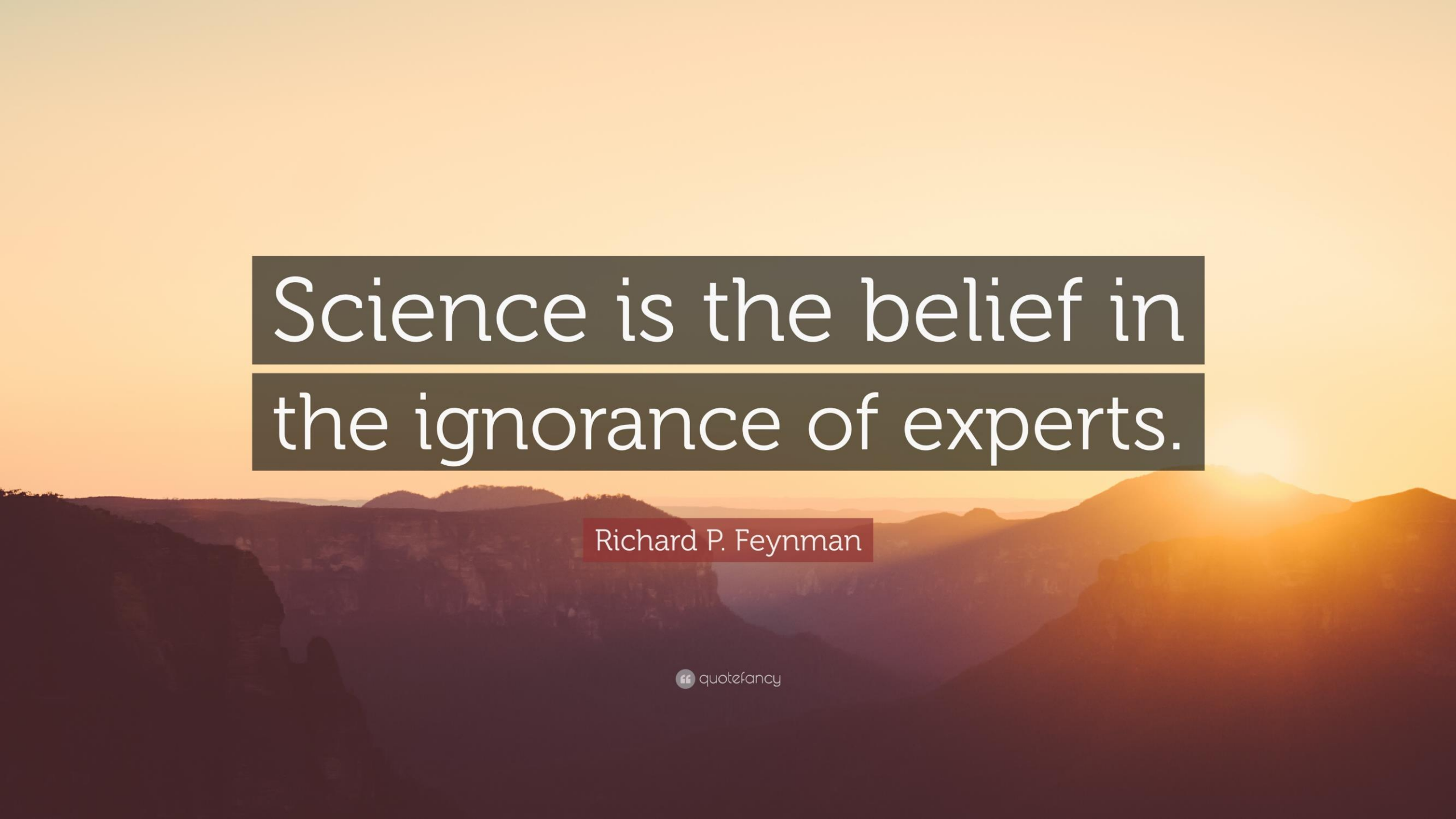

Science is the belief in the ignorance of experts.
Richard P. Feynman
quotefancy

Barrett's Oesophagus Following Sleeve Gastrectomy – Real Association or Normal Variant?

Oliver M. Fisher

MD PhD FMH (Surgery) FRACS

Consultant Upper GI Surgeon

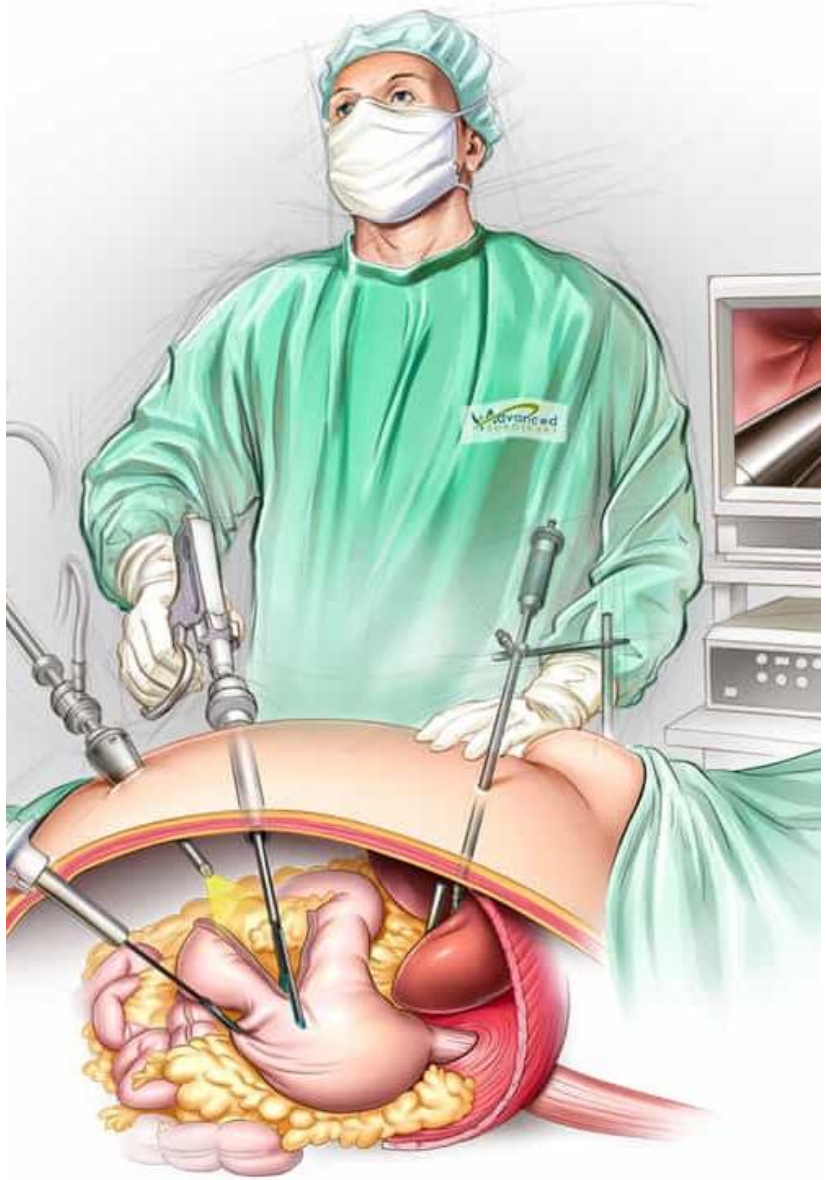
St George Public & Private Hospitals

UNSW SYDNEY

NSW GOVERNMENT Health South Eastern Sydney Local Health District

THE ST GEORGE HOSPITAL TU SOUFFRES CELA SUFFIT

No conflicts of interest



Courtesy Dr. V. Kuzinkovas, Advanced Surgicare

Topics

- Framing the problem
- Incidence of Barrett’s oesophagus post sleeve gastrectomy
- Changes to the gastric cardia and LES following sleeve gastrectomy
- Putting Barrett’s oesophagus into context

Multicenter Study

> Obes Surg. 2019 May;29(5):1462-1469.
doi: 10.1007/s11695-019-03704-y.

Systematic Endoscopy 5 Years After Sleeve Gastrectomy Results in a High Rate of Barrett's Esophagus: Results of a Multicenter Study

Lionel Sebastianelli [1 2], Marine Benois [1 2], Geoffroy Vanbiervliet [1 2], Laurent Bailly [1 3], Maud Robert [4], Nicolas Turrin [5], Emmanuel Gizard [5], Mirto Foletto [6], Marco Bisello [6], Alice Albanese [6], Antonella Santonicola [7], Paola Iovino [7], Thierry Piche [1 2], Luigi Angrisani [8], Laurent Turchi [9], Luigi Schiavo [10], Antonio Iannelli [11 12 13]

18.8% incidence

Qumseya et al, GIE 2021

Case Report

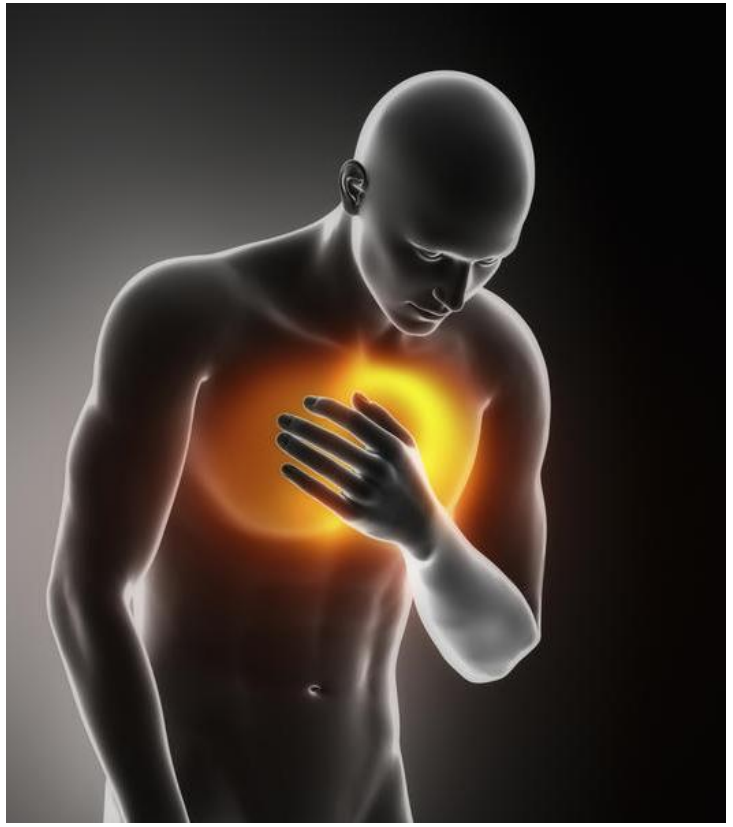
Esophageal adenocarcinoma in Barrett's esophagus after sleeve gastrectomy: Case report and literature review

Lionel El Khoury, Rosa Benvenga, Rodolfo Romero, Regis Cohen, Joel Roussel, Jean-Marc Catheline

A systematic review [7] of 28 articles reported 33 cases of gastroesophageal cancer after bariatric surgery including RYGB, gastric banding, and vertical banded gastroplasty. In this review SG was not mentioned. To the best of our knowledge, only a few cases of esophageal cancer after SG have been reported. One case occurred four months after SG in a patient who did not undergo preoperative upper endoscopy [8]. Another case reported by Sohn [9] described esophageal adenocarcinoma 2.5 years after SG also without previous endoscopic evaluation. In a recent publication, Wright [10] described esophageal adenocarcinoma five years after SG in a patient with normal previous preoperative gastroscopy. Our case is the only one with BE without dysplasia detected before SG. The main pathophysiology of esophageal adenocarcinoma following SG could result from chronic GERD, which could induce intestinal metaplastic changes.

33 cases of gastro-esophageal cancer following bariatric surgery

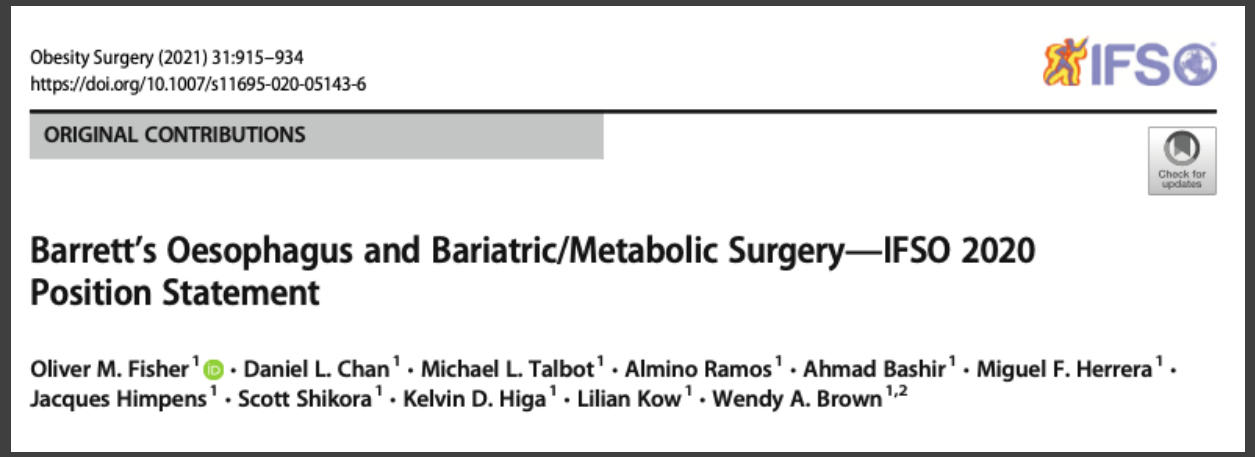
Multiple case reports of OAC following LSG



The dark side


SCOPE
OF THE PROBLEM?
SCOPE
PROBLEM
OF THE
PROBLEM?

Aim of the study



Obesity Surgery (2021) 31:915–934
https://doi.org/10.1007/s11695-020-05143-6

IFSO

ORIGINAL CONTRIBUTIONS

Check for updates

Barrett's Oesophagus and Bariatric/Metabolic Surgery—IFSO 2020 Position Statement

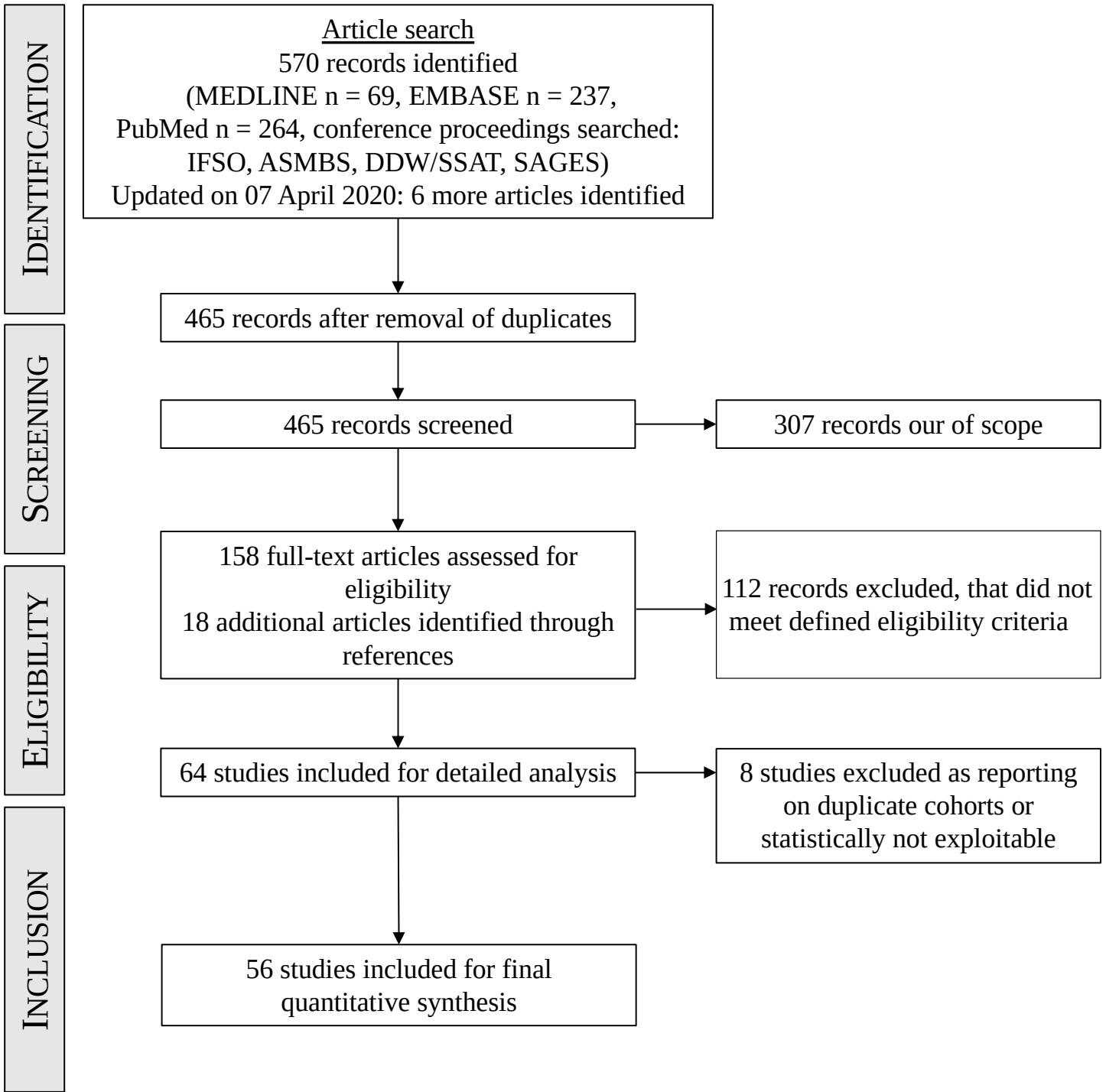
Oliver M. Fisher[1] · Daniel L. Chan[1] · Michael L. Talbot[1] · Almino Ramos[1] · Ahmad Bashir[1] · Miguel F. Herrera[1] · Jacques Himpens[1] · Scott Shikora[1] · Kelvin D. Higa[1] · Lilian Kow[1] · Wendy A. Brown[1,2]

Preoperative BE incidence

Postoperative incidence

→ Barrett's & LSG

Postoperative BE regression



Approach

Systematic review

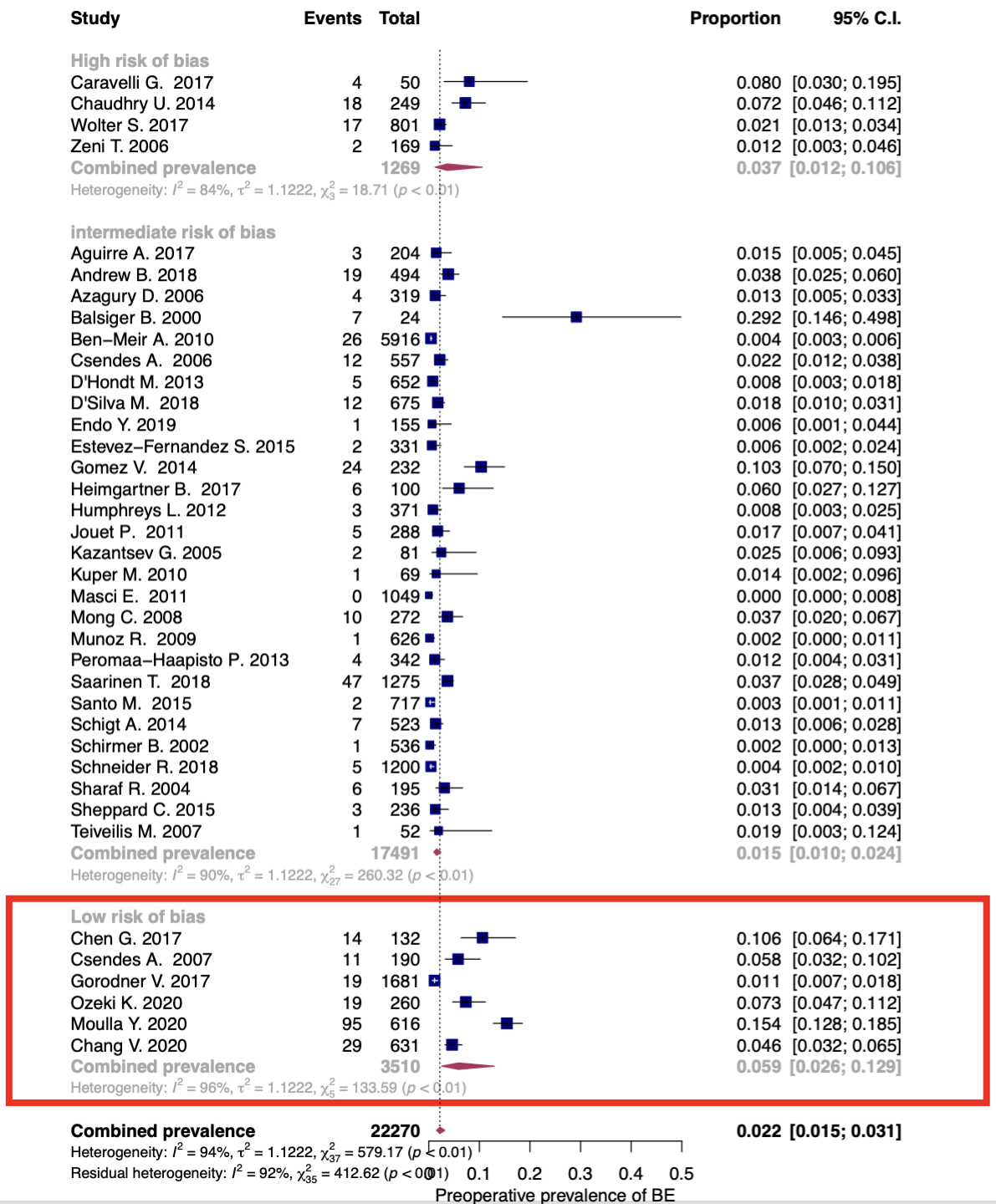
Meta-analysis

IFSO Position Statement

Preoperative incidence – stratified by risk of bias

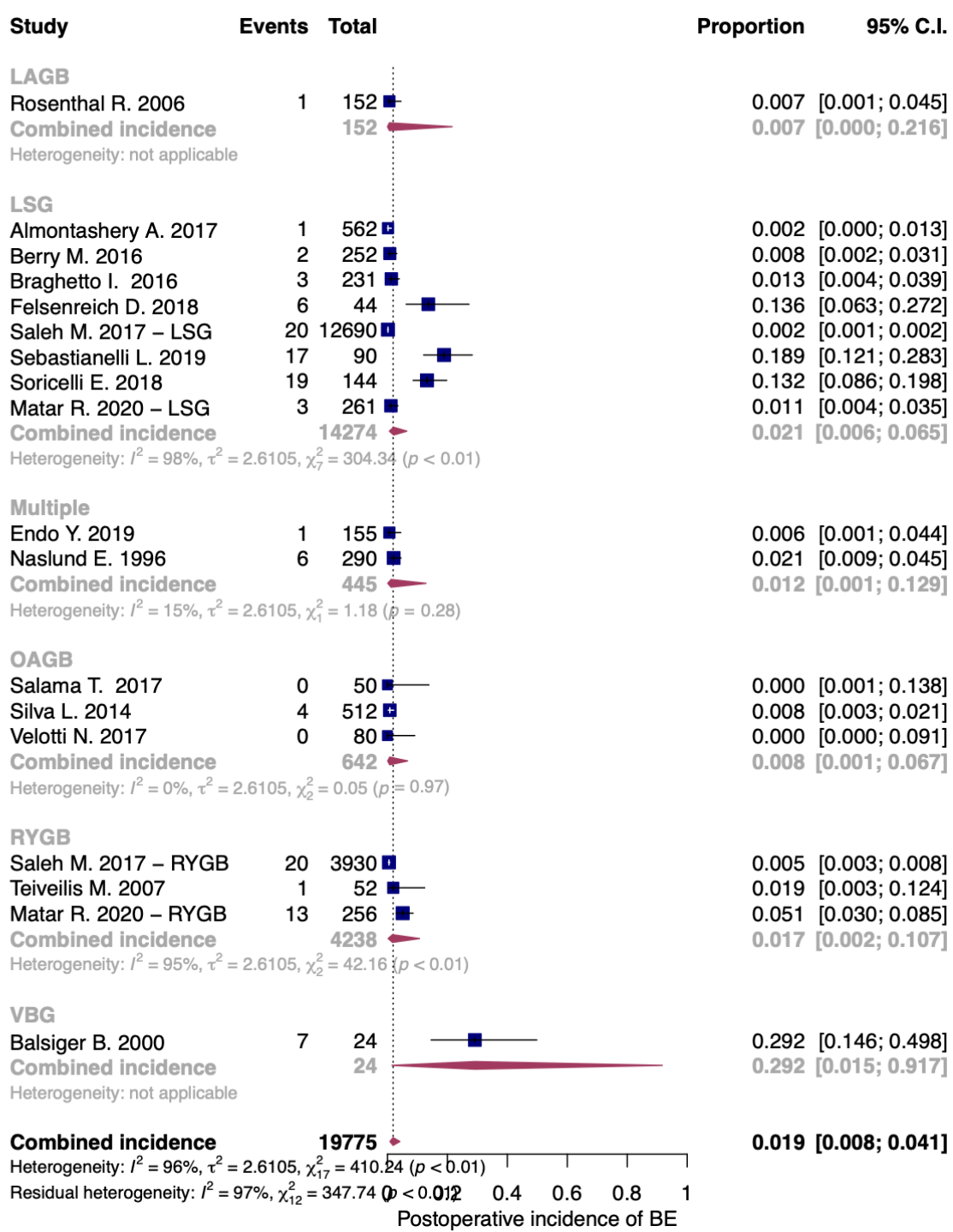
5.9%

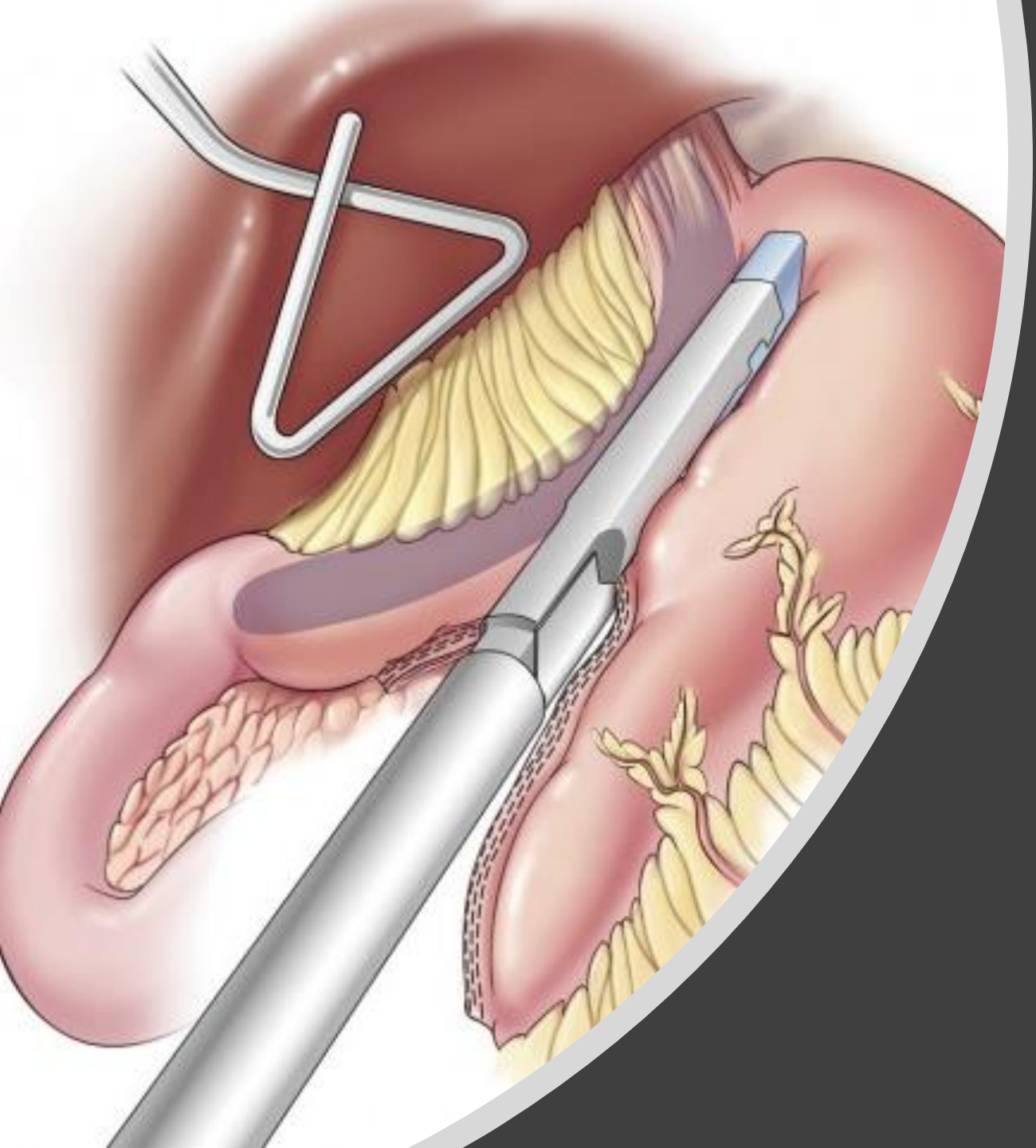
Overall ~2%



Postoperative incidence

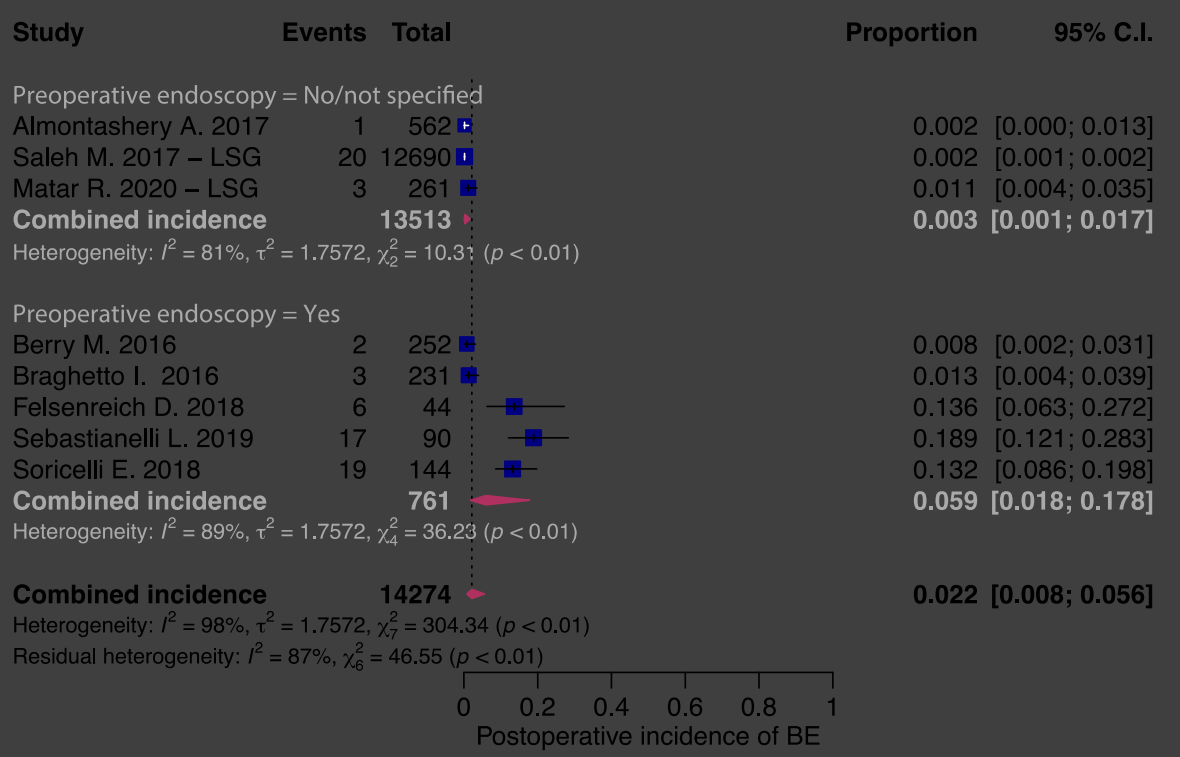
1.9%





5.9%

Adjusted for preoperative endoscopy



Newer studies?

Review > Clin Gastroenterol Hepatol. 2024 Jul 25:S1542-3565(24)00669-4.
doi: 10.1016/j.cgh.2024.06.041. Online ahead of print.

Risk of De Novo Barrett's Esophagus Post Sleeve Gastrectomy: A Systematic Review and Meta-Analysis of Studies with Long-Term Follow-Up

Saurabh Chandan [1], Shahab R Khan [2], Smit S Deliwala [3], Dushyant S Dahiya [4], Babu P Mohan [5], Daryl Ramai [6], Syed M Saghir [7], Banreet S Dhindsa [8], Lena L Kassab [9], Antonio Facciorusso [10], Kalyana Nandipati [11], Dennis Yang [1], Douglas G Adler [12]

19 studies 2018 – 2024
2046 patients
Median FU 2-11 years
5.6% de novo BE rate

Conclusions: Our analysis shows that SG results in a significantly increased risk of de novo BE and higher rates of EE, proton pump inhibitor use, and HH. Our findings suggest that clinicians should routinely screen patients with SG for BE and future surveillance intervals should be followed as per societal guidelines.

Newer studies?

› Surg Obes Relat Dis. 2023 Jul;19(7):707-715. doi: 10.1016/j.soard.2023.02.012.
Epub 2023 Feb 27.

Prospective clinical cohort study: low incidence of Barrett esophagus but high rate of reflux disease at 5-year follow-up after sleeve gastr en-Y gastric bypass

Bettina K Wölnerhanssen [1], Anne C Meyer-Ger
Matthias Sauter [4], Miriam Thumshirn [5], Marco
Christoph Gubler [8], Bernhard Morell [8], Alissa
Christoph Beglinger [2], Ralph Peterli [11], Mark F

Median f/u 7.0 years

Table 2
Prevalence of gastroesophageal reflux disease and incidence of Barrett esophagus

Factor	Before surgery		At follow-up (>5 yr after surgery)	
	Sleeve gastrectomy	Gastric bypass	Sleeve gastrectomy	Gastric bypass
Number	83	86	83	86
Clinical diagnosis of GERD	12/83 (14.5)	27/86 (31.4)	44/86 (53.0)	23/86 (26.7)
PPI use	7/83 (8.4)	11/86 (12.8)	42/83 (50.6)	17/86 (19.8)
On daily basis	7/83 (8.4)	10/86 (11.6)	26/83 (31.3)	10/86 (11.6)
If needed	0/83	1/86 (1.2)	15/83 (18.1)	7/86 (8.1)
Endoscopy findings				
Hiatal hernia	17/83 (20.5)	23/86 (26.7)	33/83 (39.8)	16/86 (18.6)
Reflux esophagitis	19/83 (22.9)	24/86 (27.9)	48/83 (57.8)	23/86 (26.7)
LA grade A	13/19 (68.4)	14/24 (58.3)	25/48 (52.1)	18/23 (78.3)
LA grade B	6/19 (31.6)	10/24 (41.7)	15/48 (31.3)	4/23 (17.4)
LA grade C	0/17	0/24	7/48 (14.6)	1/23 (4.3)
LA grade D	0/17	0/24	1/48 (2.1)	0/23
Barrett esophagus	0/83	1/86 (1.2)	3/83 (3.6)	2/86 (2.3)
Stenosis of stomach			2/83 (2.4)	2/86 (2.3)
Ulceration foot, point anastomosis			0/83	2/86 (2.3)
Histopathology				
Intestinal metaplasia (Barrett)	0/83	1/86 (1.2)	3/83 (3.6)	2/86 (2.3)
Dysplasia/carcinoma	0/83	0/86	0/83	0/86

GERD = gastroesophageal reflux disease; PPI = proton pump inhibitor; LA = Los Angeles classification of reflux esophagitis.
Values are given as counts (%). Categorical variables: before and ≥5 years after surgery by treatment group.

Newer studies

Journal of Gastrointestinal Surgery 28 (2024) 1177–1178

Contents lists available at ScienceDirect

Journal of Gastrointestinal Surgery

journal homepage: www.jogs.org

Research Communication

Lots of reflux, but no Barrett: real-world data on the incidence of gastroesophageal reflux on routine endoscopic follow-up more than 5 years after sleeve gastrectomy

Anna Carolina Batista Dantas [a,*], Jorge Landivar Coutinho [b], José Donizeti de Meira Jr [b], Diogo Turiani Hourneaux De Moura [c], Denis Pajecki [a], Marco Aurelio Santo [a]

[a] Unidade de Cirurgia Bariatrica e Metabolica, Disciplina de Cirurgia do Aparelho Digestivo e Coloproctologia, Departamento de Gastroenterologia, Hospital das Clinicas HCFMUSP, Faculdade de Medicina, Universidade de Sao Paulo, Sao Paulo, SP, Brazil
[b] Disciplina de Cirurgia do Aparelho Digestivo e Coloproctologia, Departamento de Gastroenterologia, Hospital das Clinicas HCFMUSP, Faculdade de Medicina, Universidade de Sao Paulo, Sao Paulo, SP, Brazil
[c] Serviço de Endoscopia Gastrointestinal, Departamento de Gastroenterologia, Hospital das Clinicas HCFMUSP, Faculdade de Medicina, Universidade de Sao Paulo, Sao Paulo, SP, Brazil

Mean f/u 73 months (range 60 – 173)
68 patients (pre/postop endoscopy)
92.6% female cohort

Table 2
Endoscopic findings before and after sleeve gastrectomy

Variable	Preoperative	Follow-up	*P* value
Esophagitis, n (%)	10 (14.7)	31 (45.5)	< .001
A	10	11	
B	0	11	
C	0	8	
D	0	1	
Barrett esophagus	0	0	–
Hiatal hernia, n (%)	2 (2.9)	12 (17.6)	< .001

Why this contradiction?

Sometimes we get it wrong the first time. But you only have to get it right once.

Emery Lord

Is it all just normal anatomy after LSG?

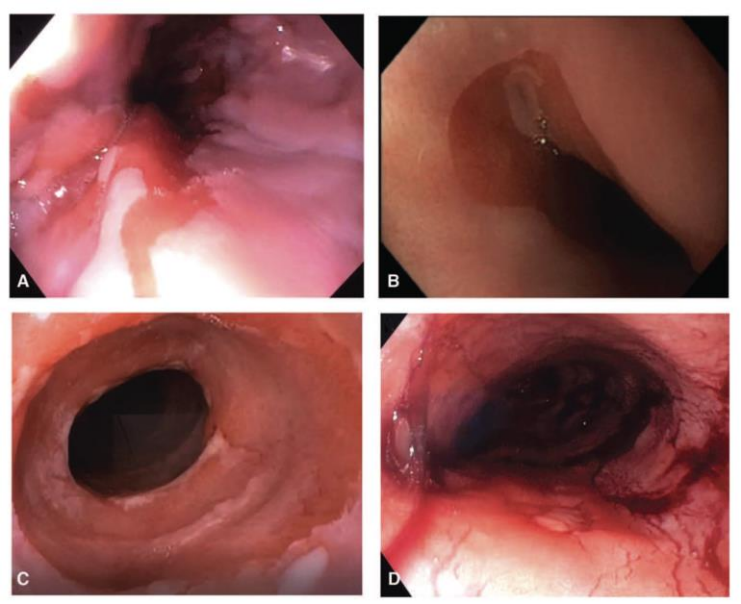
ORIGINAL ARTICLE

Tubularized and Effaced Gastric Cardia Mimicking Barrett Esophagus Following Sleeve Gastrectomy

Protocolized Endoscopic and Histological Assessment With High-resolution Manometry Analysis

Yazmin Johari, MBBS,†✉ Kenny Budiman,*‡ William Catchlove, MBBS,*† Cheryl Laurie, BHSc,* Geoffrey Hebbard, BMedSci, MBBS, PhD, FRACP,§ Sam Norden, MBBS, FRCPA,|| Wendy A. Brown, MBBS, PhD, FRACS, FACS,*† and Paul Burton, MBBS, PhD, FRACS*†*

2022



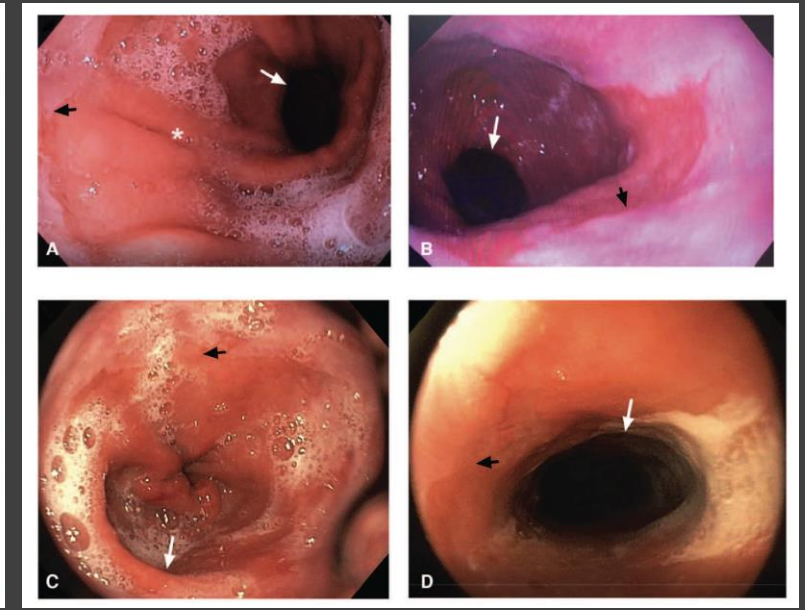
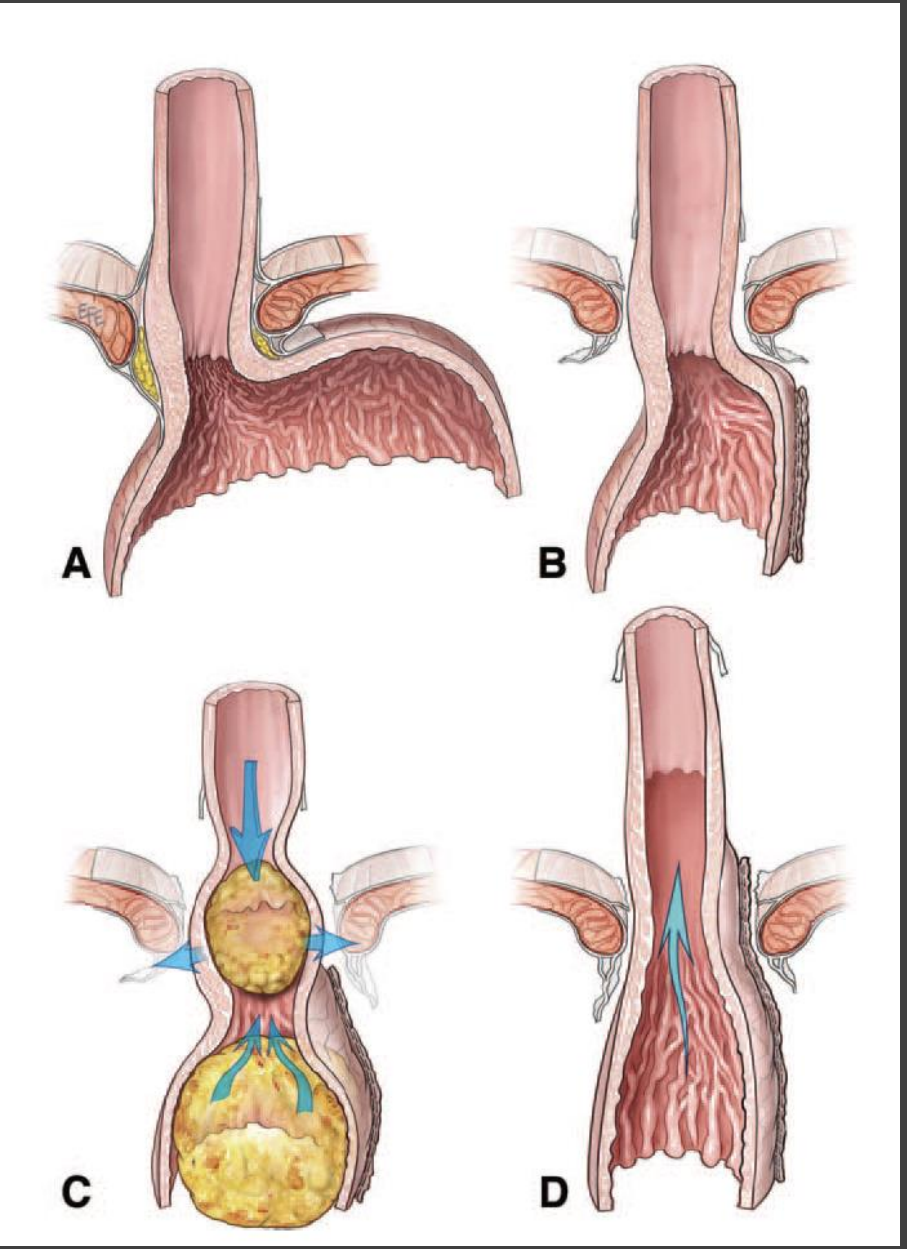


TABLE 2. Endoscopic findings pre- and post-sleeve gastrectomy

	Pre-operative	Post-operative	p-value
N	320	567	
Z-line distance, cm	38.7 ± 2.3	37.4 ± 2.0	<0.001*
Diaphragmatic impression distance, cm	40.2 ± 1.6	39.9 ± 1.6	0.055*
Hiatus hernia, n (%)	127 (39.7)	459 (81.0)	<0.001†
Hiatus hernia size, median (IQR), cm	2.0 (1.0)	3.0 (1.0)	0.026§
Esophagitis, n (%)	83 (25.9)	182 (32.1)	0.056†
The Los Angeles classification of esophagitis, n (%)	Grade A – 77 (92.8) Grade B – 5 (6.0) Grade C – 1 (1.2)	Grade A – 144 (79.1) Grade B – 34 (18.7) Grade C – 4 (2.2)	0.017‡
Barrett esophagus, n (%)	13 (4.1)	19 (3.4)	0.756†
Tubularized cardia herniation, n (%)	2 (0.6)	151 (26.6)	<0.001†
Bile in the stomach, n (%)	43 (13.4)	222 (39.2)	<0.001†

*Student t-test.
†Chi-square test.
‡Fisher's exact test.
§Mann-Whitney U test.



Johari Y, *Annals of Surgery Volume 276, Number 1, July 2022*

Gut. 2022 Aug;71(8):1488-1514. doi: 10.1136/gutjnl-2022-327281. Epub 2022 Jun 20.

Kyoto international consensus report on anatomy, pathophysiology and clinical significance of the gastro-oesophageal junction

Kentaro Sugano [1], Stuart Jon Spechler [2], Emad M El-Omar [3], Kenneth E L McColl [4], Kaiyo Takubo [5], Takuji Gotoda [6], Mitsuhiro Fujishiro [7], Katsunori Iijima [8], Haruhiro Inoue [9], Takashi Kawai [10], Yoshikazu Kinoshita [11], Hiroto Miwa [12], Ken-Ichi Mukaisho [13], Kazunari Murakami [14], Yasuyuki Seto [15], Hisao Tajiri [16], Shobna Bhatia [17], Myung-Gyu Choi [18], Rebecca C Fitzgerald [19], Kwong Ming Fock [20], Khean-Lee Goh [21], Khek Yu Ho [22], Varocha Mahachai [23], Maria O'Donovan [24], Robert Odze [25], Richard Peek [26], Massimo Rugge [27], Prateek Sharma [28], Jose D Sollano [29], Michael Vieth [30], Justin Wu [31], Ming-Shiang Wu [32], Duowu Zou [33], Michio Kaminishi [34], Peter Malfertheiner [35] [36]

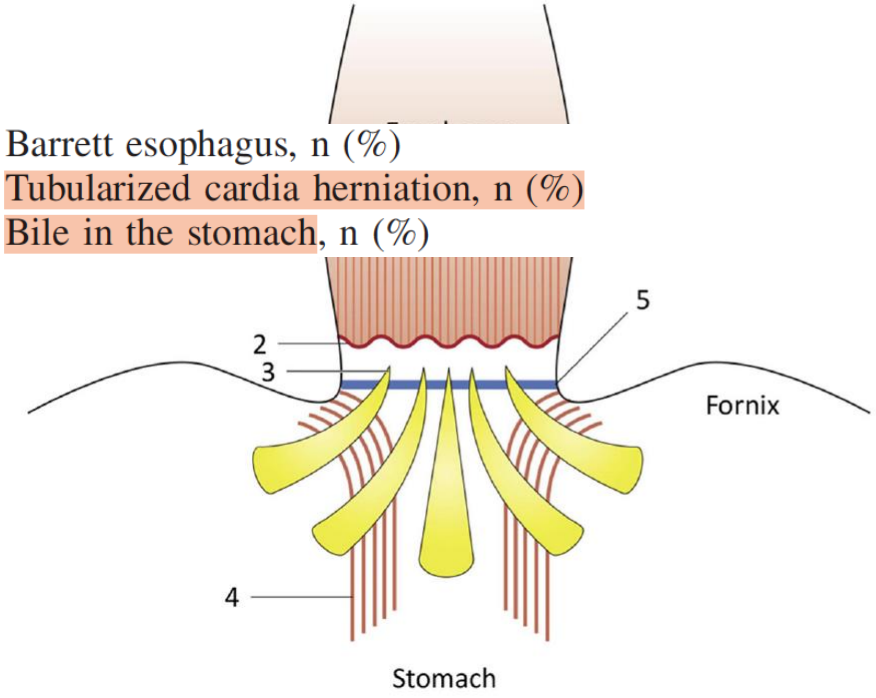
CQ 19

What factors are associated with IM in the GOJZ?

Statement 19

Gastric acid, pepsin, bile, nitrosative stress and *H. pylori* are associated with IM in the GOJZ.

A



B

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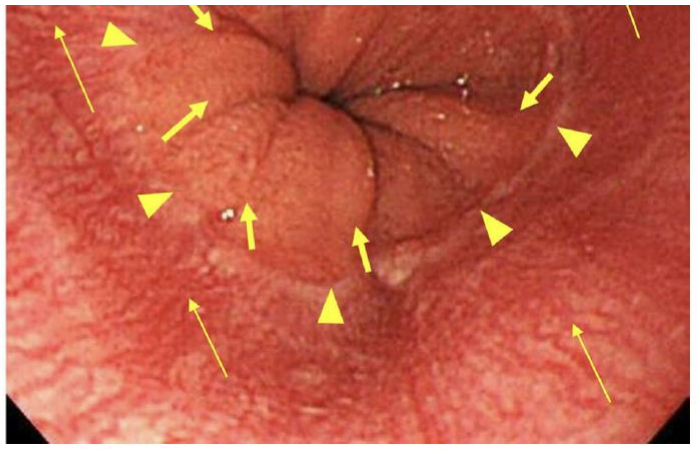

ORIGINAL ARTICLE

Tubularized and Effaced Gastric Cardia Mimicking Barrett Esophagus Following Sleeve Gastrectomy

Protocolized Endoscopic and Histological Assessment With High-resolution Manometry Analysis

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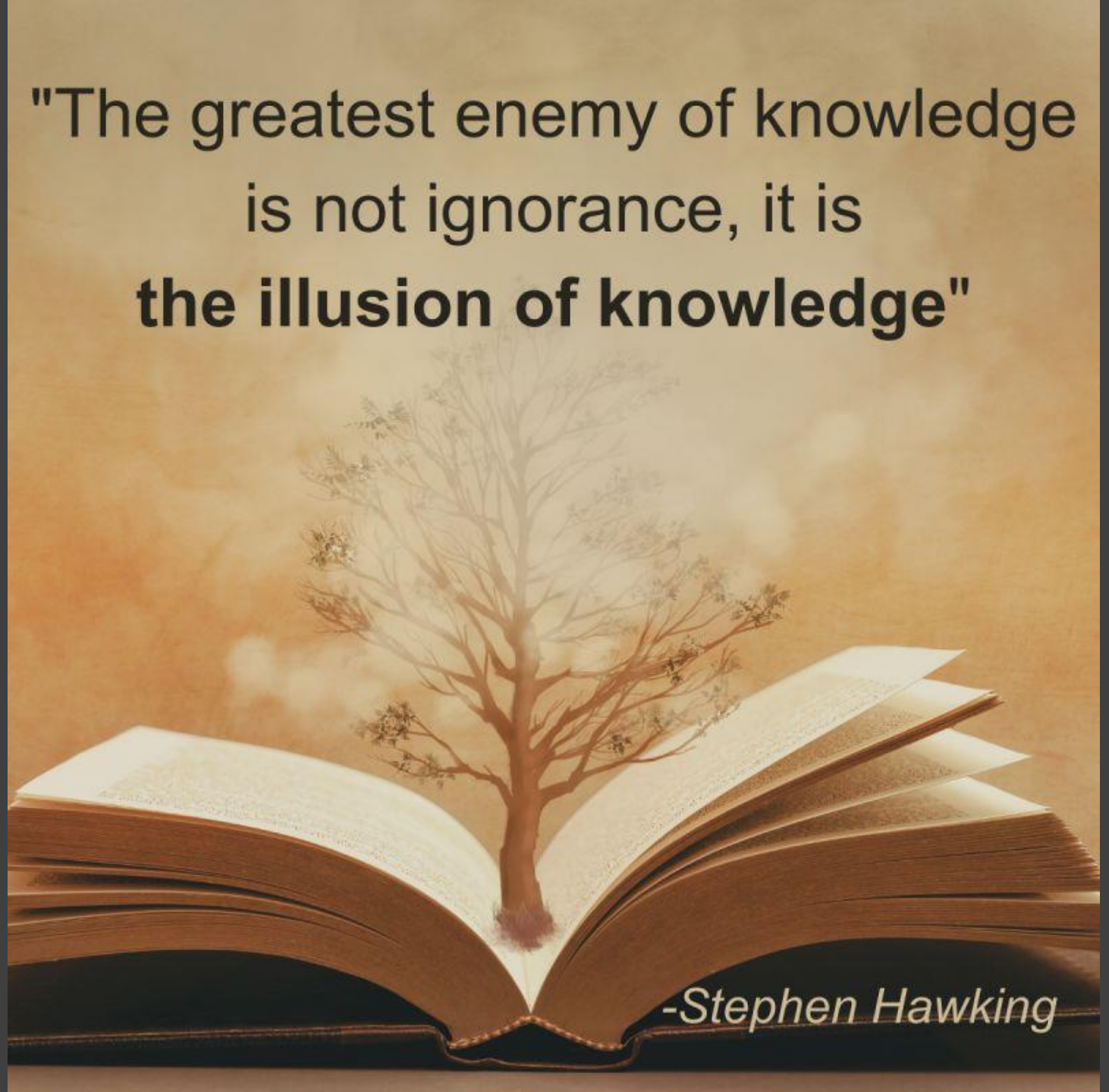

"The greatest enemy of knowledge
is not ignorance, it is
the illusion of knowledge"
-Stephen Hawking

Case Report

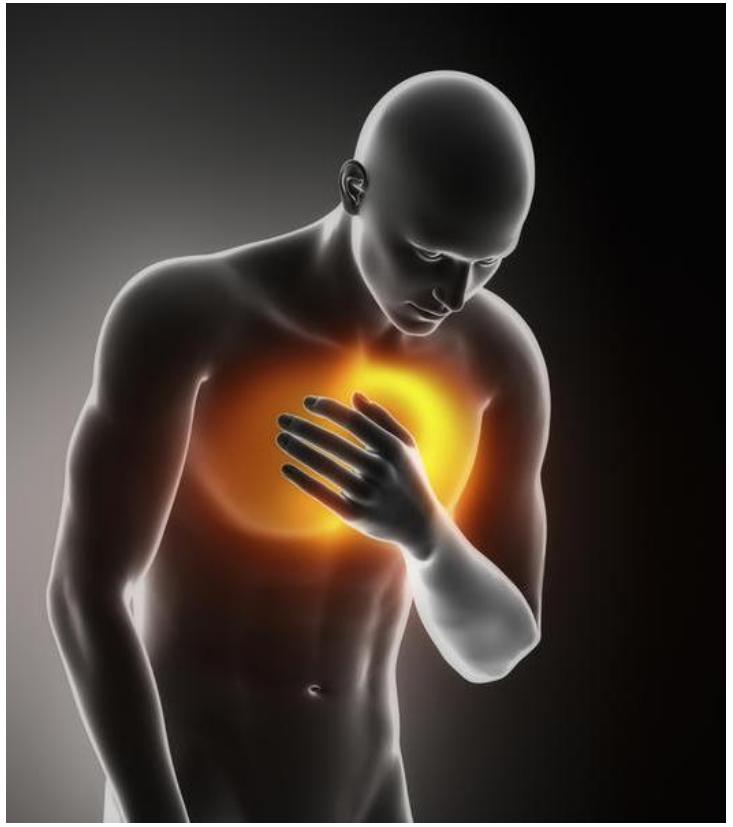
Esophageal adenocarcinoma in Barrett's esophagus after sleeve gastrectomy: Case report and literature review

Lionel El Khoury, Rosa Benvenga, Rodolfo Romero, Regis Cohen, Joel Roussel, Jean-Marc Catheline

A systematic review [7] of 28 articles reported 33 cases of gastroesophageal cancer after bariatric surgery including RYGB, gastric banding, and vertical banded gastroplasty. In this review SG was not mentioned. To the best of our knowledge, only a few cases of esophageal cancer after SG have been reported. One case occurred four months after SG in a patient who did not undergo preoperative upper endoscopy [8]. Another case reported by Sohn [9] described esophageal adenocarcinoma 2.5 years after SG also without previous endoscopic evaluation. In a recent publication, Wright [10] described esophageal adenocarcinoma five years after SG in a patient with normal previous preoperative gastroscopy. Our case is the only one with BE without dysplasia detected before SG. The main pathophysiology of esophageal adenocarcinoma following SG could result from chronic GERD, which could induce intestinal metaplastic changes.

33 cases of gastro-esophageal cancer following bariatric surgery

Multiple case reports of OAC following LSG



The dark side

Barrett's = risk factor for OAC

BUT THAT RISK IS LOW!

Factors influencing risk of progression to HGD/OAC

Patient factors

1. Age
2. Male gender
3. Obesity
4. Smoking
5. Recurrent/persistent GORD (acid & bile)
6. Years of disease

Disease factors

1. "Molecular subtype" at inception
2. TP53 mutations
3. Presence of dysplasia
4. Barrett's segment length

Barrett's - malignant progression

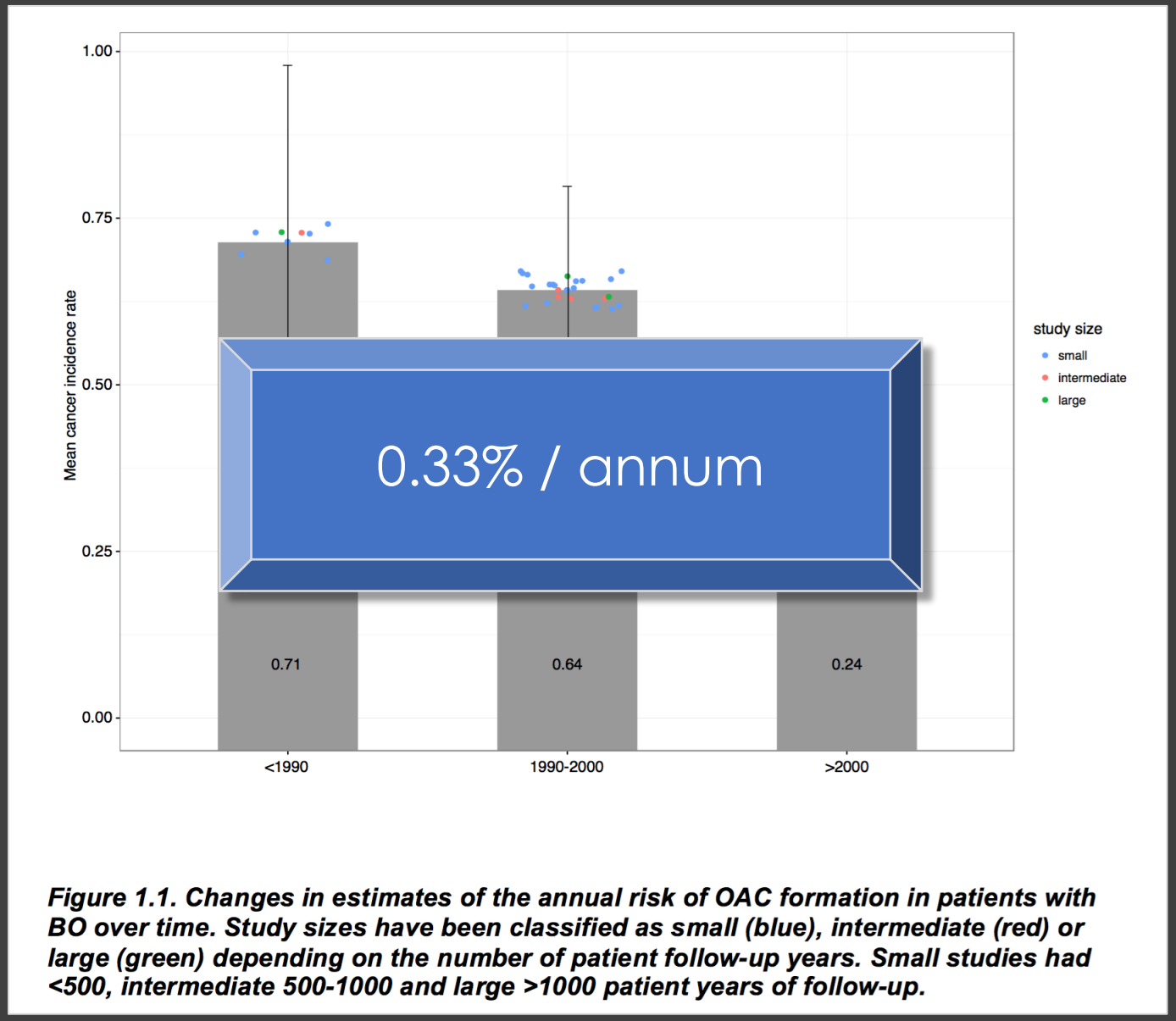


Figure 1.1. Changes in estimates of the annual risk of OAC formation in patients with BO over time. Study sizes have been classified as small (blue), intermediate (red) or large (green) depending on the number of patient follow-up years. Small studies had <500, intermediate 500-1000 and large >1000 patient years of follow-up.

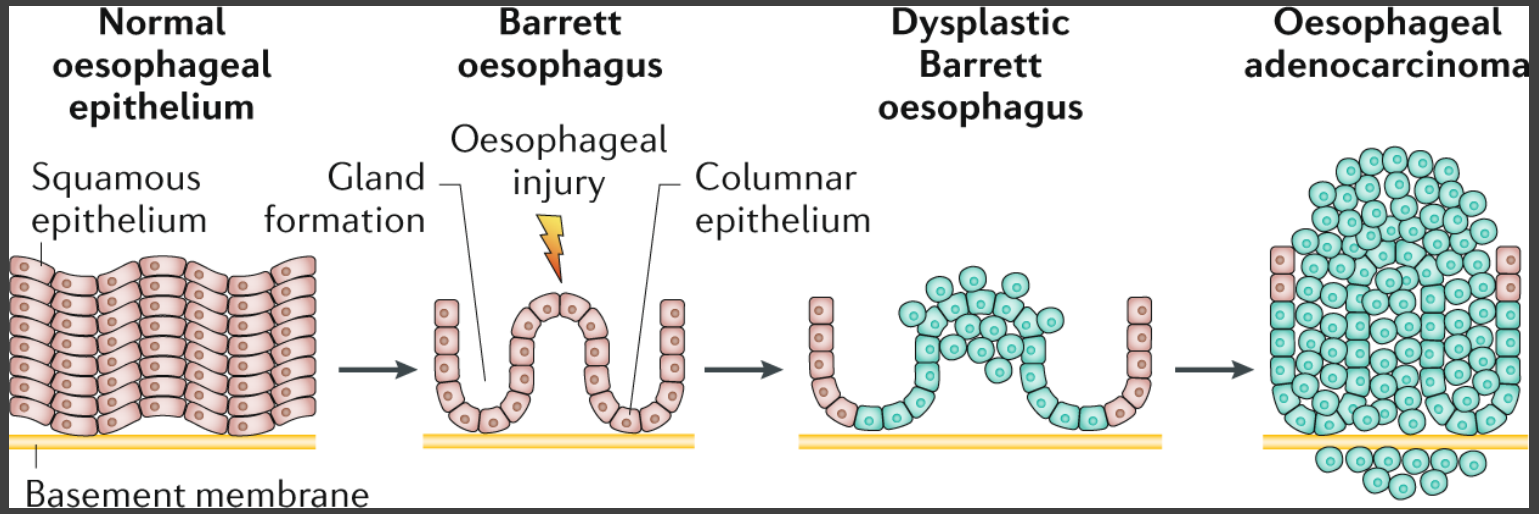
OM Fisher & RV Lord in Shackleford's Surgery of the Alimentary Tract
Desai et al., Gut 2012

Dysplasia & malignant progression

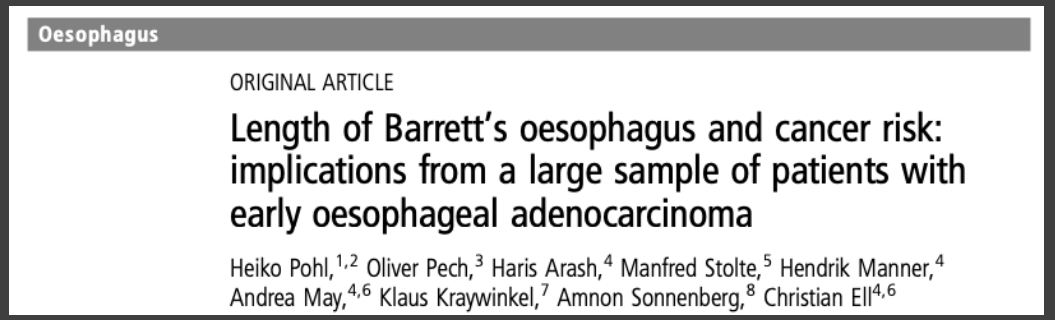
Non-dysplastic Barrett's – 0.33%/annum

LGD ~ 1-2%/annum (Phoa et al RFA-Trial = 11.8%)

HGD 6-7% (up to 12% in other studies)



Barrett's length & malignant progression



Oesophagus

ORIGINAL ARTICLE

Length of Barrett's oesophagus and cancer risk: implications from a large sample of patients with early oesophageal adenocarcinoma

Heiko Pohl,[1,2] Oliver Pech,[3] Haris Arash,[4] Manfred Stolte,[5] Hendrik Manner,[4] Andrea May,[4,6] Klaus Kraywinkel,[7] Amnon Sonnenberg,[8] Christian Ell[4,6]

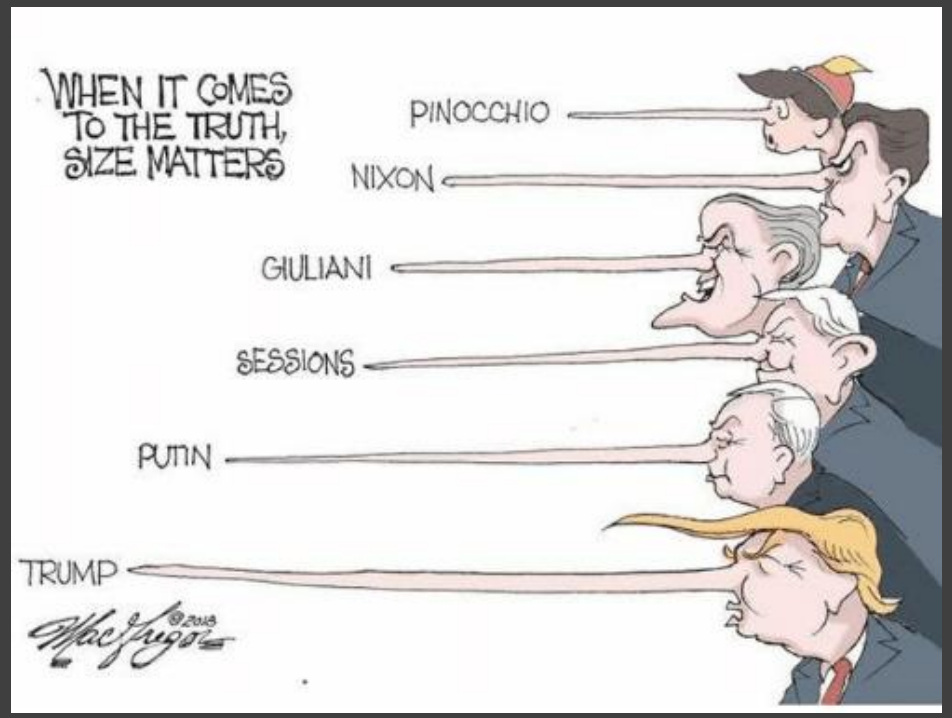
Long-segment Barrett's (LSBO) >3cm
Short-segment Barrett's (SSBO) < 3cm
Ultra-short segment Barrett's (USSBO) <1cm

0.22%/annum for LSBO
0.03%/annum for SSBO
0.01%/annum for USSBO

NNT 450 for LSBO
NNT 3440 for SSBO
NNT 12364 for USSBO

Pohl et al, Gut 2016

Barrett's length & malignant progression



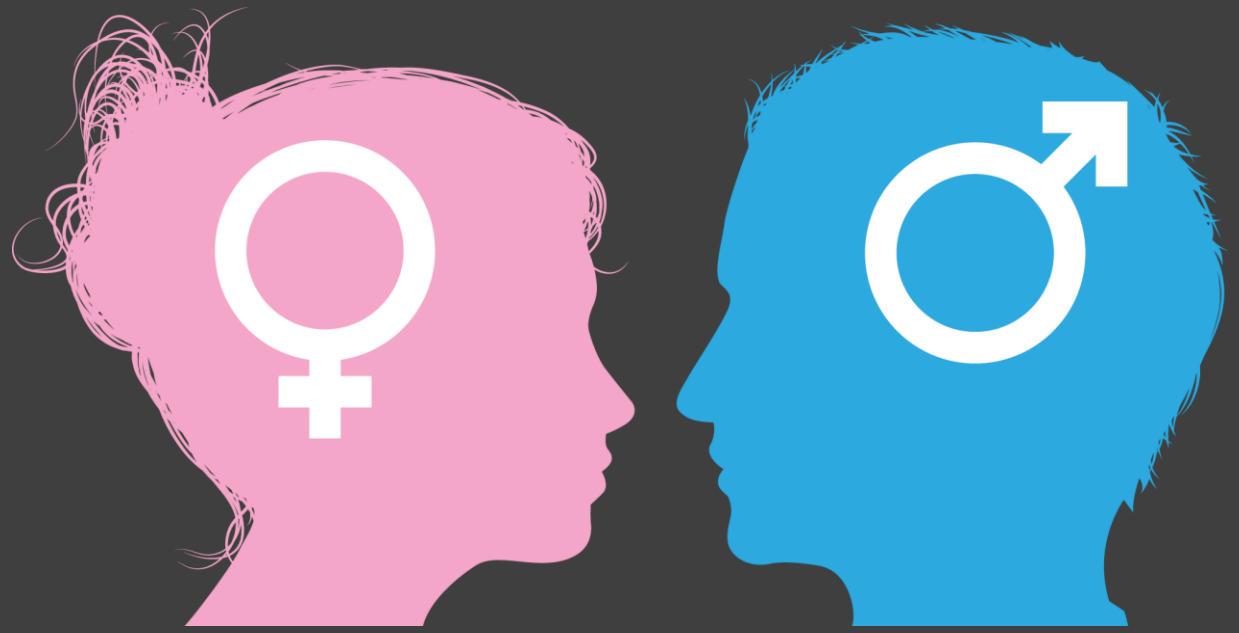
<u>Meta-analysis</u>

(10 studies, >20,000 person-years of follow-up)

→0.31%/annum for LSBO

→0.06%/annum for SSBO

Chandrasekar et al. Endoscopy 2019



Up to 6:1 male predominance for OAC

Males 2-4x higher risk of progression

? lag of 20 years in dx of OAC in women

ORIGINAL ARTICLE: PDF ONLY

Low Risk of Progression of Barrett's Esophagus

Volume 103, Issue 13
6 July 2011

Risk of Malignant Progression in Barrett's Esophagus Patients: Results from a Large Population-Based Study

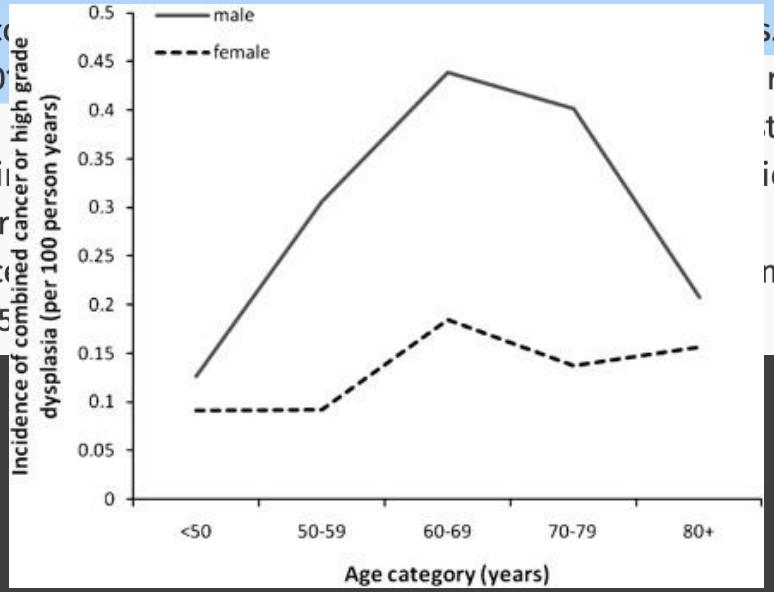
Shivaram Bhat, Helen G. Coleman, Fouad Yousef, Brian T. Johnston, Damian T. McManus, Anna T. Gavin, Liam J. Murray

JNCI: Journal of the National Cancer Institute, Volume 103, Issue 13, 6 July 2011, Pages 1049–1057, https://doi.org/10.1093/jnci/djr203

Published: 16 June 2011 **Article history**

doi: 10.1097/MCG.0000000000001362

with an overall annual incidence of 0.3% (95% confidence interval: 0.2%-0.4%). We found significant differences between women and men in annual incidence rates of EAC (0.05% for women vs. 0.3% in men; *P*=0.04)



Risk of progression in women?

ORIGINAL ARTICLE

TABLE 1. Sociodemographic and clinical characteristics of the entire study cohort (n = 608) and stratified by nonprogressors (n = 584) and progressors (n = 24) defined as development of high-grade dysplasia or esophageal adenocarcinoma during follow-up

	Study cohort	Nonprogressors	Progressors
Frequency	608	584	24
Age			
<60 y	211 (34.7)	206 (35.3)	5 (20.8)
60 y to <70 y	323 (53.1)	309 (52.9)	14 (58.4)
70+ y	74 (12.2)	69 (11.8)	5 (20.8)
Race			
Non-Hispanic white	486 (79.9)	466 (79.8)	20 (83.3)
Non-Hispanic black	62 (10.2)	61 (10.5)	1 (4.2)
Hispanic	60 (9.9)	57 (9.8)	3 (12.5)
Sex			
Male	583 (95.9)	559 (95.7)	24 (100.0)
Female	25 (4.1)	25 (4.3)	0 (.0)
Body mass index			
<25	109 (17.9)	106 (18.1)	3 (12.5)
25 to <30	234 (38.5)	227 (38.9)	7 (29.2)
30+	265 (43.6)	251 (43.0)	14 (58.3)

Mean FU 4.1 years

OESOPHAGUS

Mortality in Barrett's oesophagus: results from a

p

GASTROENTEROLOGY 2013;144:1375–1383

CLIN

AP&T Alimentary Pharmacology and Therapeutics

Cause-
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Barrett'
study

R. Erichsen*
H. T. Sørensen

Results

Patients

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Oesophagus

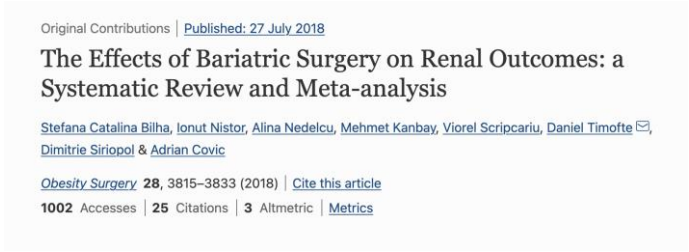
ORIGINAL ARTICLE

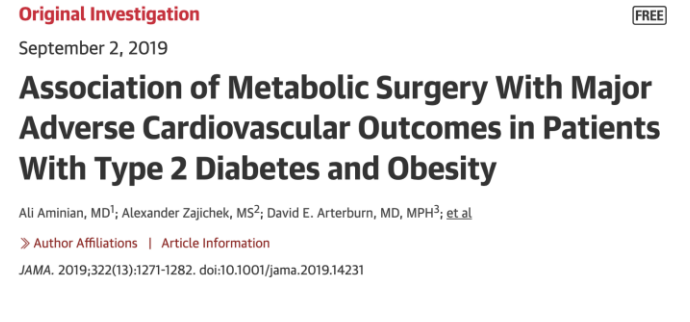
Cancer incidence and mortality risks in a large US Barrett's oesophagus cohort

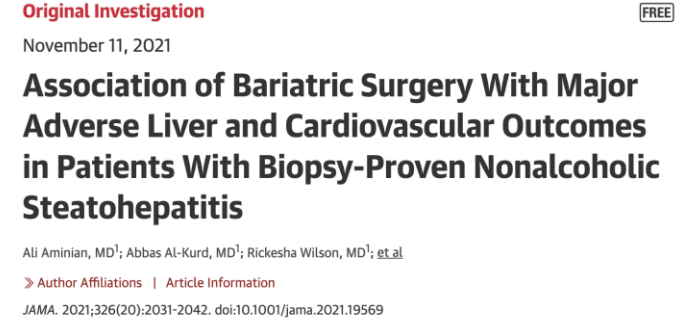
Michael B Cook,[1] Sally B Coburn,[1] Jameson R Lam,[2] Philip R Taylor,[1] Jennifer L Schneider,[2] Douglas A Corley[2]

Cause-specific SMRs were elevated for ischaemic heart disease (SMR=1.39, 95% CI 1.18 to 1.63), respiratory system diseases (SMR=1.51, 95% CI 1.29 to 1.75) and digestive system diseases (SMR=2.20 95% CI 1.75 to 2.75).

do patients
arrett's die
rom?







And what does BMS offer?

The great tragedy of science – the slaying of a beautiful hypothesis by an ugly fact.

Thomas Henry Huxley

BE remission after LSG?

ABSTRACT ONLY | VOLUME 14, ISSUE 11, SUPPLEMENT , S156, NOVEMBER 01, 2018

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Remission of Barrett's Esophagus after Sleeve Gastrectomy, A Case Study

Stephanie Therrien, Bs.c • Daniel Jones, MD MS, FASMBS

DOI: https://doi.org/10.1016/j.soard.2018.09.358

Background: Barrett's Esophagus (BE),common in individuals with gastroesophageal reflux disease (GERD), pre-disposes the affected individual to the potential development of intestinal metaplasia, dysplasia and esophageal adenocarcinoma. Due to physiologic changes incurred post Laparoscopic Sleeve Gastrectomy (LSG), there is an increased risk of BE development, or progression in patients with active GERD. Because of this, many surgeons consider a patient who has BE to be contraindicated for LSG surgery.

Barrett's Regression LSG

?%

BT002
REGRESSION OF BARRETT'S METAPLASIA ON ENDOSCOPIC SURVEILLANCE FOLLOWING SLEEVE GASTRECTOMY

Dionee Liefman and Gregory Bruce Nolan

Gold Coast University Hospital, QLD

Short segment Barrett's metaplasia has previously been a contraindication to proceeding with sleeve gastrectomy. This study observed 32 patients, 50% of which had regression of metaplasia and 33.33% with unchanged metaplasia on recorded Prague classification at post-operative endoscopy. Barrett's metaplasia, as a potentially reversible condition, has been demonstrated to at least partially regress with effective anti-reflux medical or surgical management 1,2. Data collected compared pre-operative and post-operative reflux symptoms, and Prague classification of Barrett's metaplasia, amongst other patient factors. Of the 32 patients observed, 83.33% (15 out of 18) of those who underwent post-operative gastroscopy were recorded to have either regression or stability of metaplastic change compared to pre-operatively. In addition, 46.87% of patients studied (15 of 32) reported reflux pre-operatively, with then only 15.62% of the group (5 of 32) experiencing minor persistent but well controlled reflux after sleeve gastrectomy. We conclude that improvement in reflux symptoms and recorded regression of Barrett's metaplasia is observed in a significant number of patients on endoscopic surveillance following sleeve gastrectomy.

References

1. Spechler SJ. Does Barrett's Esophagus Regress After Surgery (Or Proton Pump Inhibitors)? Digestive Diseases 2014;32:156–16.
2. Gagner M. Is Sleeve Gastrectomy Always An Absolute Contraindication In Patients with Barrett's? Obesity Surgery (2016) 26:715–717.

83% regression or stability

ROYAL AUSTRALASIAN COLLEGE OF SURGEONS

Sydney 2018

Barrett's stability post LSG

Part 1: Endoscopic Changes Post Sleeve Gastrectomy

Endoscopic findings of the pre-operative and post-operative cohorts are detailed in Table 2. BE was uncommon following SG and comparable to the pre-operative cohort (4.1% vs. 3.4%, $p = 0.756$). There was no dysplasia in either group.

5/13 pts with preop BE had f/u endoscopy:

- 3 reduction in length of BE
- 2 had complete remission

38% - 44% improvement or remission

16 pts with BE post LSG:

- 2 unchanged at 1 year
- 3 complete remission at 1 year
- 2 had improvement in length at 2 years
- All BE SSBE, with exception of one LSBE who showed progression in length 1 year later

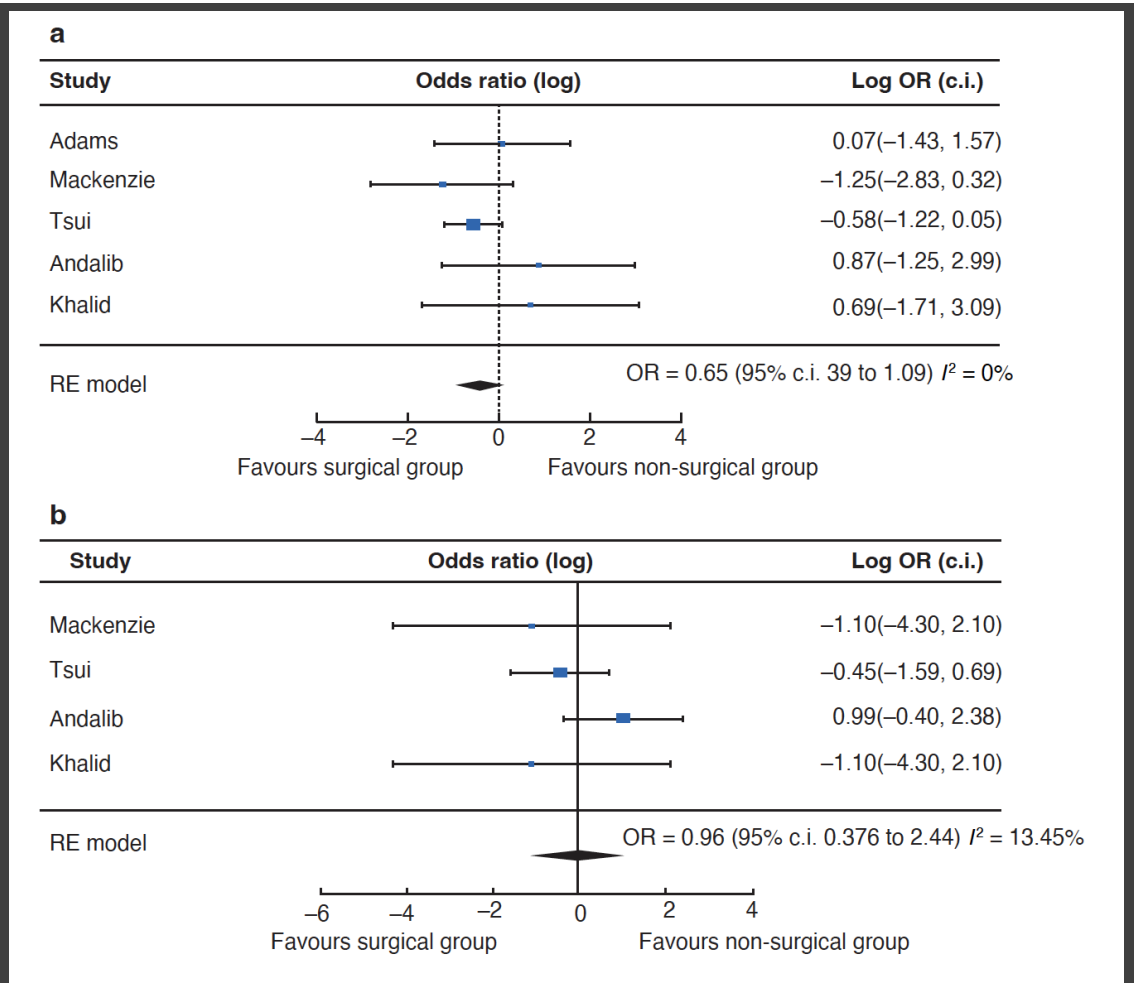
Johari Y, *Annals of Surgery Volume 276, Number 1, July 2022*

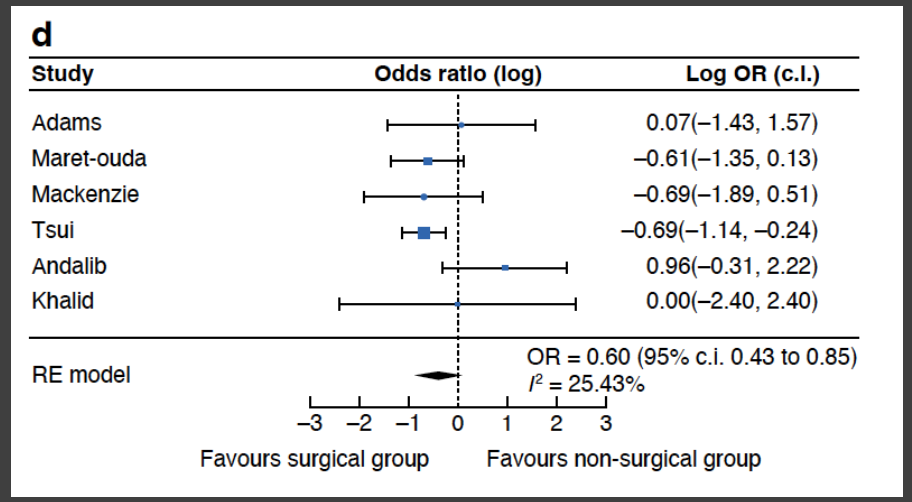
Meta-Analysis > Br J Surg. 2022 Dec 13;110(1):24-33. doi: 10.1093/bjs/znac343.

Risk of non-hormonal cancer after bariatric surgery: meta-analysis of retrospective observational studies

Benjamin Clapp [1], Ray Portela [2], Ishna Sharma [3], Hayato Nakanishi [4], Katie Marrero [5], Philip Schauer [6], Thorvardur R Halfdanarson [7], Barham Abu Dayyeh [8], Michael Kendrick [2], Omar M Ghanem [2]

15 studies
18'583'477 pts (947'787 bariatric)





LSG

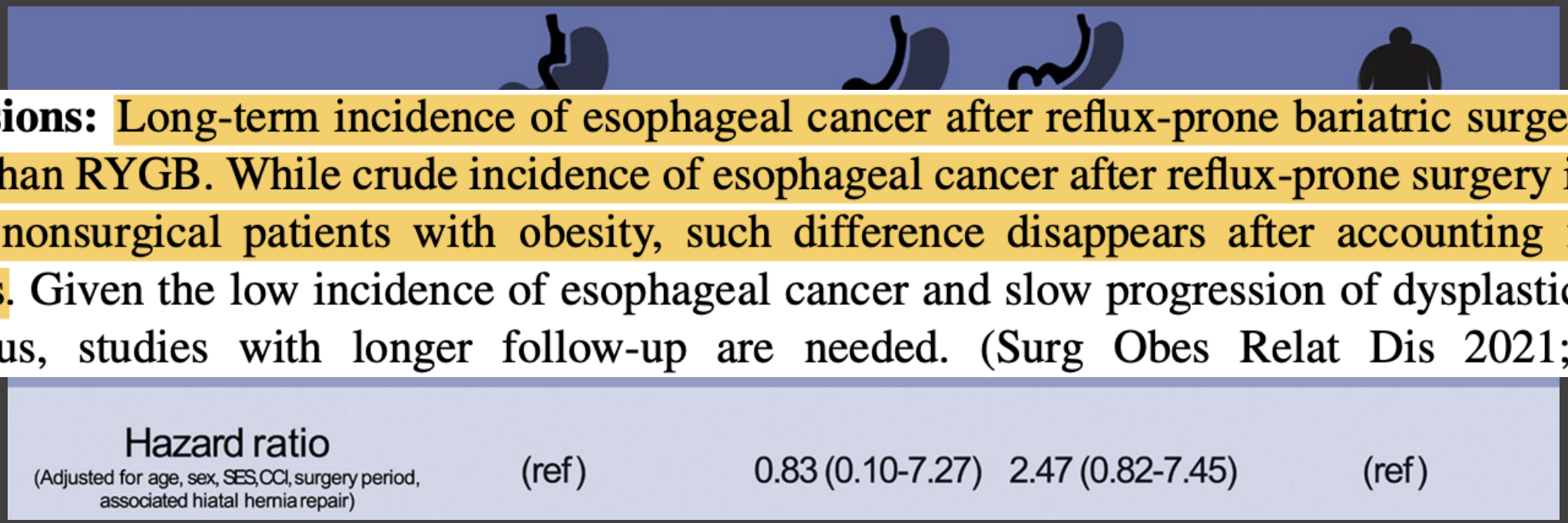
Is the risk of OAC really higher?

FULL TEXT ARTICLE

Esophageal cancer after sleeve gastrectomy: a population-based comparative cohort study

Amin Andalib M.D., M.Sc., Philippe Bouchard M.D., M.Sc., Sebastian Demyttenaere M.D., M.Sc., Lorenzo E. Ferri M.D., Ph.D. and Olivier Court M.D.

Surgery for Obesity and Related Diseases, 2021-05-01, Volume 17, Issue 5, Pages 879-887, Copyright © 2020 American Society for Bariatric Surgery



Conclusions: Long-term incidence of esophageal cancer after reflux-prone bariatric surgery is not greater than RYGB. While crude incidence of esophageal cancer after reflux-prone surgery is higher than in nonsurgical patients with obesity, such difference disappears after accounting for confounders. Given the low incidence of esophageal cancer and slow progression of dysplastic Barrett esophagus, studies with longer follow-up are needed. (Surg Obes Relat Dis 2021;17:879–

Hazard ratio (Adjusted for age, sex, SES, CCI, surgery period, associated hiatal hernia repair)	(ref)	0.83 (0.10-7.27)	2.47 (0.82-7.45)	(ref)

LSG 3.9 per 100’000 person/y
RYGB 2.6 per 100’000 person/y
Non surgical 6.9/100’000 person/y

Caroline Gronnier – IFSO 2024

A word (or two) on screening endoscopy

Barrett's/OAC screening after LSG?

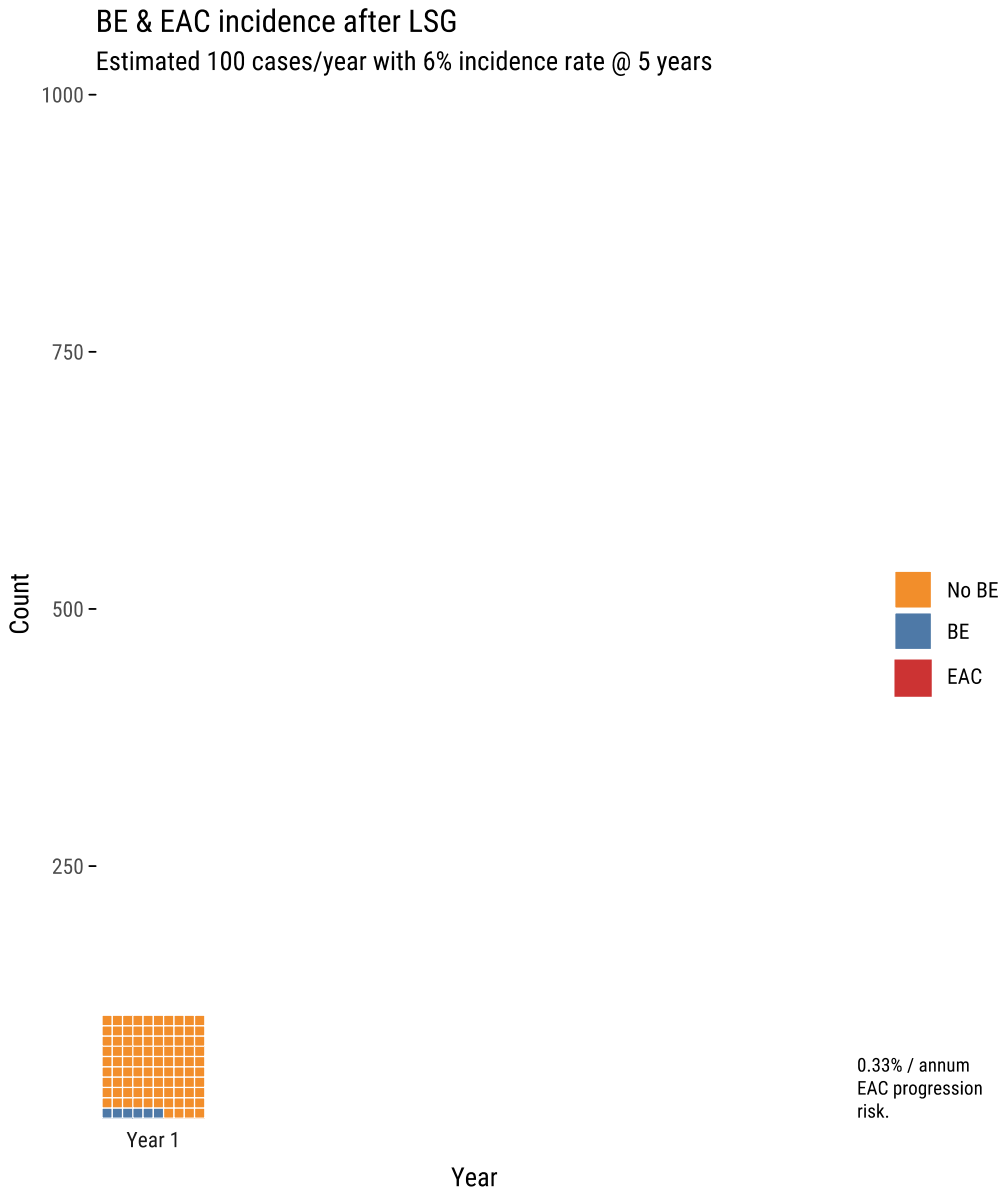


TABLE 10A – CURRENT STATUS OF SLEEVE GASTRECTOMY PRIMARY PARTICIPANTS AS AT 30 JUNE 2019

No. of Sleeve Gastrectomy Primary Participants who currently have:		
Only a Primary LSG		45,099
Any Revision of LSG		400
- Re-sleeve	47	
- Conversion to RYGB	164	
- Conversion to OAGB	33	
- Required just Lavage	34	
- Required just Dilitation	29	
- Required just to Control Bleeding	21	
- Other Revision	140	
Total		**45,499**

Screen 45,000 patients to find ~90 HGD/EACs

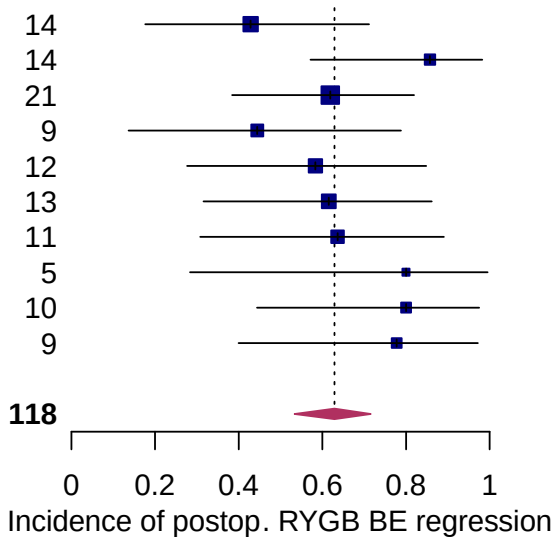
Cost effective?

Barrett's Regression RYGB

62.9%

Study	Events	Total	Proportion	95% C.I.
Andrew B. 2018	6	14	0.429	[0.177; 0.711]
Ben−Meir A. 2010	12	14	0.857	[0.572; 0.982]
Braghetto I. 2012	13	21	0.619	[0.384; 0.819]
Chen G. 2017	4	9	0.444	[0.137; 0.788]
Csendes A. 2006	7	12	0.583	[0.277; 0.848]
Dova G. 2016	8	13	0.615	[0.316; 0.861]
Gorodner V. 2017	7	11	0.636	[0.308; 0.891]
Houghton S. 2008	4	5	0.800	[0.284; 0.995]
Felsenreich D. 2020	8	10	0.800	[0.444; 0.975]
Signorini F. 2020	7	9	0.778	[0.400; 0.972]
Combined incidence of regression		**118**	**0.629**	**[0.534; 0.716]**

Heterogeneity: I^2 = 0%, t^2 = 0, c_9^2 = 8.99 (p = 0.44)



Regression = reduction in length or dysplasia

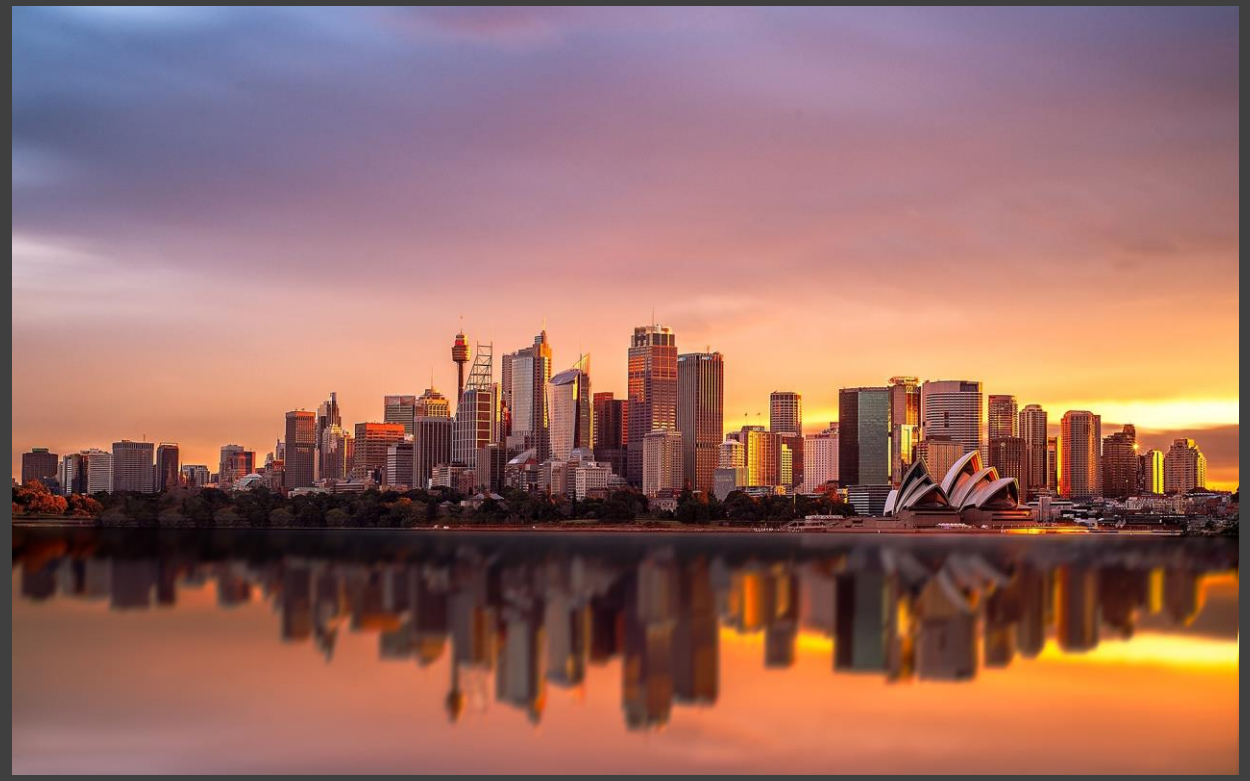
If you can't convince them, confuse them.

~Paul Sugarbaker

Is Barrett's after LSG a normal variant?

- It's nuanced, not complicated
- Most cases of "Barrett's" post LSG = cardiac mucosal effacement of a tubularised cardia
- However, IM is present – but risk on GOJ cancer formation seems low
- You can always convert to a Roux

Thank you for listening



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IFSO Scientific Committee & EB
All my mentors
My wife and family

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