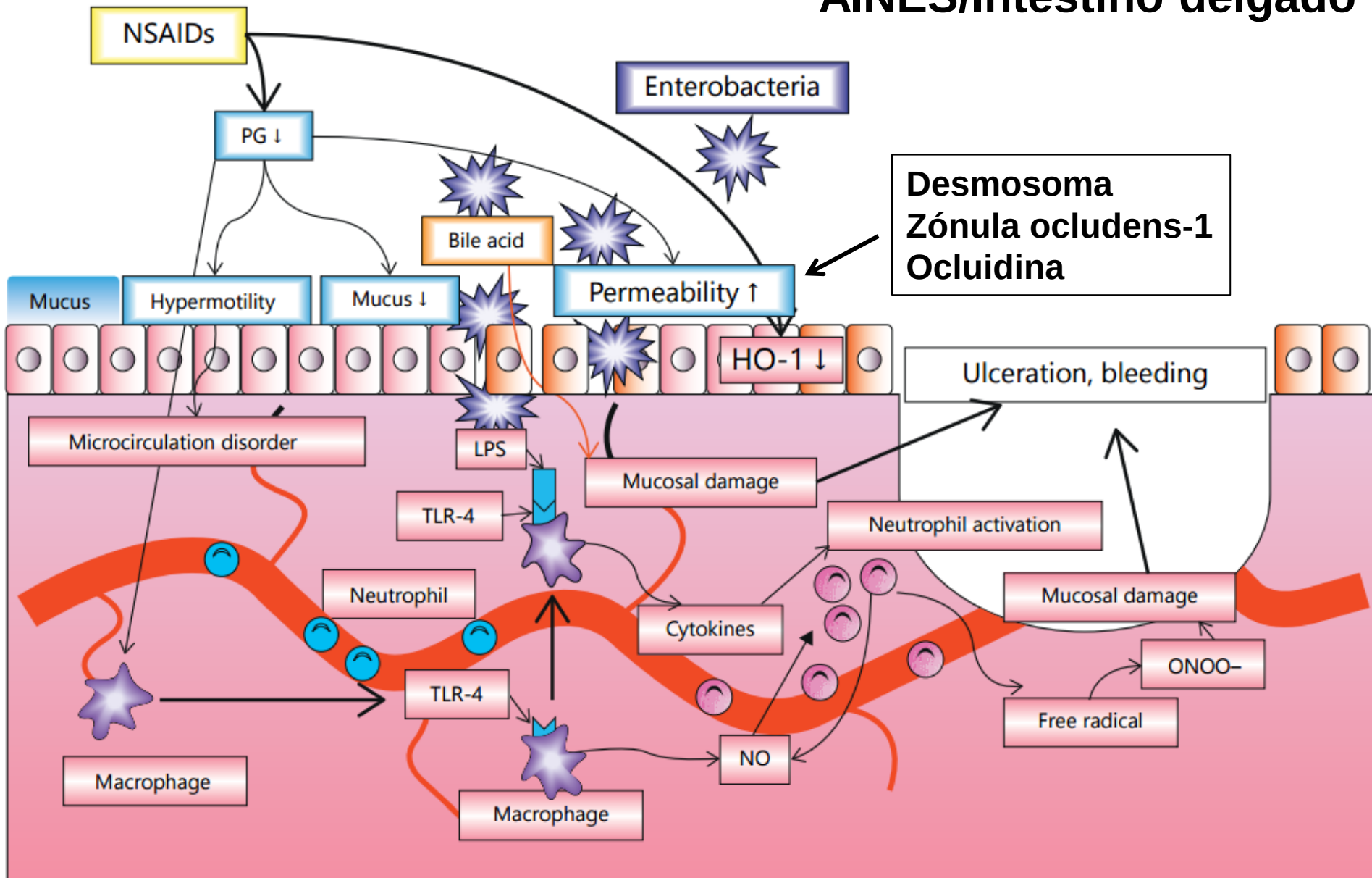


**Protección
hasta
el duodeno**



**Incrementa
Lesiones
inferiores**

AINES/Intestino delgado



Proton pump inhibitors affect the gut microbiome

Floris Imhann,¹ Marc Jan Bonder,² Arnau Vich Vila,¹ Jingyuan Fu,² Zlatan Mujagic,³ Lisa Vork,³ Ettje F Tigchelaar,² Soesma A Jankipersadsing,² Maria Carmen Cenit,² Hermie J M Harmsen,⁴ Gerard Dijkstra,¹ Lude Franke,² Ramnik J Xavier,⁵ Daisy Jonkers,³ Cisca Wijmenga,² Rinse K Weersma,¹ Alexandra Zhernakova²

Proton pump inhibitors alter the composition of the gut microbiota

Matthew A Jackson,¹ Julia K Goodrich,^{2,3} Maria-Emanuela Maxan,⁴ Daniel E Freedberg,⁵ Julian A Abrams,⁵ Angela C Poole,^{2,3} Jessica L Sutter,^{2,3} Daphne Welter,^{2,3} Ruth E Ley,^{2,3} Jordana T Bell,¹ Tim D Spector,¹ Claire J Steves¹

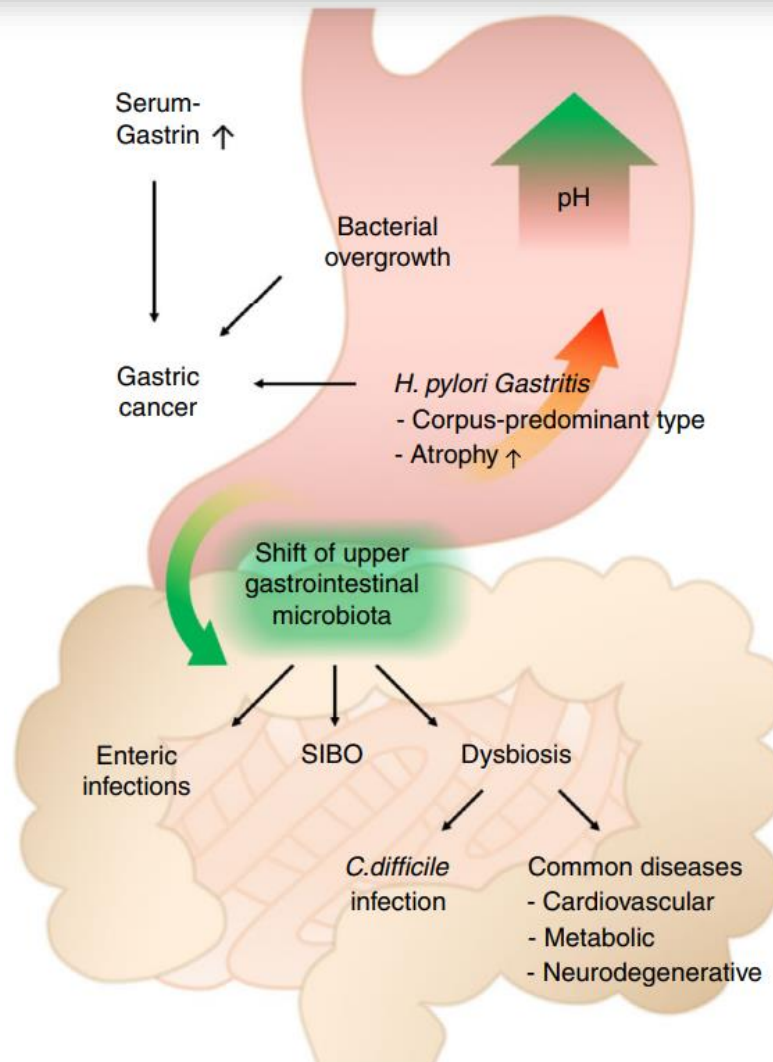
Proton Pump Inhibitors Alter Specific Taxa in the Human Gastrointestinal Microbiome: A Crossover Trial



Daniel E. Freedberg,¹ Nora C. Toussaint,² Sway P. Chen,³ Adam J. Ratner,⁴ Susan Whittier,⁵ Timothy C. Wang,¹ Harris H. Wang,^{5,6,§} and Julian A. Abrams^{1,§}

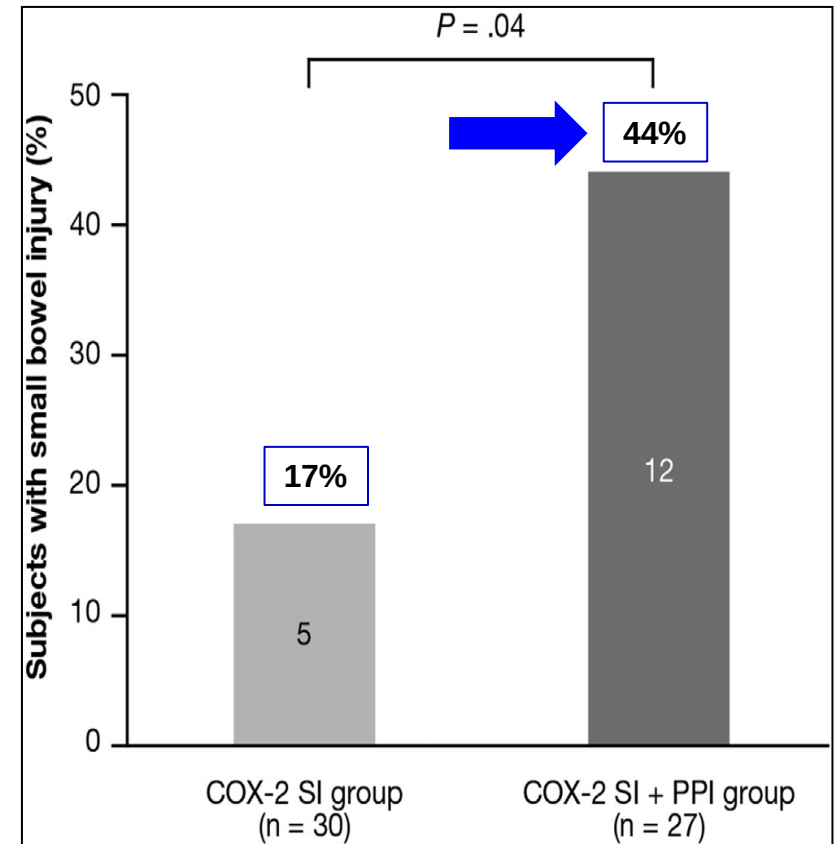
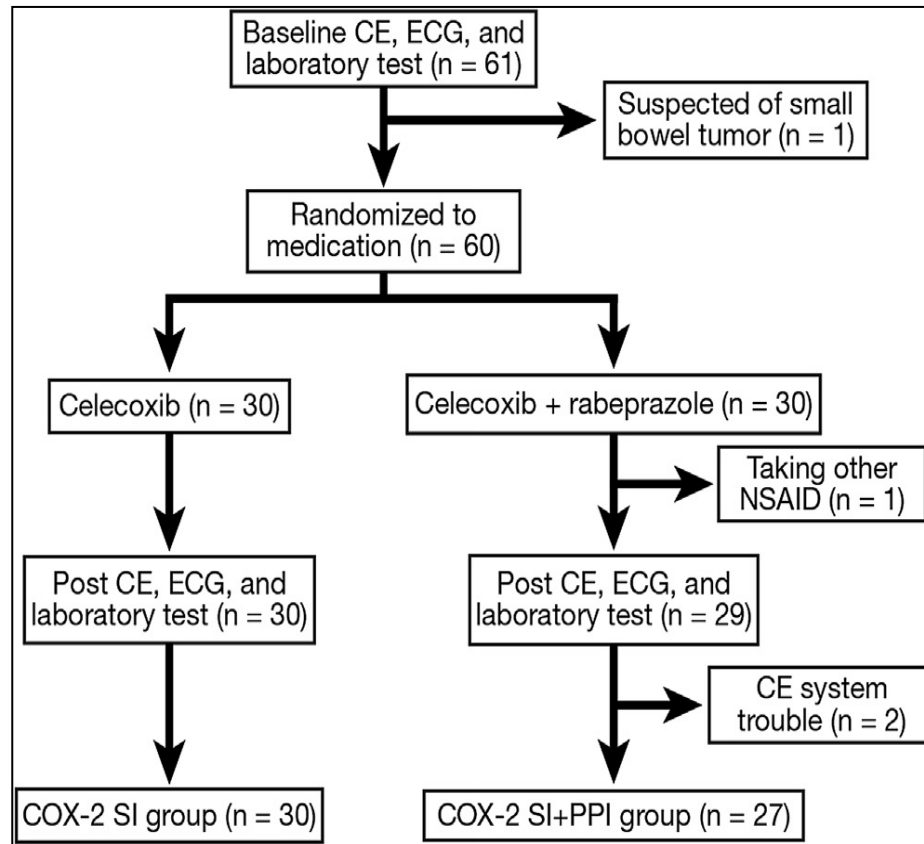
Systematic review: the effects of proton pump inhibitors on the microbiome of the digestive tract—evidence from next-generation sequencing studies

Lukas Macke¹  | Christian Schulz¹ | Leandra Koletzko¹ | Peter Malfertheiner^{1,2}



Proton Pump Inhibitors Increase Incidence of Nonsteroidal Anti-Inflammatory Drug–Induced Small Bowel Injury: A Randomized, Placebo-Controlled Trial

Ema Washio,^{*} Motohiro Esaki,^{*} Yuji Maehata,^{*} Masashi Miyazaki,[‡] Hiroyuki Kobayashi,[‡] Hideki Ishikawa,[§] Takanari Kitazono,^{*} and Takayuki Matsumoto^{||}



Enteropatía por AINES

Diarrea crónica

Mala-absorción

Anemia ferropénica

Sangrado

Estenosis

Obstrucción intestinal

Perforación

Watababe T, J Gastroenterol 2020;55:481-95

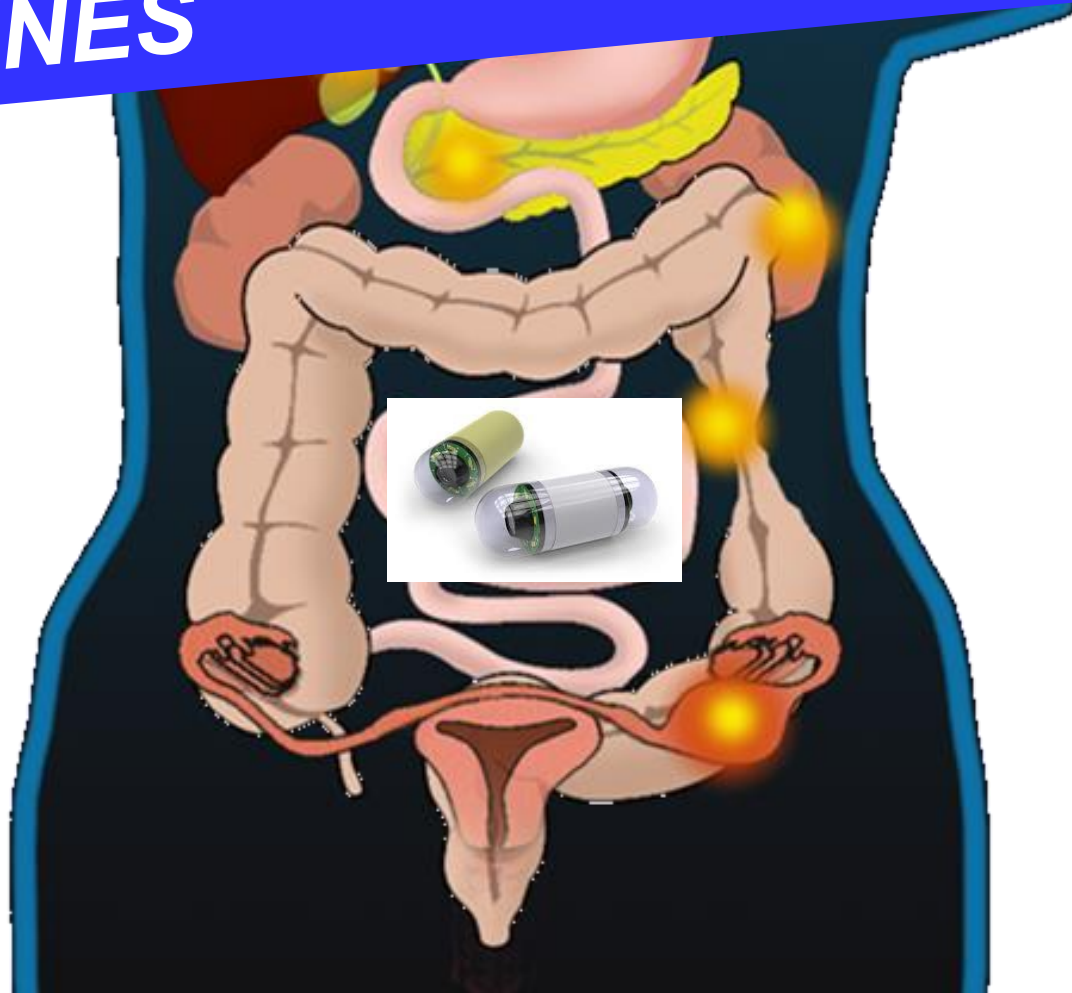
Lanas A, Digestion 2006;73:136-50

Enteropatía por AINES

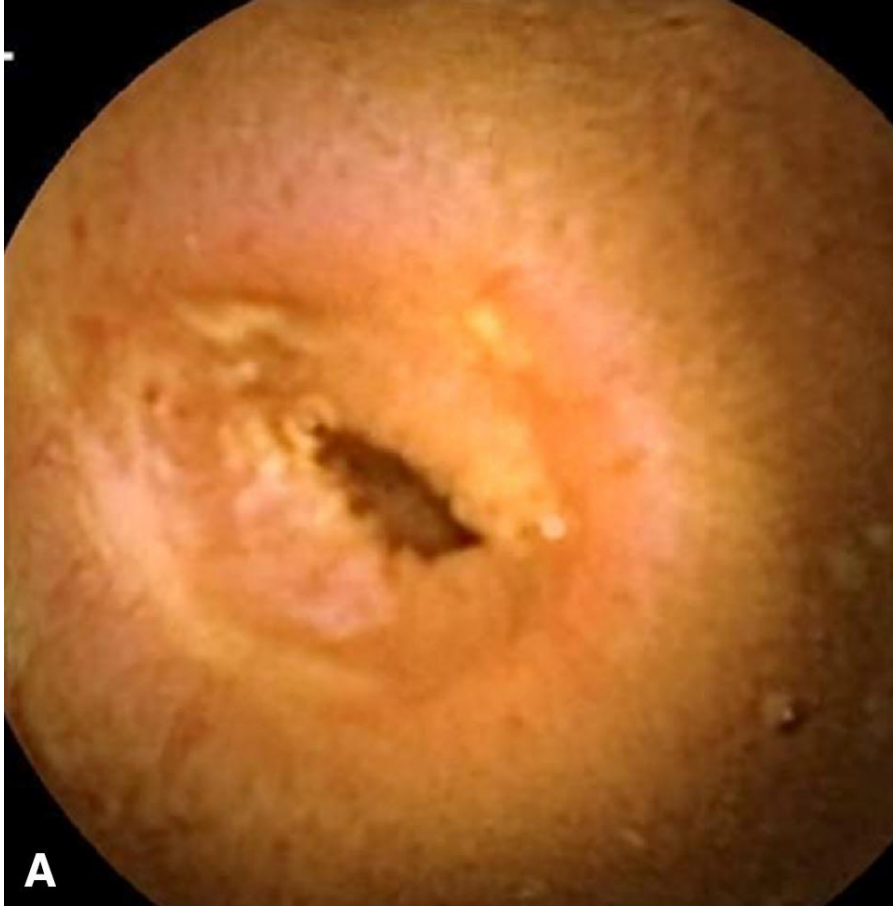


Graham DY, et al. ClinGastroenterol Hepatol. 2005;3:55-9
Sugimori S, et al. Digestion. 2008;78:208-13

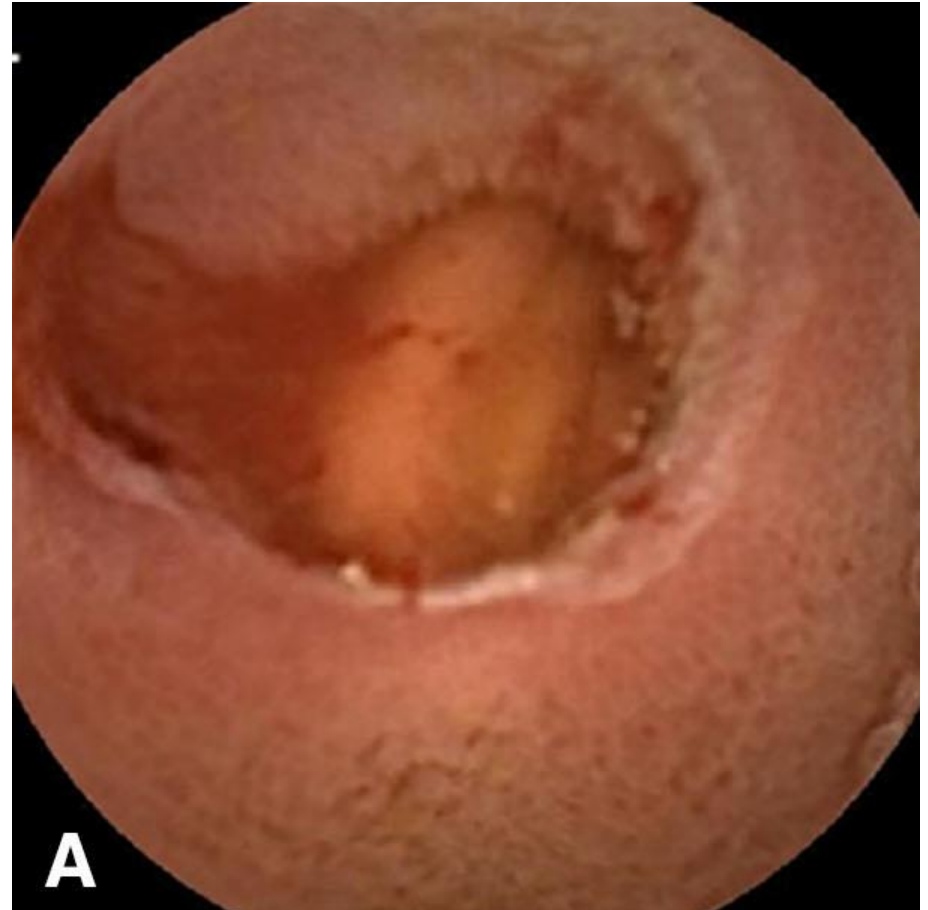
**Video cápsula ha iluminado
La prevalencia de enteropatía
Por AINES**



Video-cápsula

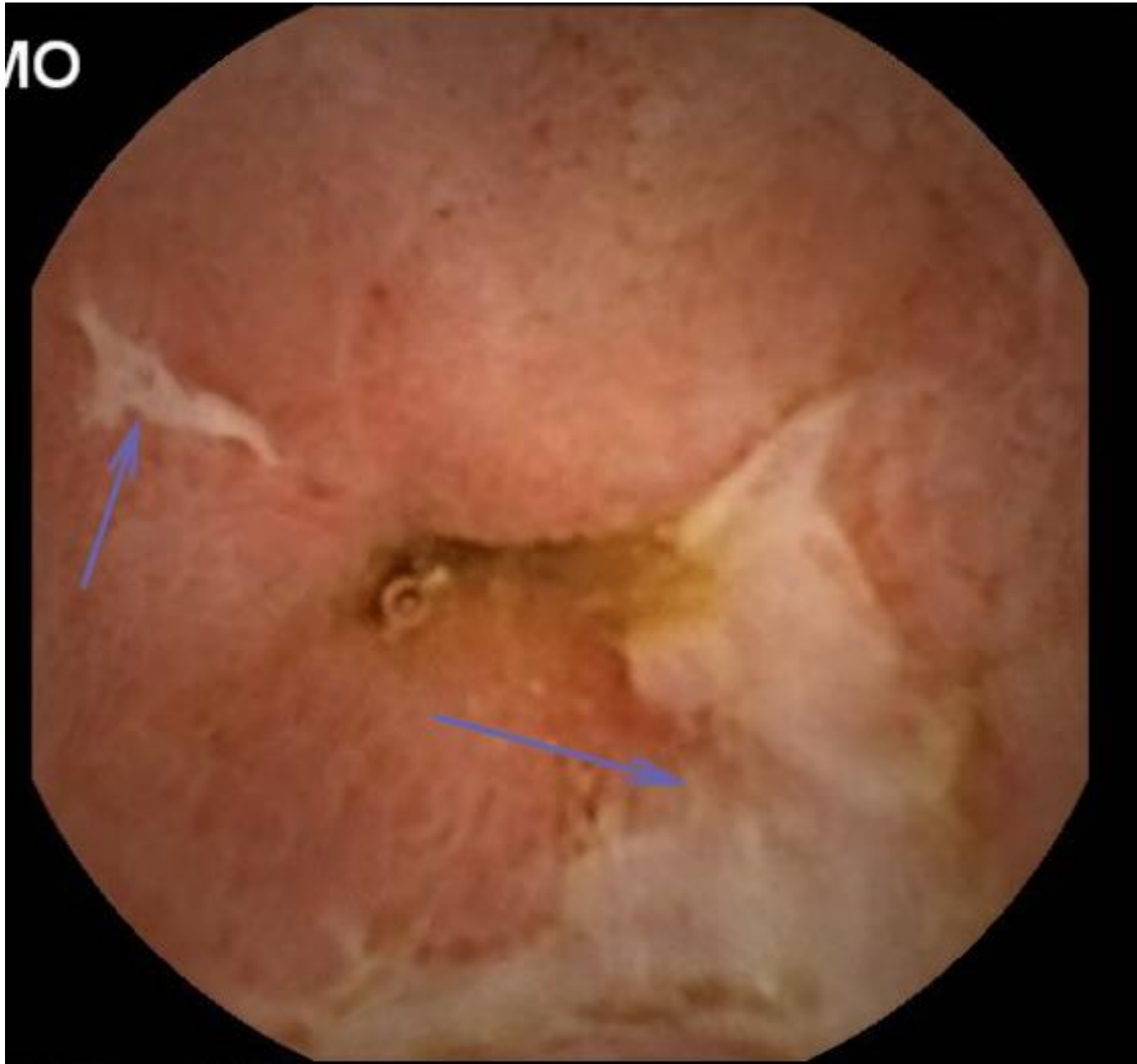


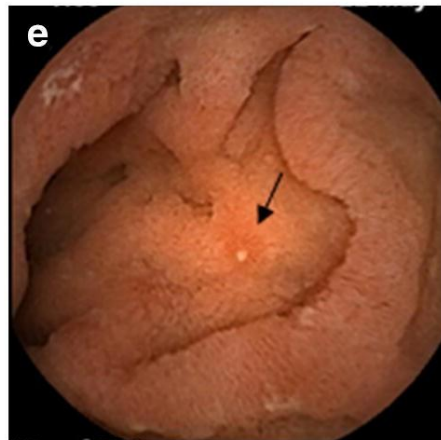
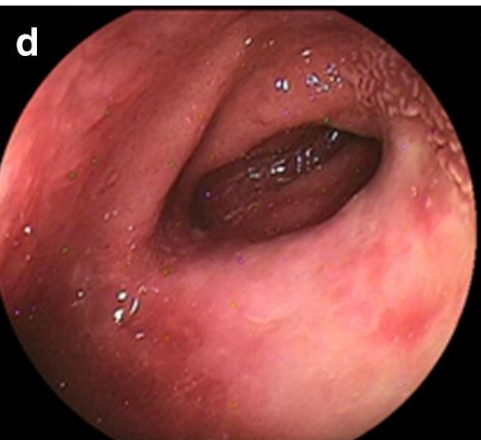
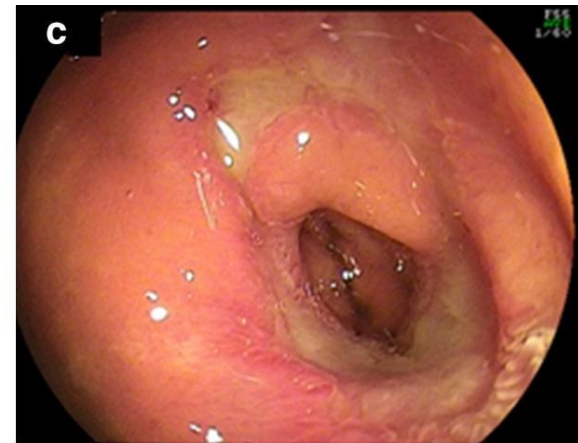
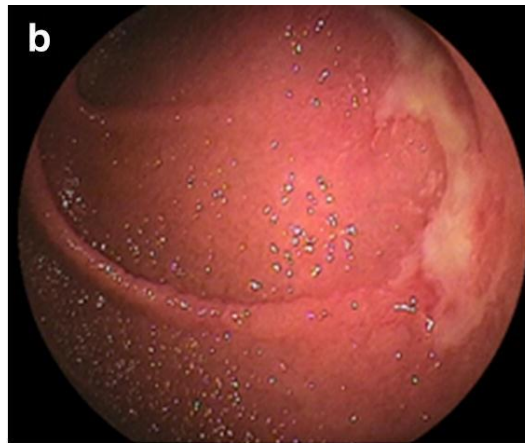
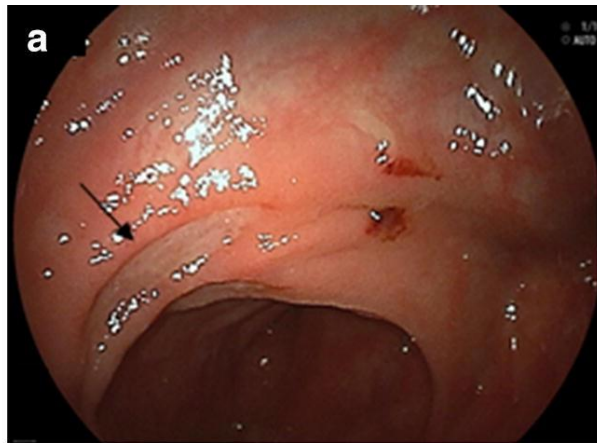
Úlcera circunferencial



**Úlcera con sangrado activo
estenosis**

Úlceras por AINES en ID

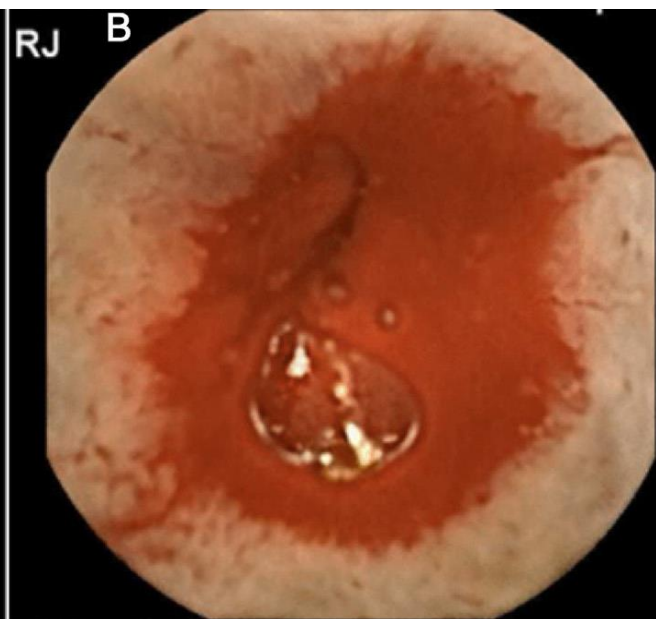




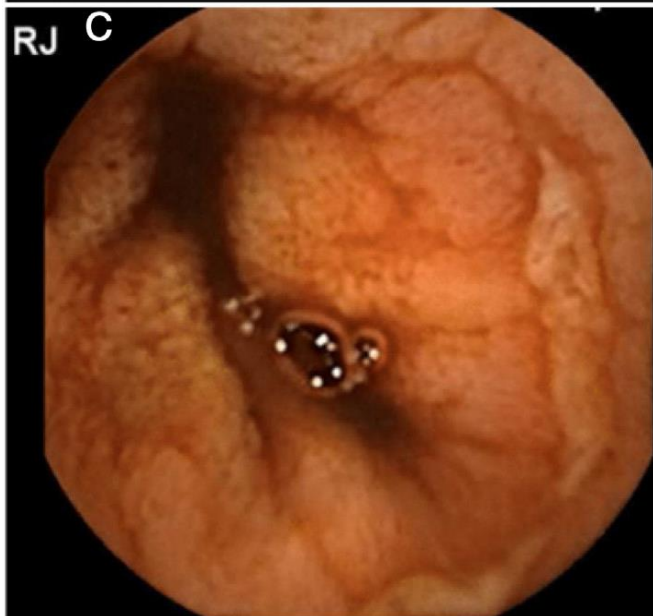
Watanabe T, et al. J Gastroenterol 2020;55:481-95.



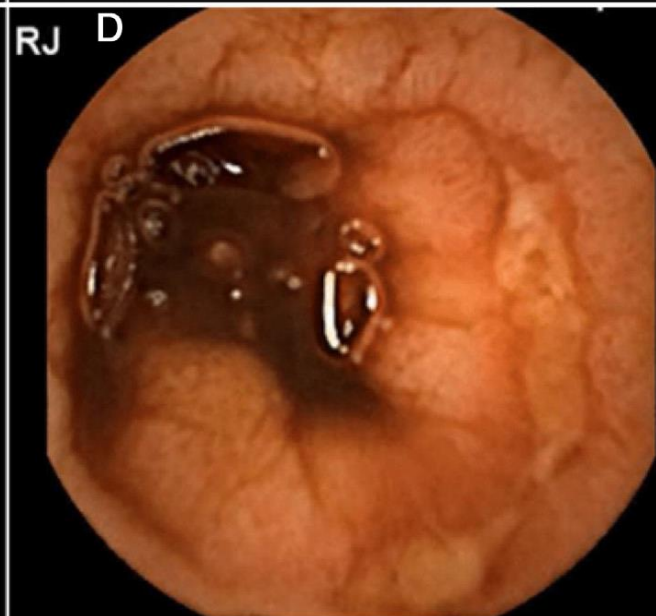
PillCam® SB



PillCam® SB



PillCam® SB



PillCam® SB

AINES –Daño GI inferior

En el momento NO hay



Tratamiento o Profilaxis

Watanabe T, J Gastroenterol 2020;55:481-95

ANES-Daño GI inferior: Tratamiento

Sulfuro de hidrogeno (H₂S): citoprotector

Rebamipide: citoprotector

Irsogladine: protege integridad epitelial

Rifaximina: antibiótico intraluminal

Kuramoto T, BMC Gastroenterol 2013;13:85

Watanbe T, PLOS One 2015;10:e0122330

Marlicz M, Mayo Clin Proceed 2014;89:1699-709

Wallace JL, Curr Treat Opt 2015, Online Augusto 25

Rifaximin Reduces the Number and Severity of Intestinal Lesions Associated With Use of Nonsteroidal Anti-Inflammatory Drugs in Humans

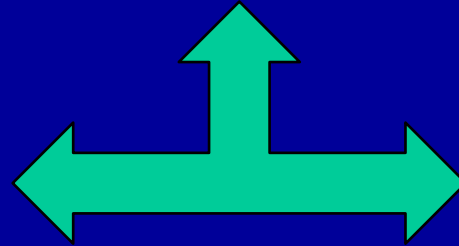
Carmelo Scarpignato,^{1,*} Werner Dolak,^{2,*} Angel Lanas,³ Peter Matzneller,⁴ Cecilia Re

Scarpignato C, Gastroenterology 2017;152:980–982

VDC antes y después

**64 voluntarios sanos
Dclofenac 75 mg 2v/dia +
Omeprazol 20 mg/d 14 días**

**Rifaximina
400 2v/d**



**Placebo
2v/d**

Erosiones

20%

43%

p=0.05

**Lsiones
Grandes**

0

9

p<0.001

Scarpignato C, Gastroenterology 2017;152:980–982

SII orgánico o funcional ?

Cuándo utilizar antibióticos ?

**Roma IV
2016**

***Trastorno gastrointestinal
Funcional***



***Trastorno del
funcionamiento
Gastrointestinal***



***No es Ausencia de
Enfermedad orgánica***

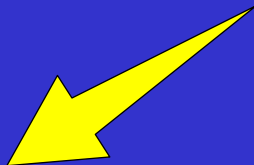
SII



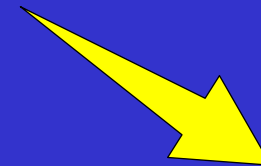
Ulceras pépticas



Enfermedad sicológica

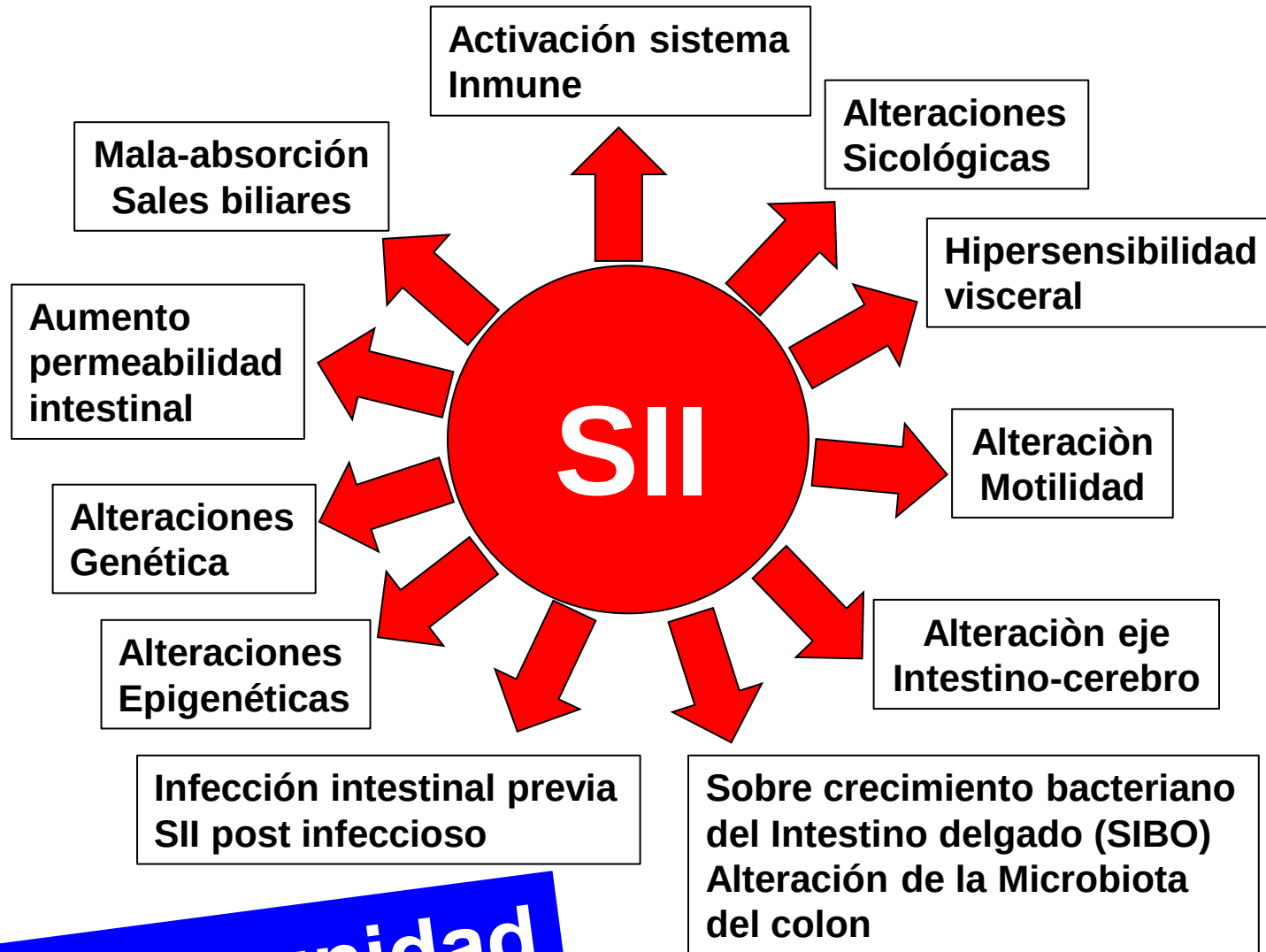


***Enfermedad
Orgánica***



***Helicobacter pylori
AINES***

SII -Fisiopatología



Autoinmunidad

Small Intestinal Bacterial Overgrowth in Irritable Bowel Syndrome: A Systematic Review and Meta-Analysis of Case-Control Studies

Ayesha Shah, MBBS, FRACP^{1,2,3,*}, Nicholas J. Talley, MBBS, MD, PhD, FRACP, FRCP, FACP FAHMS^{4,*}, Mike Jones, BsC, PhD, A.Stat, C.Stat^{5,*}, Bradley J. Kendall, MBBS, FRACP, PhD^{1,2}, Natasha Koloski, PhD^{1,4,*}, Marjorie M. Walker, MBBS, FRCPATH, FRCPA, AGAF^{4,*}, Mark Morrison, PhD^{1,2,6,*} and Gerald J. Holtmann, MD, PhD, MBA, FRACP, FRCP, FAHMS^{1,2,3,*}

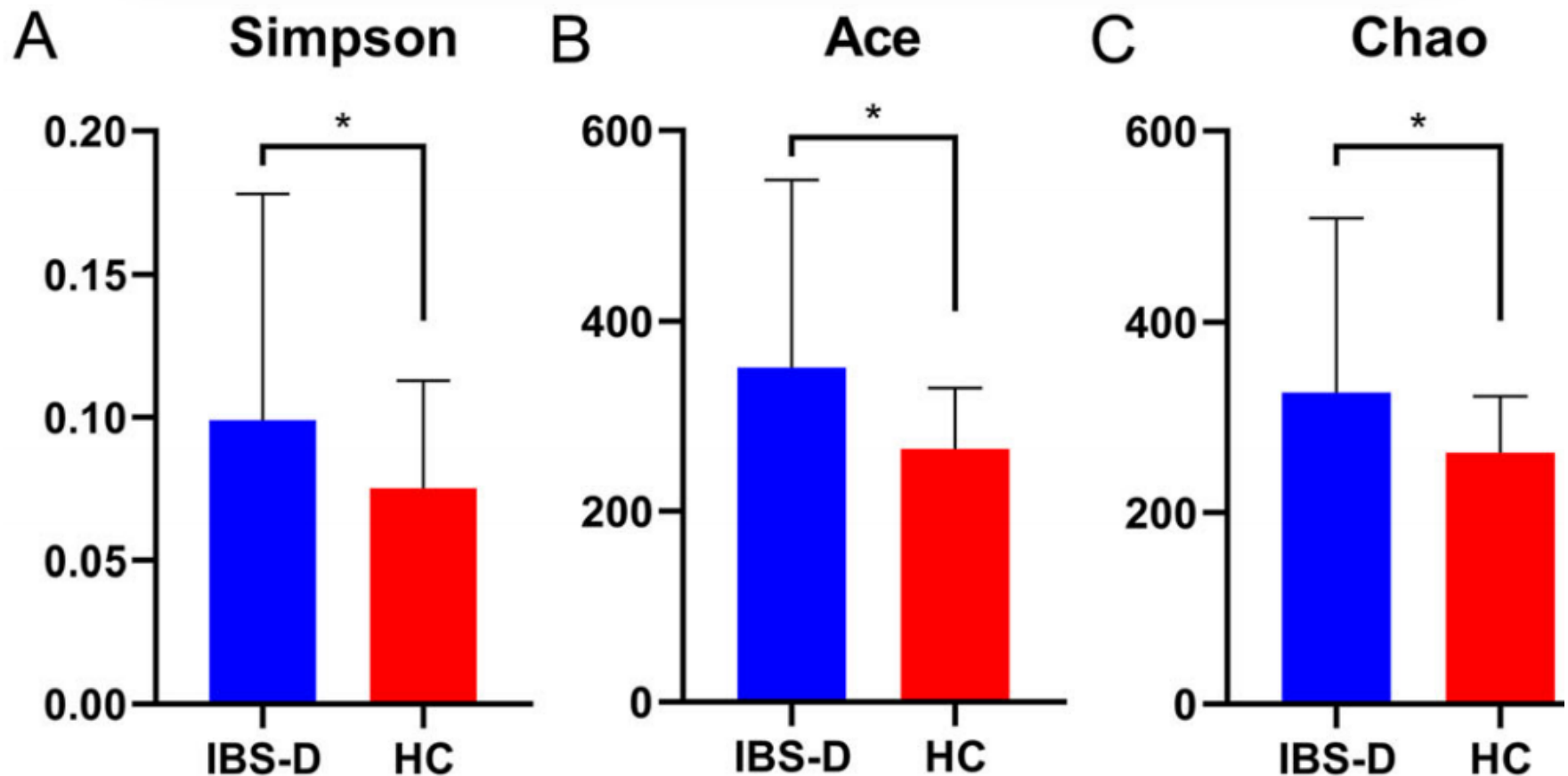
25 estudios
3.192 SII
3.320 controles

SII vs controles	OR 3.7 (IC95% 2.3-6.0)
SII vs Controles sanos asintomáticos	OR 4.9 (IC95%2.8-8.6)
SII vs Controles Cultivo 10⁵	13.9% vs 5%
SII vs Controles 10³	33.5% vs 8.2%
CH4 SII Estreñimiento vs diarrea	OR 2.3 (IC 1.2-4.2)
IBP No tuvo asociación con SIBO	

Microbial and metabolomic profiles in correlation with depression and anxiety co-morbidities in diarrhoea-predominant IBS patients

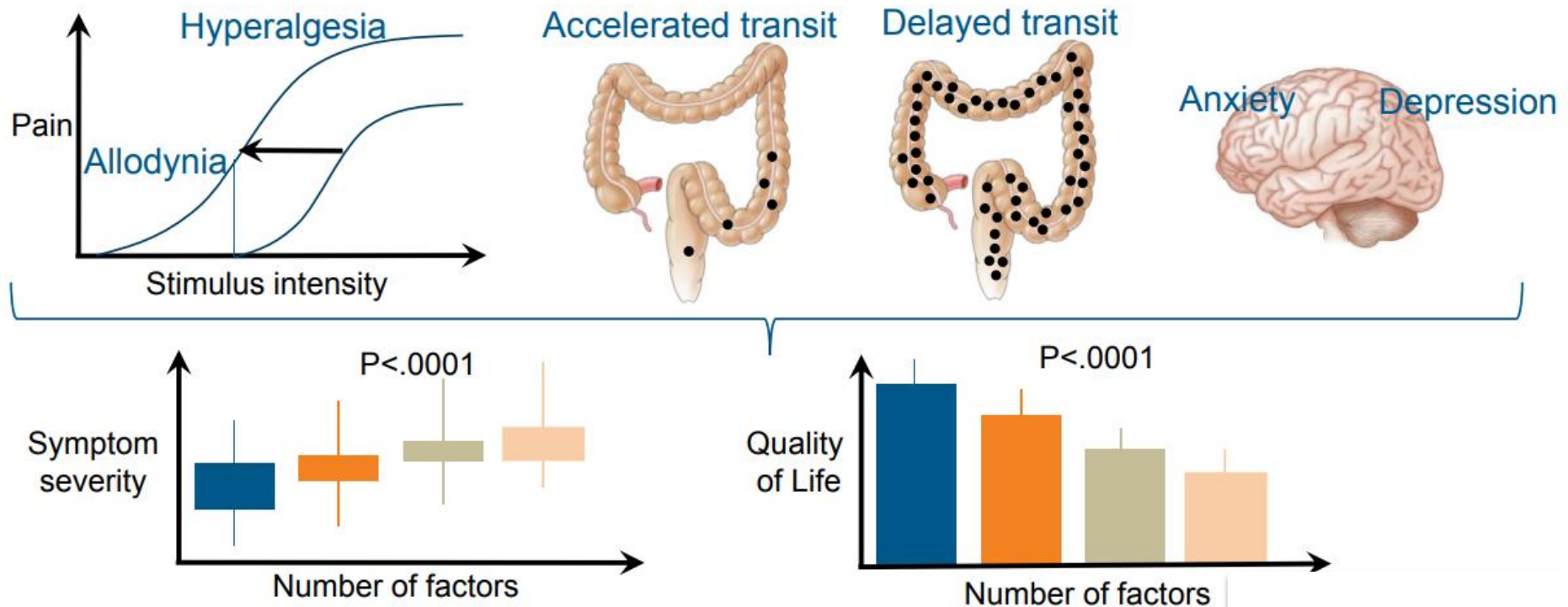


Tong Liu^{1,2,3}, Xiang Gu^{1,2,3}, Li-Xiang Li^{1,2,3}, Ming Li^{1,2,3}, Bing Li^{1,2,3}, Xiao Cui^{1,2,3} and Xiu-li Zuo^{1,2,3*} 

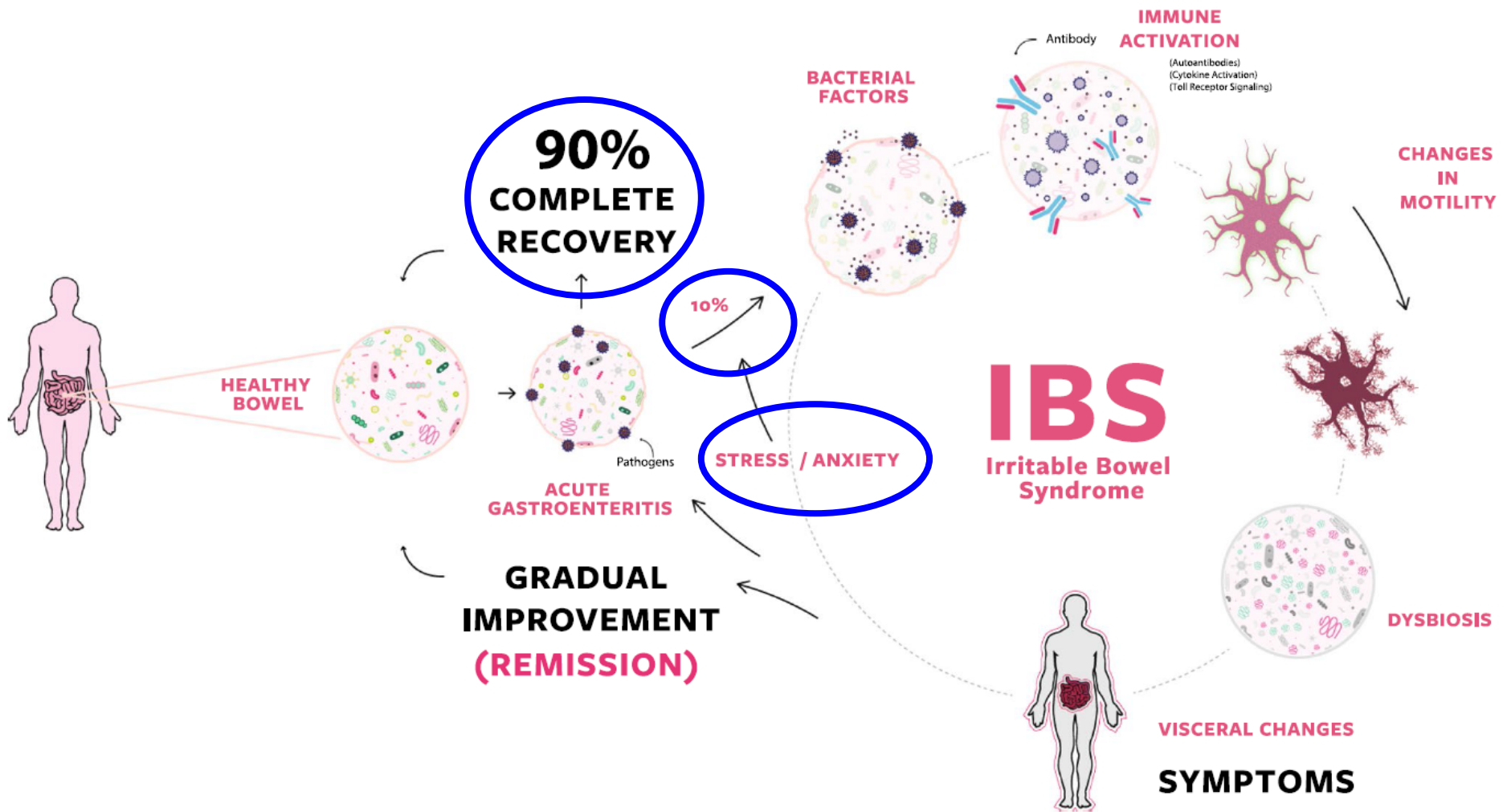


Cumulative Effects of Psychologic Distress, Visceral Hypersensitivity, and Abnormal Transit on Patient-reported Outcomes in Irritable Bowel Syndrome

Magnus Simrén,^{1,2} Hans Törnblom,¹ Olafur S. Palsson,² Lukas Van Oudenhove,³ William E. Whitehead,² and Jan Tack³



Pos infeccioso: la mejor evidencia de organicidad



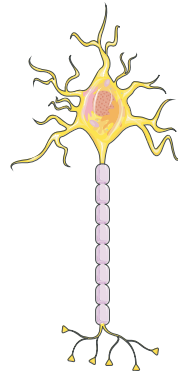
Autoimmunity Links Vinculin to the Pathophysiology of Chronic Functional Bowel Changes Following *Campylobacter jejuni* Infection in a Rat Model

Mark Pimentel • Walter Morales • Venkata Pokkunuri • Constantinos Brikos •
Sun Moon Kim • Seong Eun Kim • Konstantinos Triantafyllou • Stacy Weitsman •
Zachary Marsh • Emily Marsh • Kathleen S. Chua • Shanthi Srinivasan •
Gillian M. Barlow • Christopher Chang

Anticuerpos
Anti CdTB



Reacción cruzada
Vinculina en
Células Cajal
Ganglios mientéricos



Vinculina
Proteína Fundamental
Integridad estructural
Adhesión/migración
Neuronal

Alteración Motilidad
gastrointestinal



Dig Dis Sci. 2015;60:1195-205.

Medicamentos

Múltiples alteraciones orgánicas
Autoinmunidad, eje intestino cerebro



Probióticos

Antibióticos

**Microbioma un
Blanco terapéutico**

**Dieta baja
en FODMAP**

**Trasplante
Fecal**



Rifaximina

**Antibiótico
acción tópica.**



550 mg cada 8 horas/14 días.

Microbioma

SIBO

Diarrea

Alternante

Dolor

**Superior
a placebo
+Segura**

Ford AC, et al. Am J Gastroenterol 2018;113:1-18.
Black CJ, et al. Gut 2019;0:1-9
Black CJ, Ford AC. Frontline Gastroenterology 2020;0:1-13.
Pimentel M, et al. N Engl J Med 2011;364:22-32.

Rifaximina

Excelentes oportunidades
terapéuticas



Efecto benéfico
En la microbiota

Actúa tópicamente
Decontaminación selectiva

>>> *Lactobacilo*

>>> *Bifidobacterium*

>>> *Faecalobacterium prausnitzii*

Soldi S, Clin Exp Gastroenterol 2015;8:309-25

Ponziani FR, Dig Dis 2016;34:269-78

Ponziani FT, World J Gastroenterol 2017; 23: 4491-4499

Efficacy of Fecal Microbiota Transplantation in Irritable Bowel Syndrome: A Systematic Review and Meta-Analysis

Dabo Xu, MD¹, Vincent L. Chen, MD¹, Calen A. Steiner, MD, MS¹, Jeffrey A. Berinstein, MD¹, Shanti Eswaran, MD¹, Akbar K. Waljee, MD, MSc¹, Peter D.R. Higgins, MD, PhD, MSc¹ and Chung Owyang, MD¹

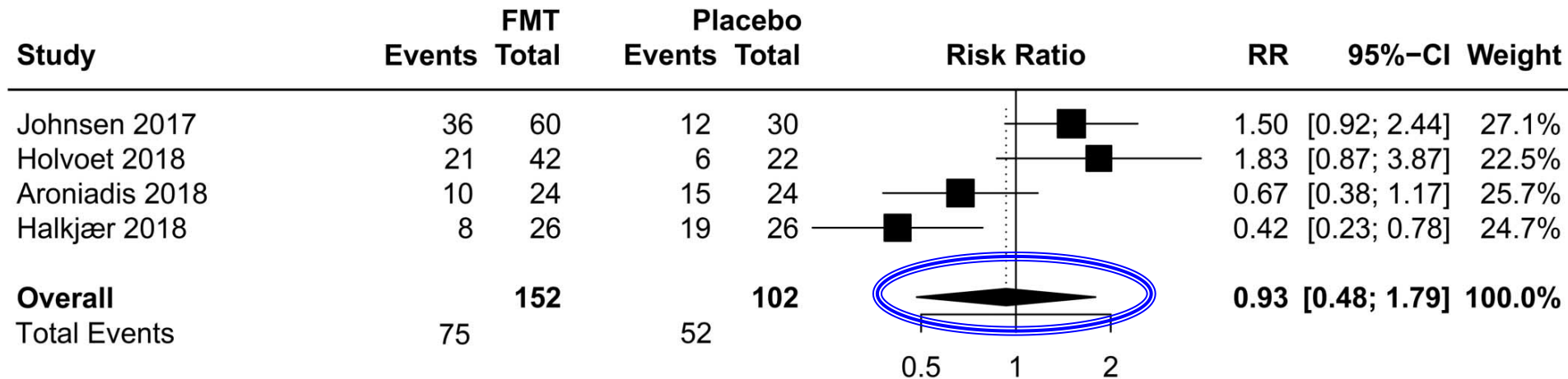
4 ECC

Mejoría de síntomas globales

8-12 meses

Am J Gastroenterol 2019;114:1043–1050

Sii, Trasplante de materia fecal Todos los estudios

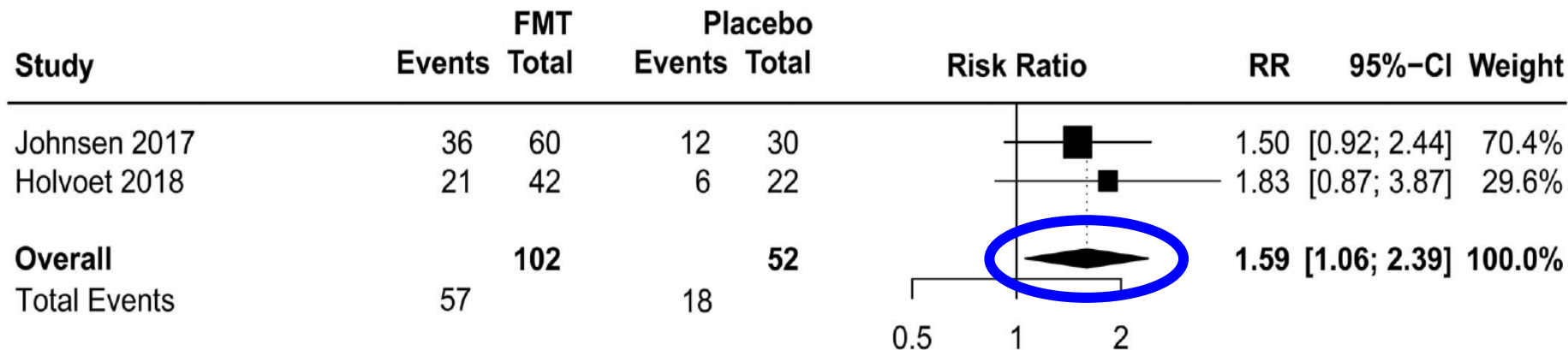


Weights are from random effects analysis
Heterogeneity: $I^2 = 79\%$, $\chi^2_3 = 14.47$ ($p < 0.01$)
Clinical Response to FMT: $z = -0.22$ ($p = 0.83$)

**No aprueba
Ni invalida el TMF**

Xu D, Am J Gastroenterol 2019;114:1043–1050

a

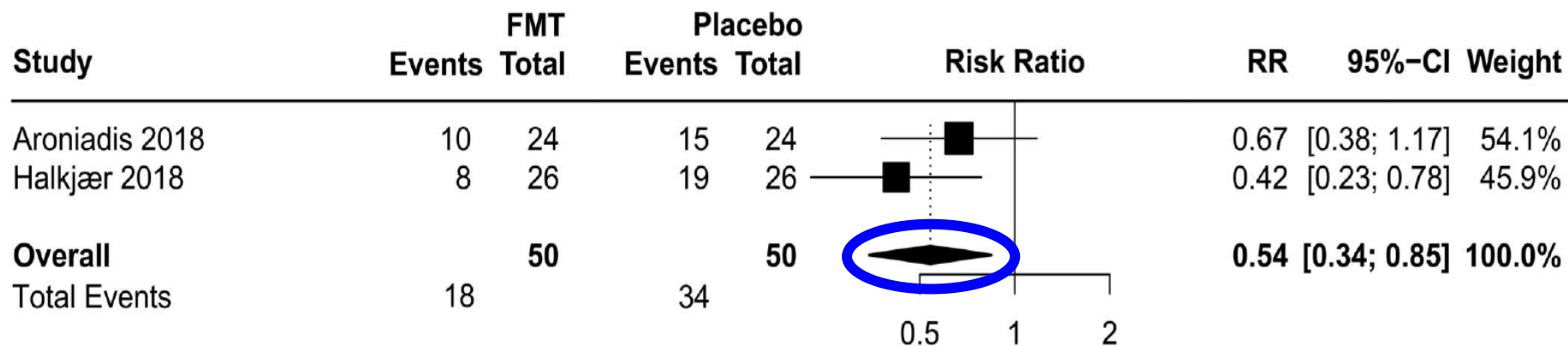


Weights are from random effects analysis

Heterogeneity: $I^2 = 0\%$, $\chi^2_1 = 0.20$ ($p = 0.66$)Clinical Response to FMT: $z = 2.24$ ($p = 0.02$)

Colonoscopia/EVDA
Una dosis

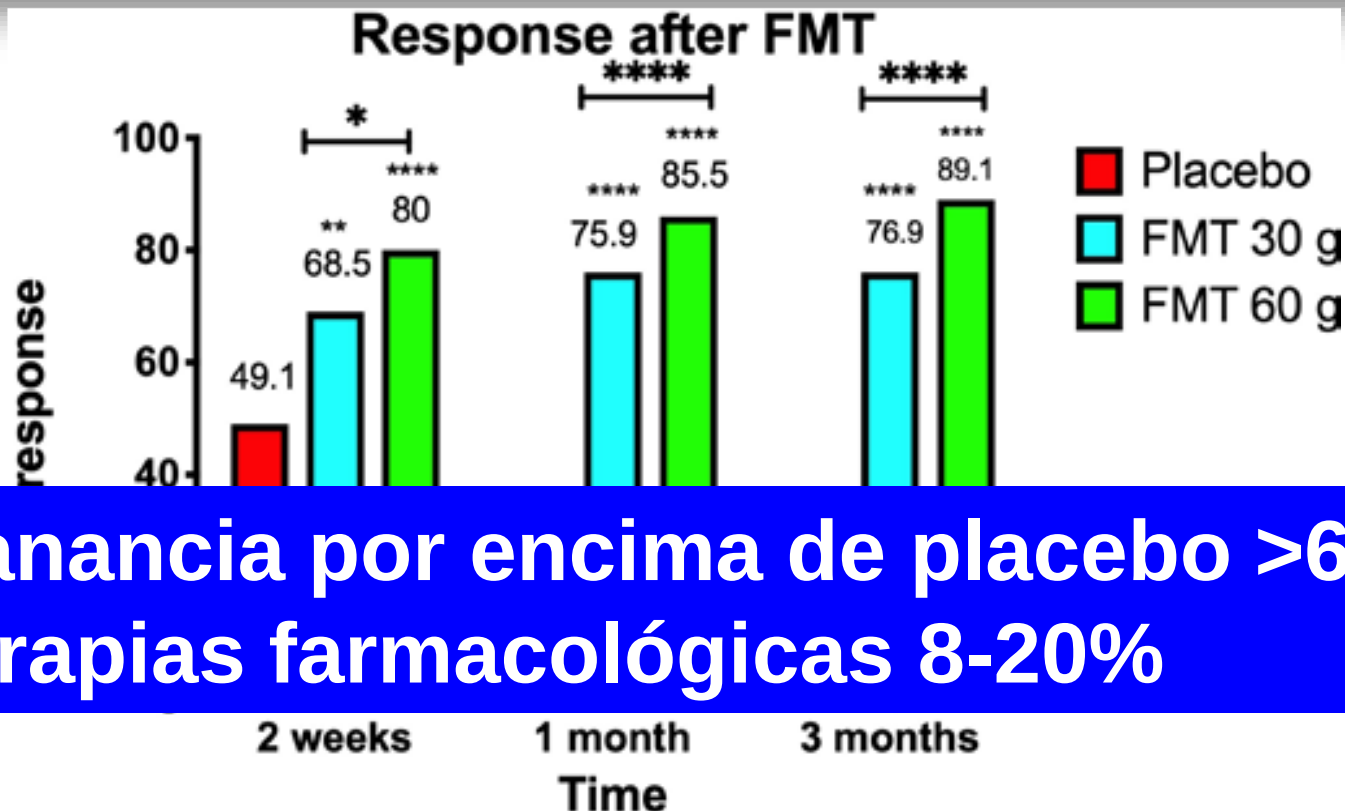
b



Capsulas

Efficacy of faecal microbiota transplantation for patients with irritable bowel syndrome in a randomised, double-blind, placebo-controlled study

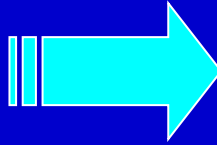
Magdy El-Salhy ,^{1,2} Jan Gunnar Hatlebakk,² Odd Helge Gilja,²
Anja Bråthen Kristoffersen,³ Trygve Hausken²



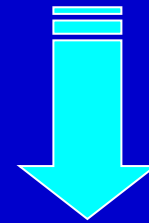
Ganancia por encima de placebo >65%
Terapias farmacológicas 8-20%

Dolor abdominal: Cuándo pensar en dolor de la pared abdominal ? y cómo tratarlo ?

**Dolor
Abdominal
crónico**



**Múltiples
causas**



Desafío

MD cuidado primario

MD especialista

Equipos médicos

Hospitales referencia



**Dolor abdominal crónico
en gastroenterología**

50%

Idiopáticos

Epidemiologia
Desconocida

10-90%



**Estructuras de la
pared abdominal**

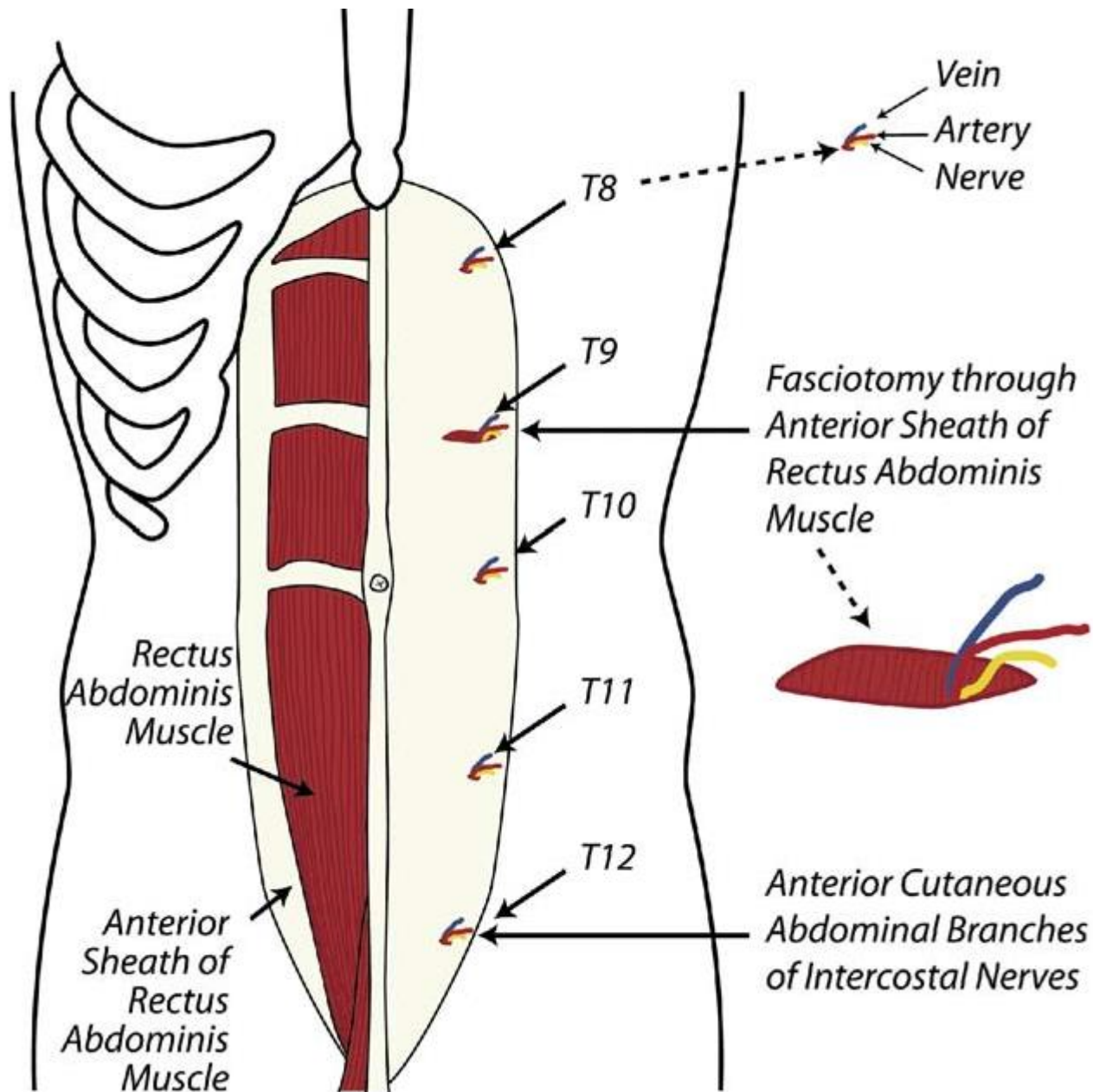
**Dolor abdominal crónico
de la pared abdominal**

Dolor crónico de la pared abdominal

Signo de Carnett (+), A y B

Carnett JB, Surg Gynecol Obstetr 1926:42:625

T7-T12



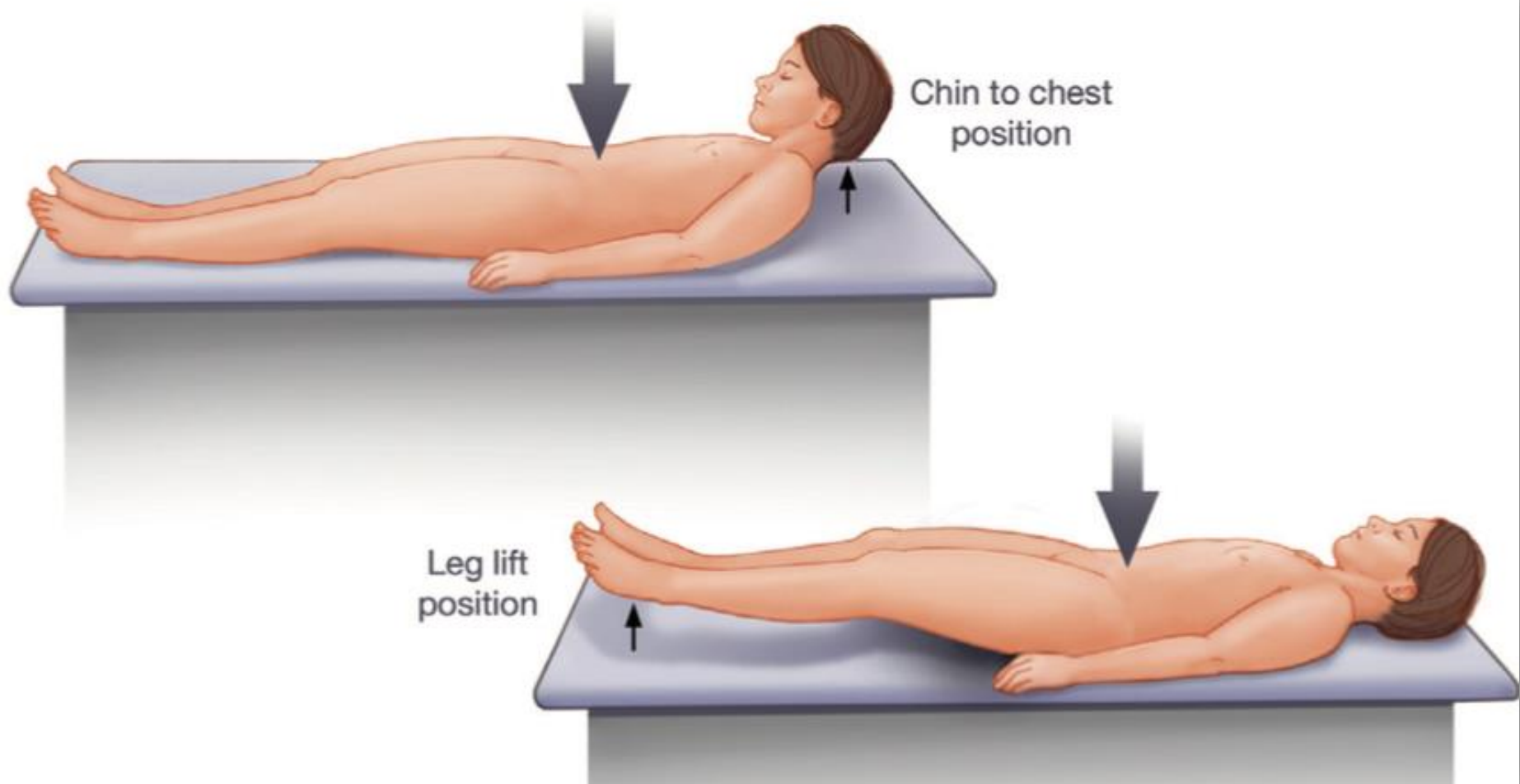
Carnett A

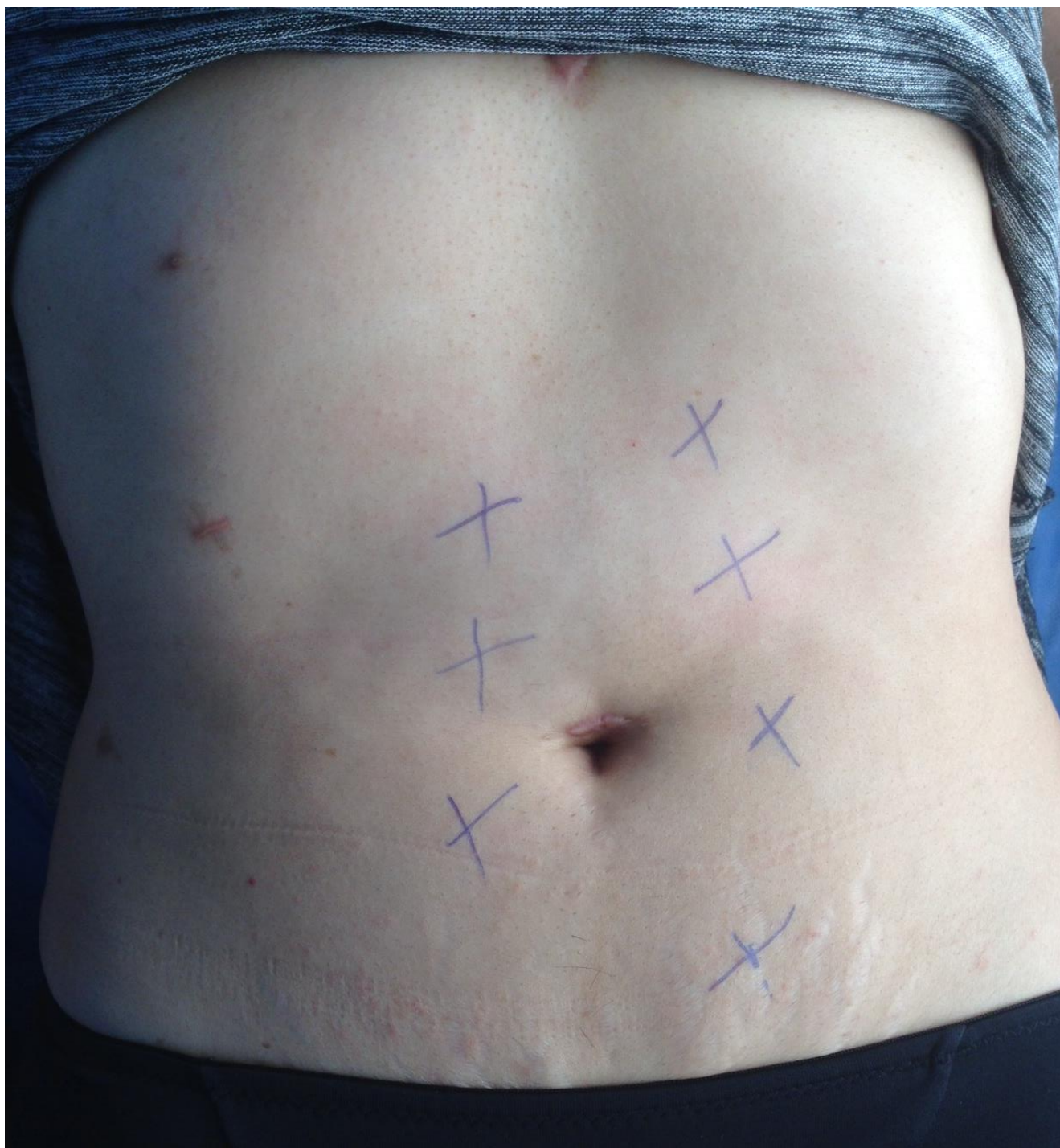


Carnett B



Signo de Carnett







“Kit” de Infiltración





Dolor crónico de la pared abdominal: una entidad poco reconocida con gran impacto en la práctica médica

Chronic Abdominal Wall pain: An unrecognized entity with great impact in the clinical practice

William Otero, MD,¹ Xiomara Ruiz, MD,² Elder Otero, MD,³ Martín Gómez, MD,⁴
Luis Fernando Pineda, MD,⁵ Víctor Arbeláez, MD.⁵

Trabajo ganador del Premio Nacional de Gastroenterología “Jacome Valderrama” 2007

48%

Rev Col Gastroenterol 2007;22:261-71

El costo de ignorar el signo de Carnett. Reporte de caso y revisión de la literatura

The Cost Of Ignoring Carnett's Sign: A Case Report and Literature Review

William Otero Regino, MD,¹ Erika Martínez Rodríguez, MD,² Adán Lúquez Mindiola, MD.

Rev Colomb Gastroenterol 2017; 32:75-81

Evaluación de la respuesta sostenida en pacientes con dolor crónico de la pared abdominal tratados con infiltración de anestesia local

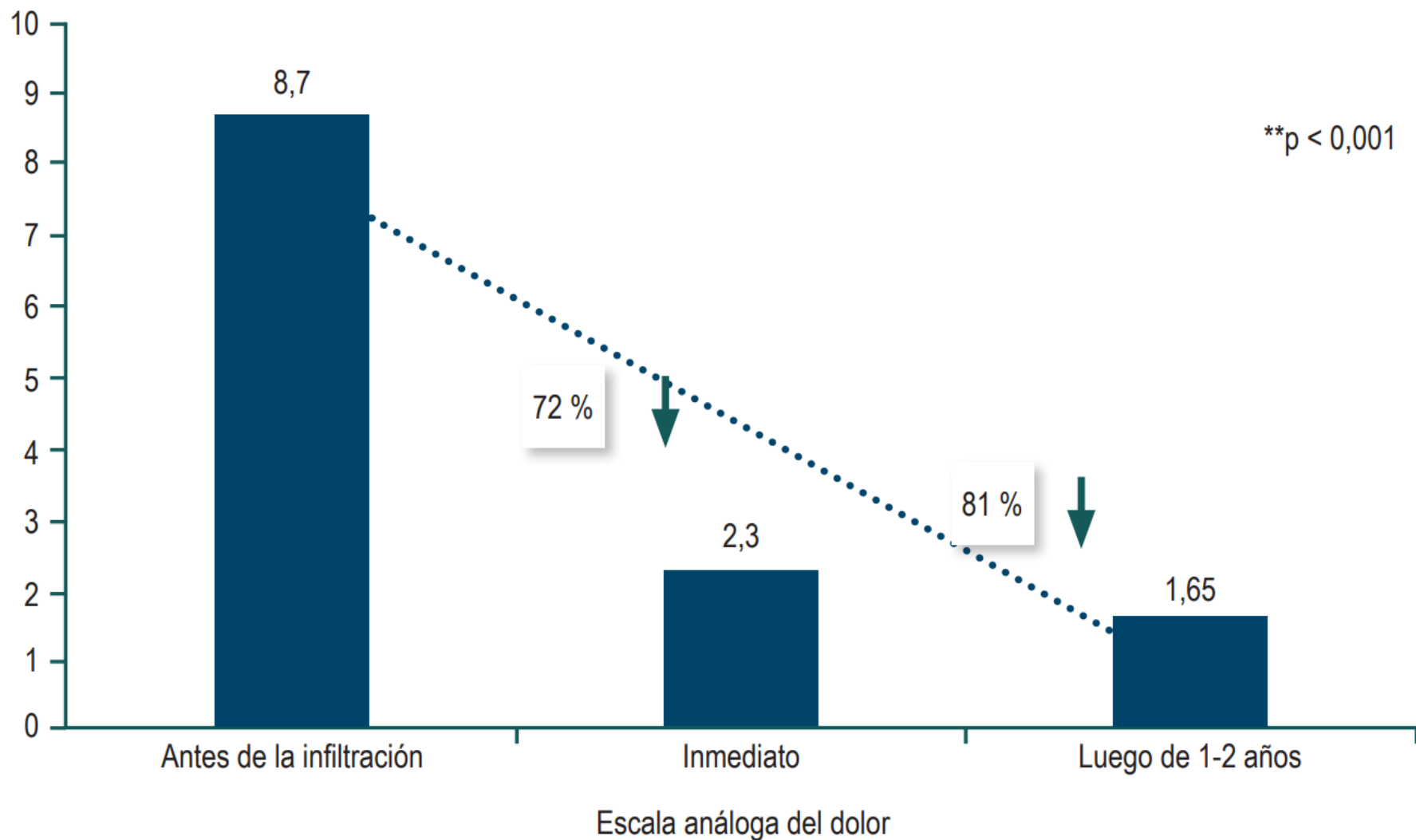
Evaluation of sustained responses to infiltration of local anesthetic in patients with chronic abdominal wall pain

Julián Mayorga-Ortiz, MD,¹ William Otero-Regino, MD,^{2*} Juan Alzate-Granados, MD,³ Hernando Marulanda Fernández, MD.⁴

N=324

Mayorga-Ortiz J, Rev Colomb Gastroenterol 2020;35:159-64

Dolor de la pared abdominal Seguimiento a tres años



A Double-Blind, Randomized, Controlled Trial on Surgery for Chronic Abdominal Pain Due to Anterior Cutaneous Nerve Entrapment Syndrome

Oliver B. Boelens, MD, Tijmen van Assen, MD,† Saskia Houterman,‡ Marc R. Scheltinga, MD,§
and Rudi M. Roumen, MD§*



**44 pacientes
22 en cada rama
16 Vs 4
P=0.001**

***Trasplante fecal,* Tiene Futuro ?**

European consensus conference on faecal microbiota transplantation in clinical practice

Giovanni Cammarota,¹ Gianluca Ianiro,¹ Herbert Tilg,² Mirjana Rajilić-Stojanović,³ Patrizia Kump,⁴ Reetta Satokari,⁵ Harry Sokol,⁶ Perttu Arkkila,⁷ Cristina Pintus,⁸ Ailsa Hart,⁹ Jonathan Segal,⁹ Marina Aloj,¹⁰ Luca Masucci,¹¹ Antonio Molinaro,¹² Franco Scaldaferri,¹ Giovanni Gasbarrini,¹ Antonio Lopez-Sanroman,¹³ Alexander Link,¹⁴ Pieter de Groot,¹⁵ Willem M de Vos,^{5,16} Christoph Högenauer,⁴ Peter Malfertheiner,¹⁴ Eero Mattila,¹⁷ Tomica Milosavljević,¹⁸ Max Nieuwdorp,^{12,15,19} Maurizio Sanguinetti,¹¹ Magnus Simren,²⁰ Antonio Gasbarrini,¹ The European FMT Working Group

Cammarota G, et al. Gut 2017;66:569–580

Consensus report: faecal microbiota transfer – clinical applications and procedures

J. König*, A. Siebenhaar[†], C. Högenauer[‡], P. Arkkila[§], M. Nieuwdorp^{¶,**}, T. Norén*, C. Y. Ponsioen[¶], U. Rosien[†], N. G. Rossen[¶], R. Satokari[§], A. Stallmach^{††}, W. de Vos^{§,‡‡}, J. Keller^{†,a} & R. J. Brummer*,^a

Aliment Pharmacol Ther 2017; 45: 222–239

The 5D framework: a clinical primer for fecal microbiota transplantation to treat *Clostridium difficile* infection

Jessica R. Allegretti, MD, MPH,^{1,2,*} Zain Kassam, MD, MPH,^{3,*} Majdi Osman, MD,^{2,3,4} Shrish Budree, MD, Monika Fischer, MD, MSc,⁶ Colleen R. Kelly, MD⁷

Gastrointest Endosc 2018;87:18-29

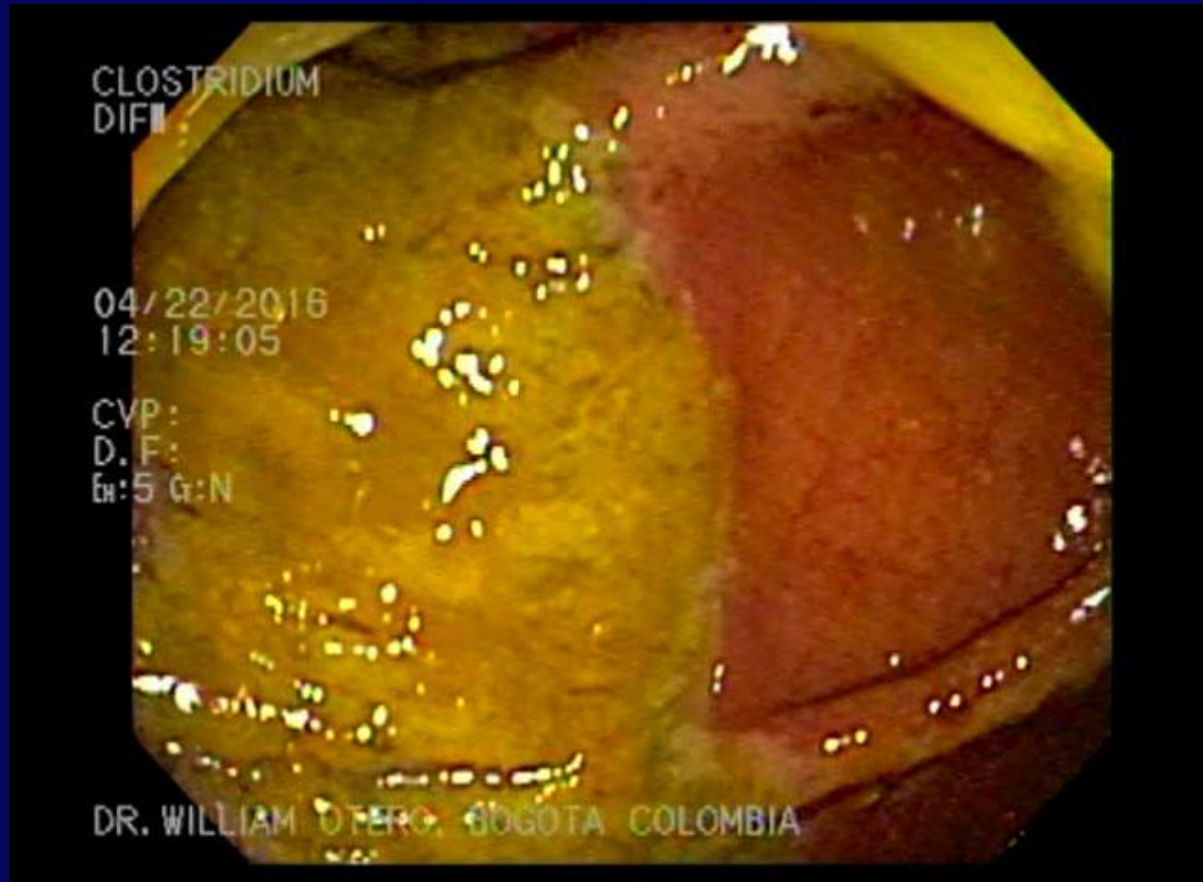
Trasplante de materia fecal



Restaura la microbiota a un estado más saludable
1er trasplante 1983
Técnicamente fácil, proceso complejo, costos
exámenes donador, Colonoscopia ? EVDA

Malani PM, JAMA 2016;315:137-8

Infección por *Clostridiodes difficile*:



The NEW ENGLAND
JOURNAL *of* MEDICINE

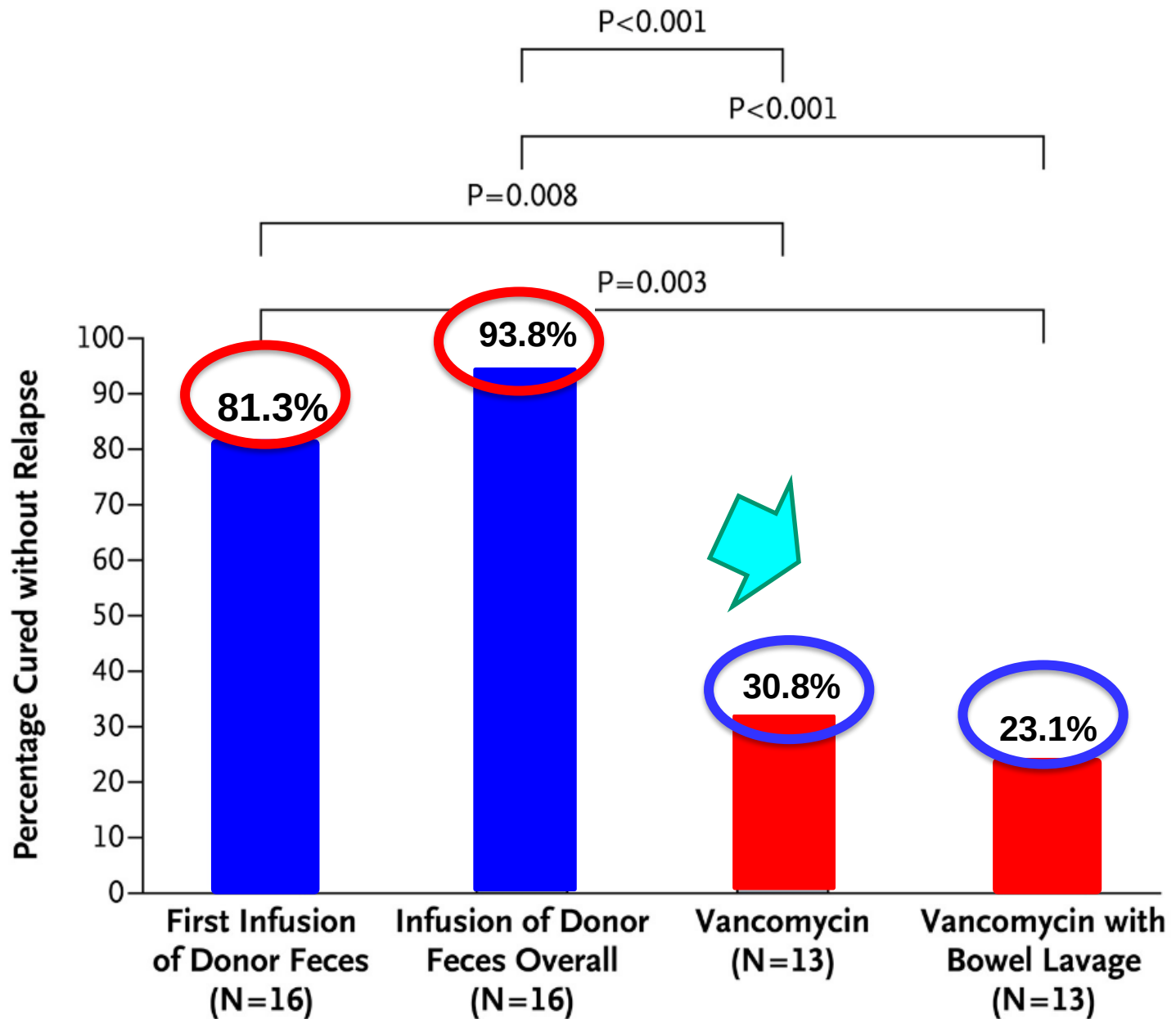
ESTABLISHED IN 1812

JANUARY 31, 2013

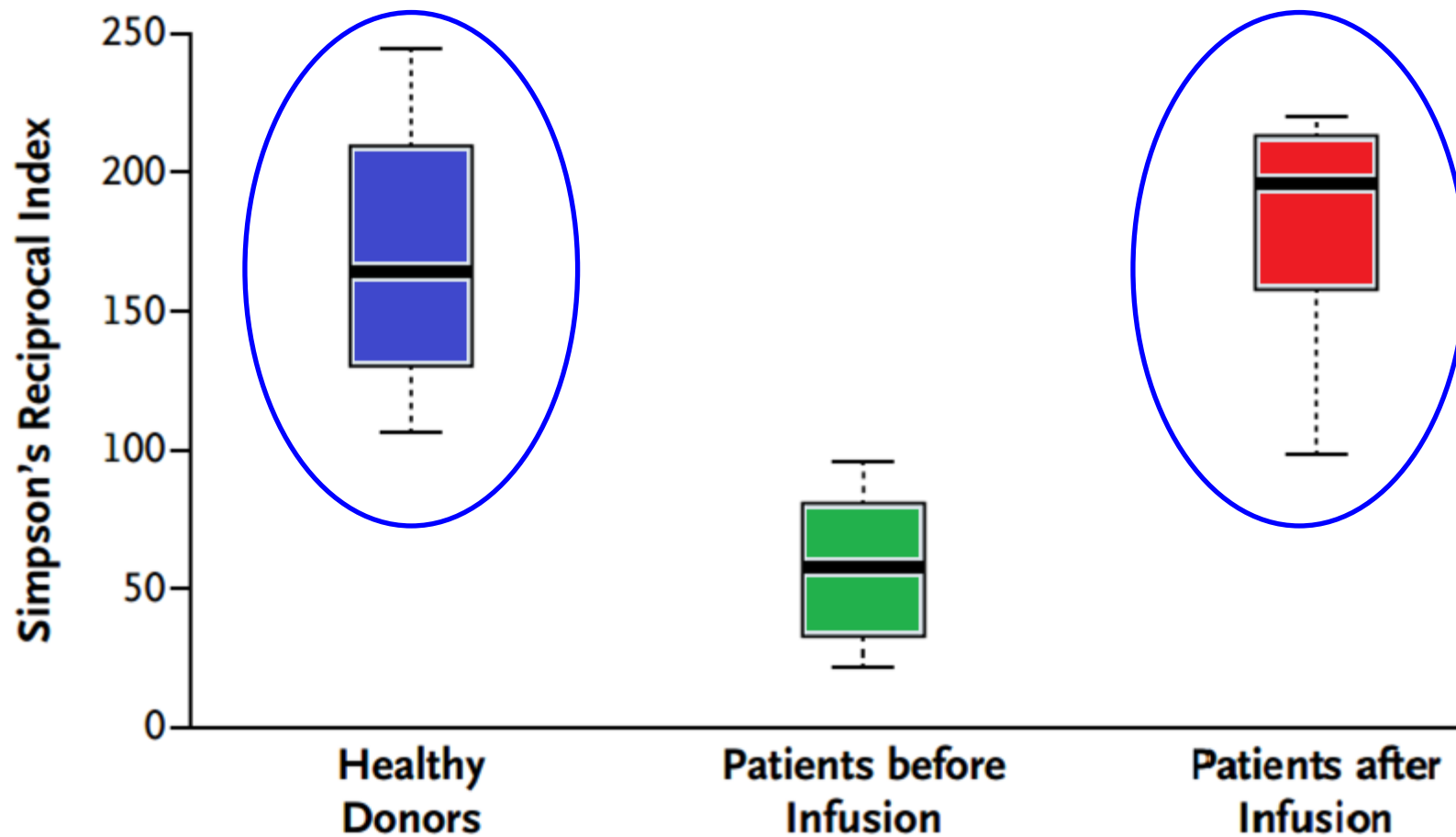
VOL. 368 NO. 5

Duodenal Infusion of Donor Feces for Recurrent
Clostridium difficile

Els van Nood, M.D., Anne Vrieze, M.D., Max Nieuwdorp, M.D., Ph.D., Susana Fuentes, Ph.D.,



B Microbial Diversity



van Nood E, N Engl J Med 2013;368:407-15.

Cd recurrente

2a Recurrencia



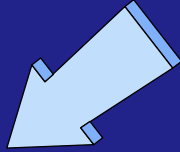
Vancomicina en pulsos
125 mg 4v/d, 10-14 días
125 mg 2v/día 1 semana
125 mg/día 1 semana
125 mg cada 2-3d/2-8 semanas

Vancomicina 125 mg 4v/d, 10 días
Seguida con Rifaximina
400 mg (550) 3vd/20 días “O”

Fidaxomicina 200 mg 2vd/10 días “O”

3ª recurrencia
Trasplante de materia fecal

Cd refractaria



Cirugía
Mortalidad
32-41%

2020



Trasplante fecal
Cura 80-90%
Mortalidad 7.6%

No hay ECC
Cabeza a cabeza
No sería ético!!

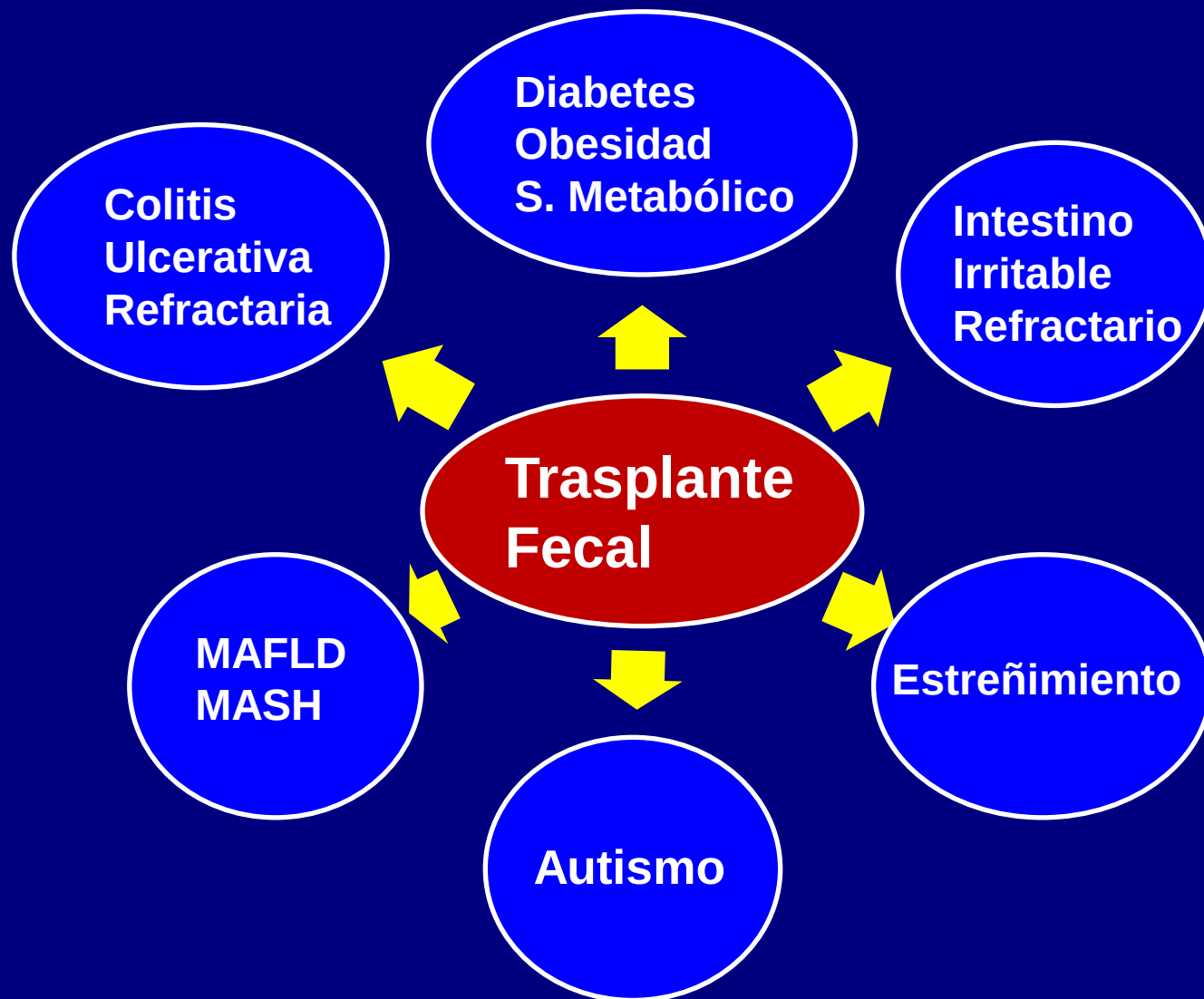
REVIEWS IN BASIC AND CLINICAL GASTROENTEROLOGY AND HEPATOLOGY

Douglas J. Robertson and Vincent W. Yang, Section Editors

Fecal Microbial Transplantation for Diseases Beyond Recurrent *Clostridium Difficile* Infection



Geert R. D'Haens¹ and Christian Jobin²



Zhang F, Protein Cell 2018;9 :462-73
Allegretti JR, Lancet 2019;394:420-31

El Transplante de FMT



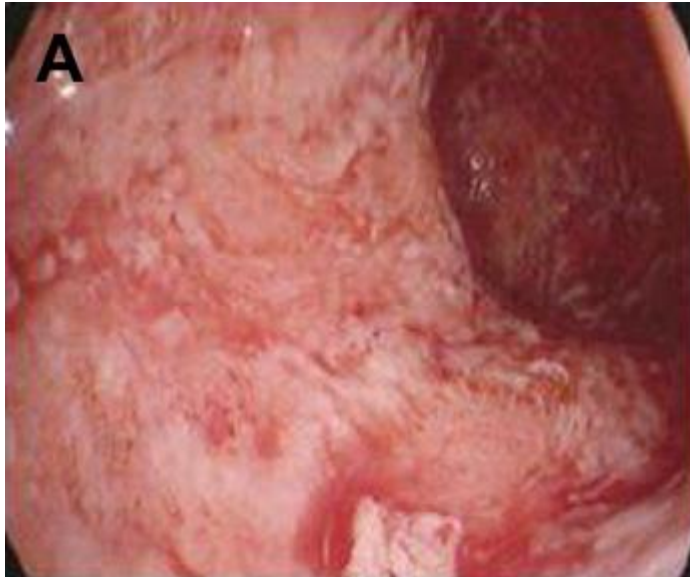
Pos FMT



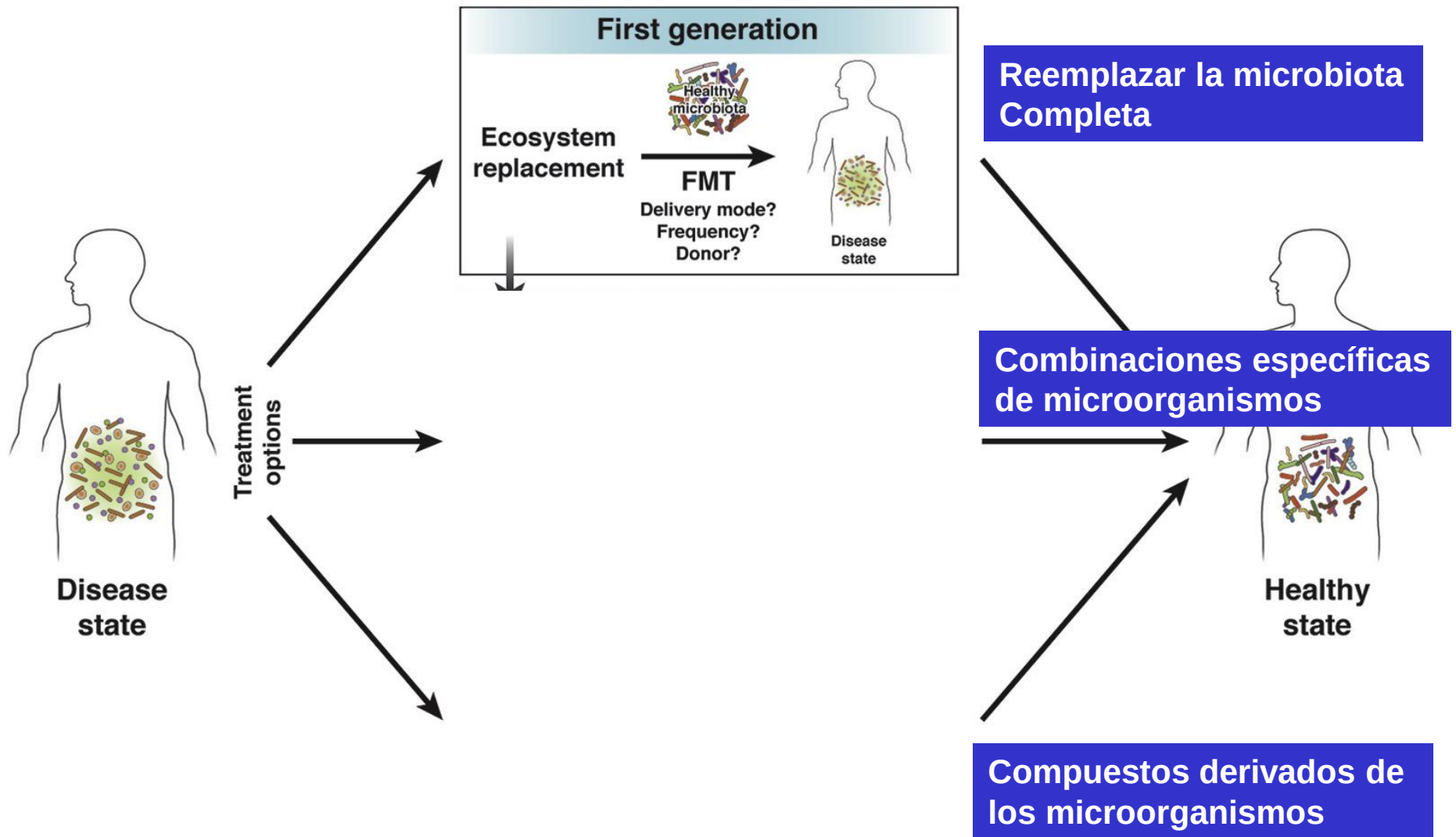
El Transplante de FMT



El Transplante de FMT



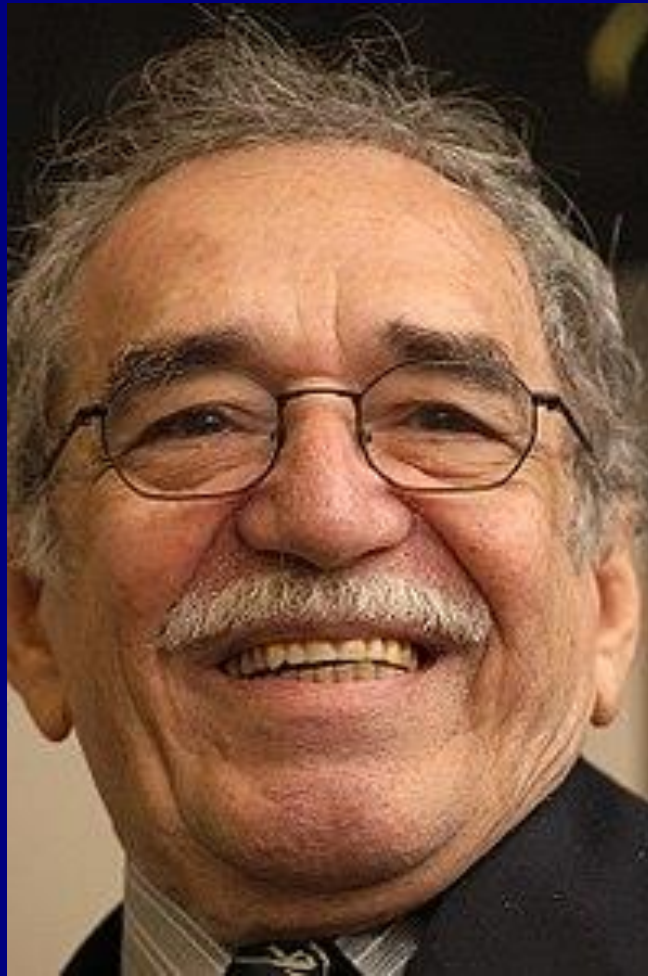
Futuro Trasplante 2ª y 3ª generación



Trasplante fecal



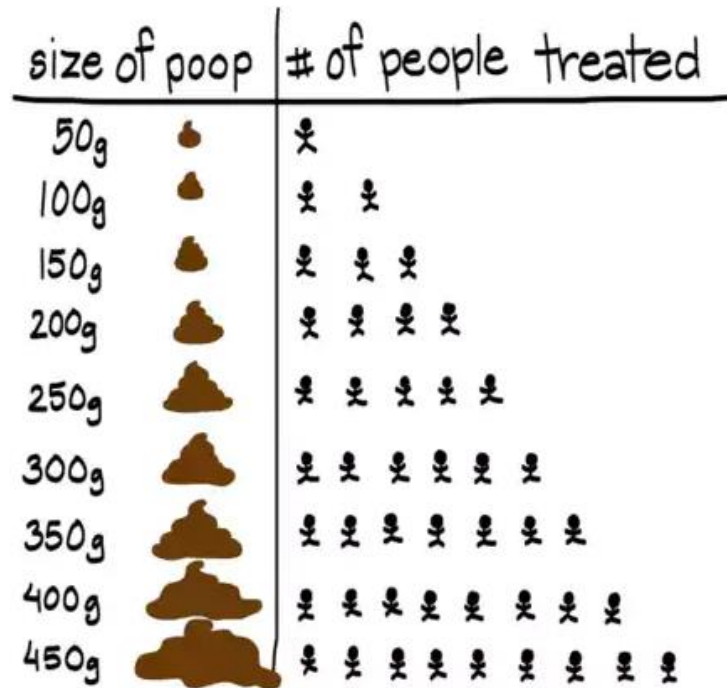
No siempre es basura!



“El día que la mierda tenga algún valor, los pobres nacerán sin”

El otoño del patriarca

US\$ 40 por muestra
US\$ 50 “premio”
Por llevar 5 semanales



THE MOST IMPORTANT THING
YOU'LL DO ALL DAY!



**Aunque no lo crea....
Venderá la materia fecal!**

Muchas gracias!