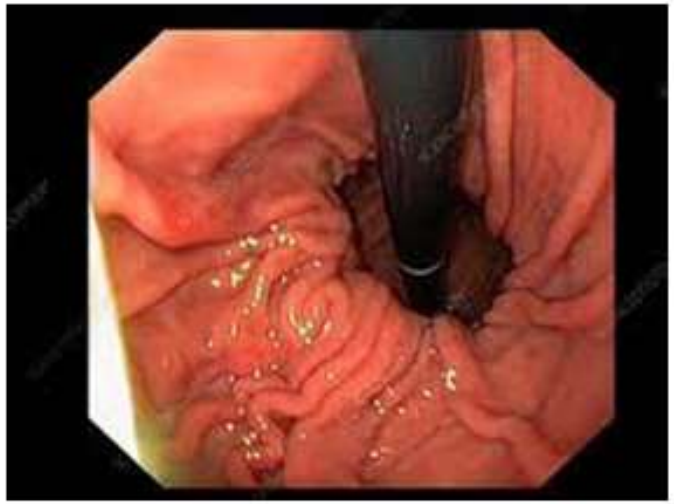
PREOPERATIVE ENDOSCOPY IN BARIATRIC SURGERY CONS

Estuardo Behrens MD MACG FACS FICS FASMBS

ebehrens@comnetsa.com

ADVANCED LAPAROSCOPIC SURGERY
BARIATRIC AND METABOLIC SURGERY
NEW LIFE CENTER. GUATEMALA.

Past-president IFSO LAC
IFSO Member at Large LAC



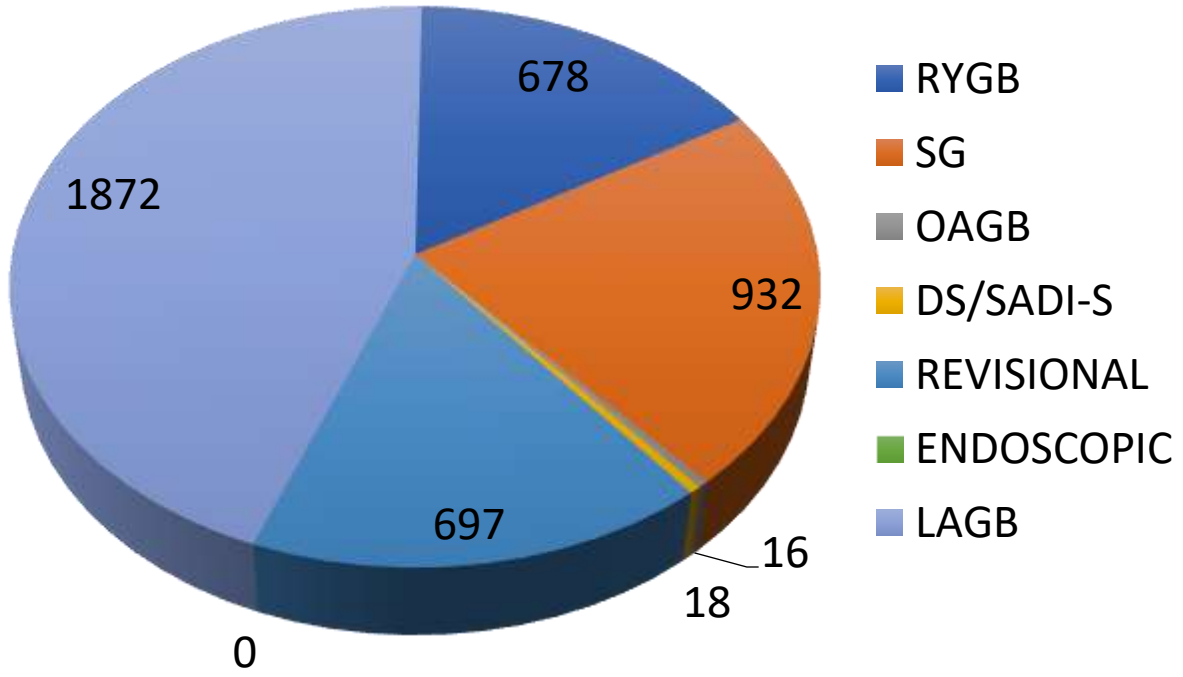
CONFLICT OF INTEREST DISCLOSURE

DISCLOSURES

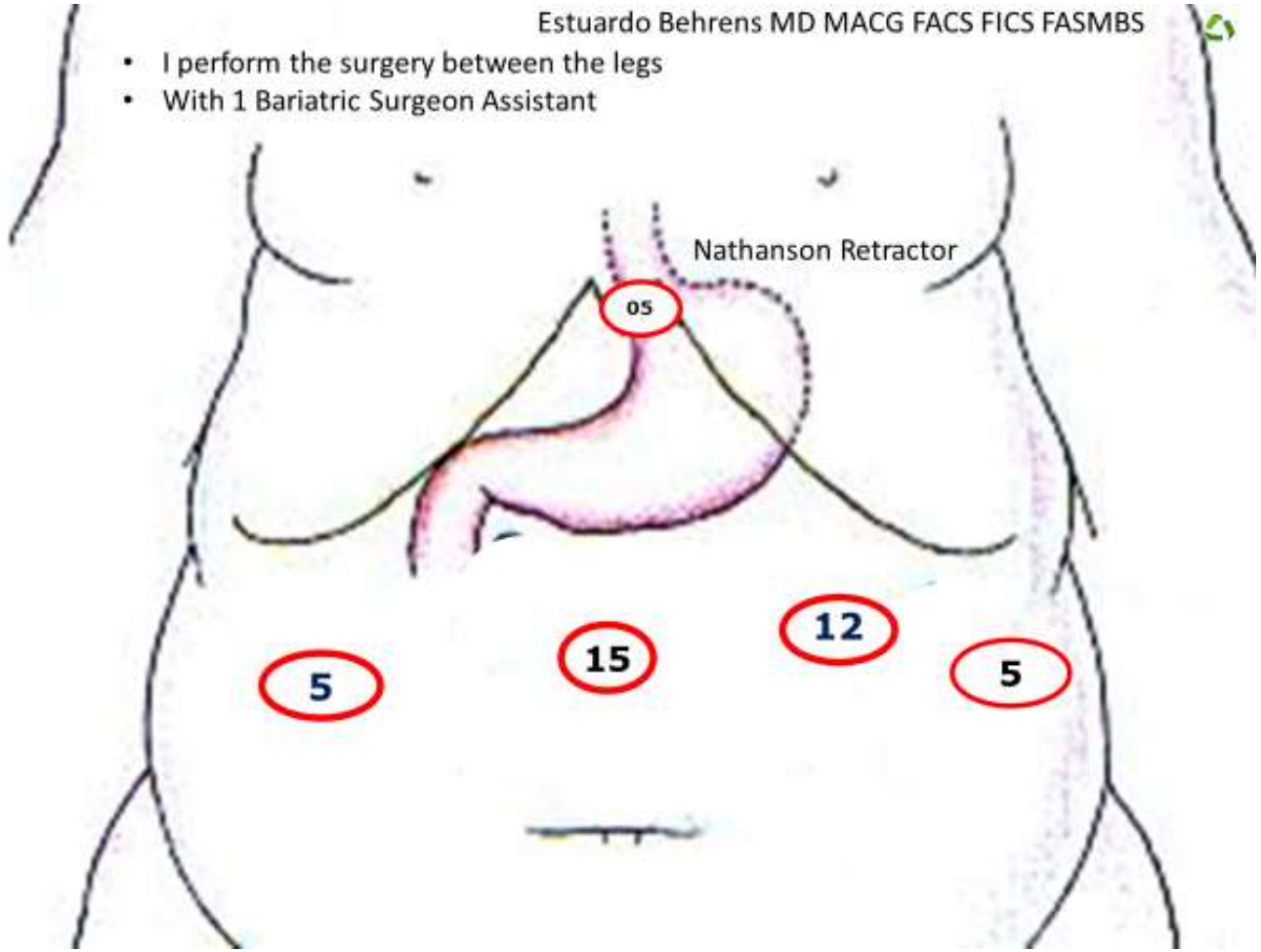
Estuardo Behrens MD MACG FACS FICS FASMBS
Bariatric-Metabolic Surgeon
NEW LIFE CENTER. GUATEMALA
Past President IFSO LAC
IFSO Member at Large LAC

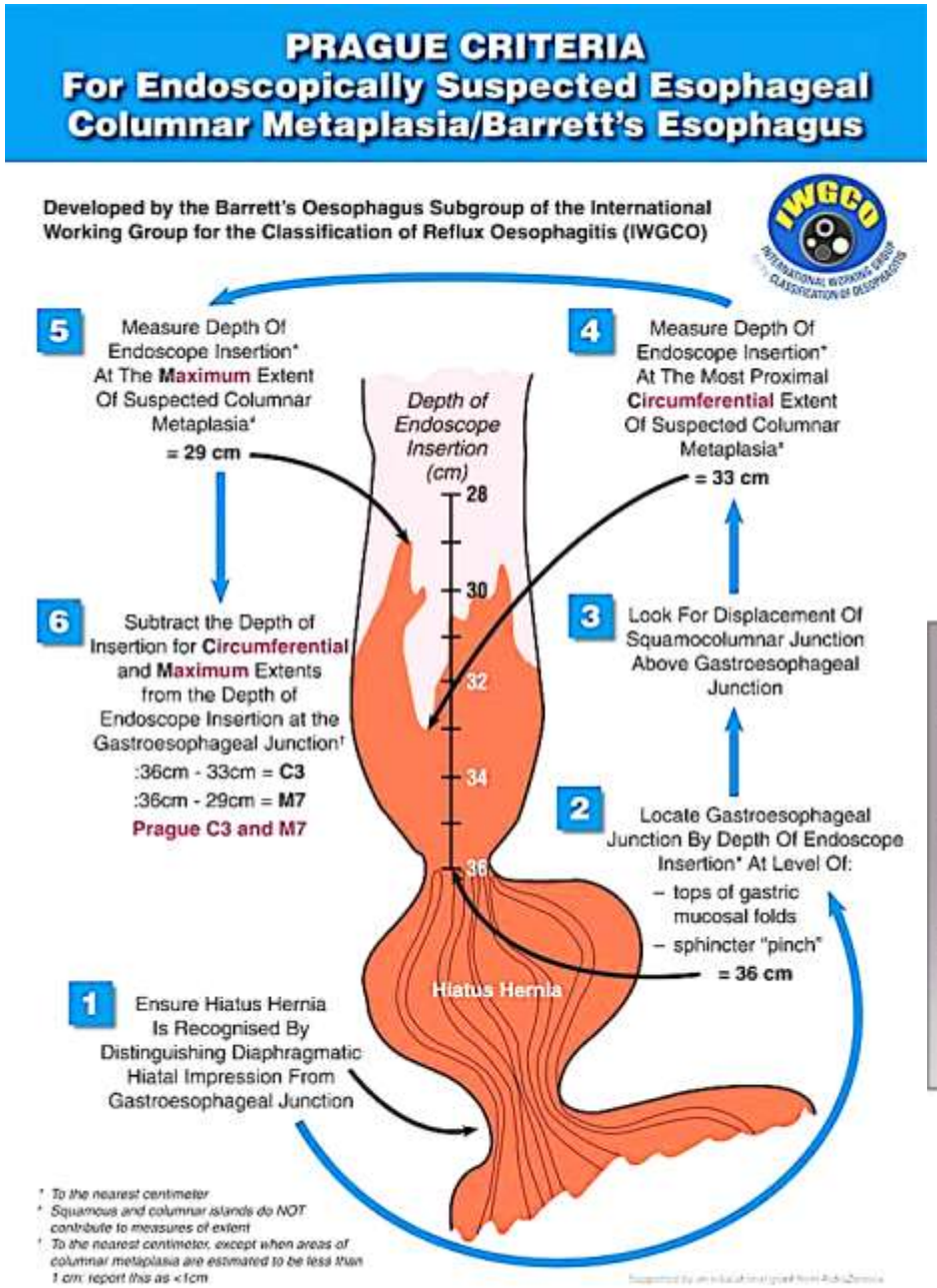
- NOTHING TO DISCLOSE.
- NO CONFLICTS OF INTEREST.

Operations 4213 / 24 YEARS

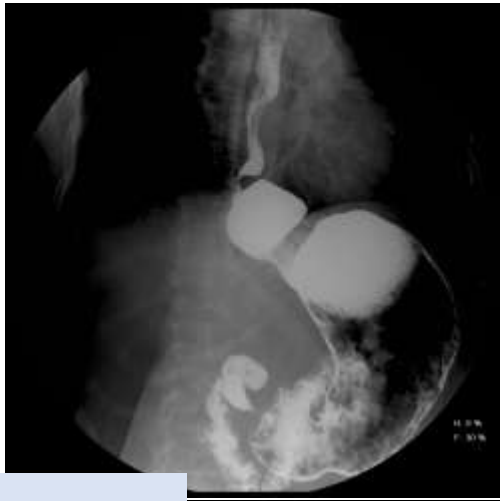


ESTUARDO BEHRENS MD NACG FACS FICS FASMBS

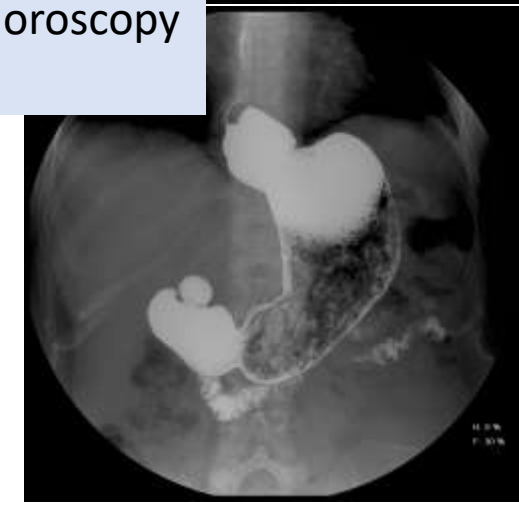


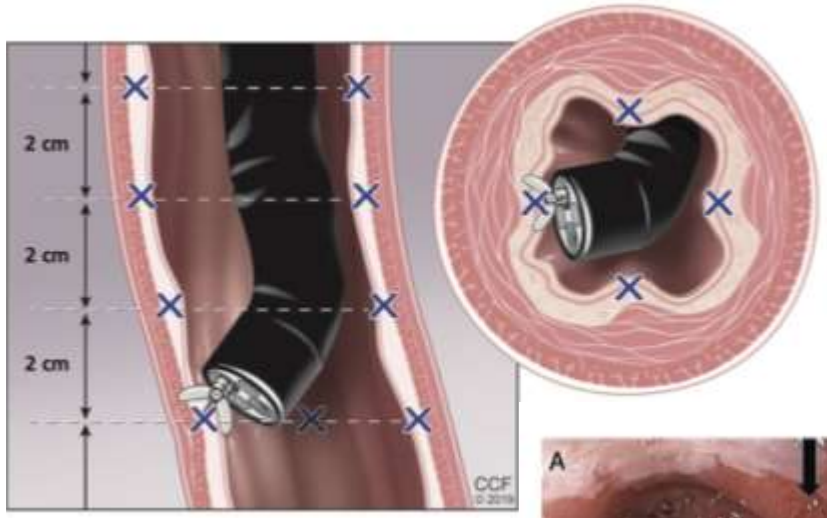


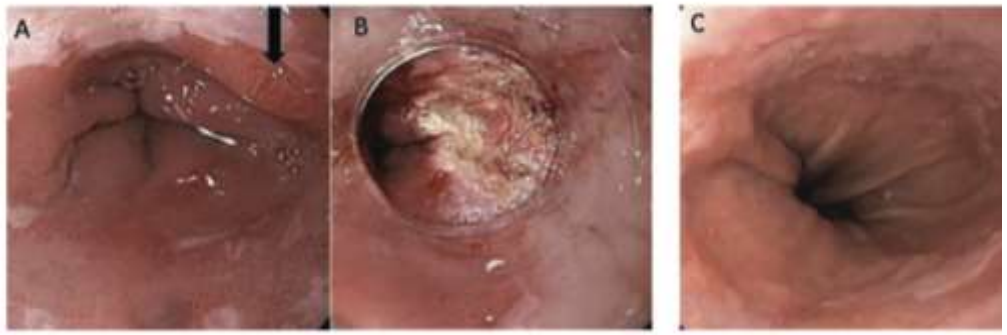
Barrett´s esophagus
Hiatal Hernia (repair if surgery decided)
Helicobacter Pilori (Breath test)
Gastric lesions
Esophageal lesions



Esophago-Gastric Fluoroscopy
Low cost





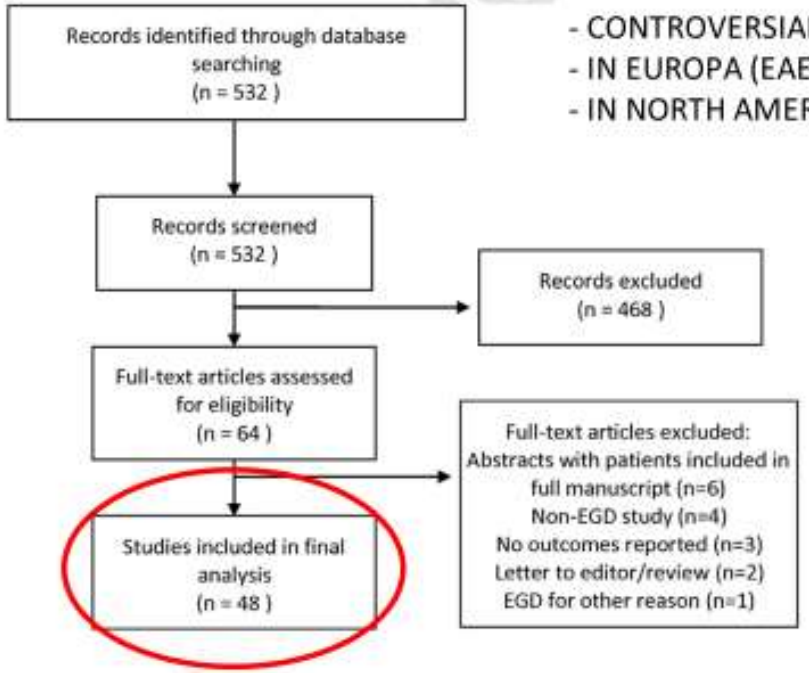


The role of routine preoperative upper endoscopy in bariatric surgery: a systematic review and meta-analysis

SOARD 2016 APRIL 11

Sean Bennett, M.D., M.Sc., Mišo Gostimir, B.Sc. Risa Shorr, M.L.I.S., Ranjeeta Mallick, Ph.D., Joseph Mamazza, M.D., Amy Neville, M.

1/2



- CONTROVERSIAL TOPIC
- IN EUROPA (EAES) ROUTINE
- IN NORTH AMERICA (ASMBS) NOT AS A ROUTINE ONLY IF SUSPECTED

The role of routine preoperative upper endoscopy in bariatric surgery: a systematic review and meta-analysis

SOARD 2016 APRIL 11

Sean Bennett, M.D., M.Sc., Mišo Gostimir, B.Sc. Risa Shorr, M.L.I.S., Ranjeeta Mallick, Ph.D., Joseph Mamazza, M.D., Amy Neville, M.

2/2

FINDINGS:

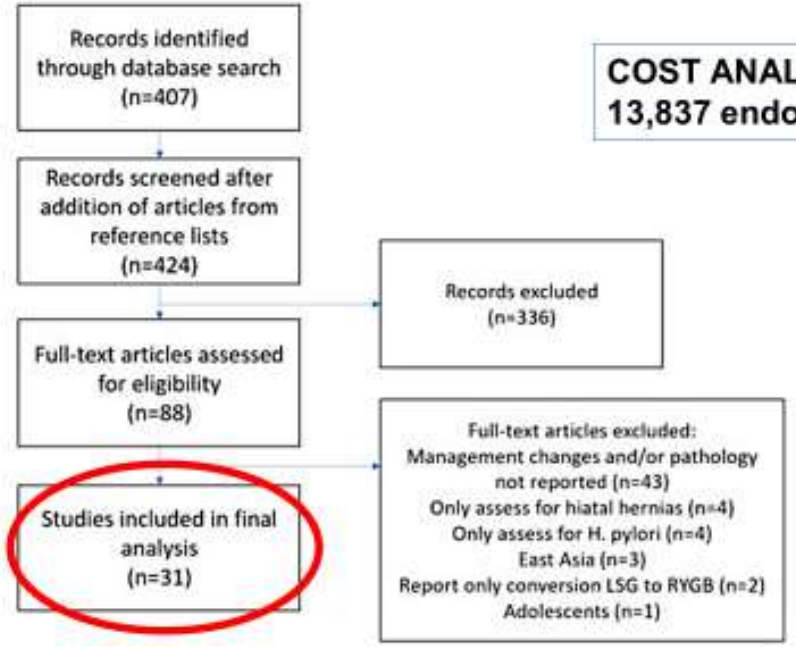
2.1% Barrett´s esophagus
0.2% Esophageal
0.4% Gastric cancer

Total of endoscopies that determined a change in the surgical decision	7.8%
Total of endoscopies that determined a change in the Medical management	27.5%

Conclussion: It is reported a very low incidence of findings that can change the surgical management. It is not recommended a routine endoscopy. Cost-Benefit.

High Cost for Low Yield A Systematic Review and Meta-Analysis to Assess Cost of Routine Preoperative Esophagogastroduodenoscopy Before Bariatric Surgery J Clin Gastroenterol Volume 54, Number 5, May/June **2020**

Gretchen Evans, MD, MPH,* Abigail Barker, PhD,† Laura Simon, MLIS,‡ and Vladmir Kushnir, MD§



1/2

COST ANALYSIS – PREOP. ROUTINE ENDOSCOPY
13,837 endoscopies

Endoscopic findings 3.9%
Decrease to 0.4% if Hiatal Hernia Dx. is removed

H. pylori finding 7.5%
The cost decreases to 0.2 if breath test is used

High Cost for Low Yield A Systematic Review and Meta-Analysis to Assess Cost of Routine Preoperative Esophagogastroduodenoscopy Before Bariatric Surgery

J Clin Gastroenterol Volume 54, Number 5, May/June **2020**

Gretchen Evans, MD, MPH,* Abigail Barker, PhD,† Laura Simon, MLIS,‡ and Vladmir Kushnir, MD§

Changes in management according to endoscopic diagnosis

2/2

Absolute Value and Corresponding Percentage of Total EGDs [n = 13,837] of Operative Delay or Change by Abnormality	Operative Delay [n (%)]	Operative Change [n (%)]
Hiatal hernia	0	694 (5)
Esophagitis	170 (1.2)	17 (0.12)
Gastritis	299 (2.2)	0
Duodenitis	77 (0.6)	0
Gastric ulcer	139 (1.0)	5 (0.04)
Gastric polyp	19 (0.14)	1 (<0.01)
Duodenal polyp	1 (<0.01)	0
Barrett's esophagus	10 (0.07)	7 (0.05)
Cancer	0	12 (0.09)

EGD indicates esophagogastroduodenoscopy.

COSTS – ROUTINE ENDOSCOPY
13,837 Endoscopies

US $ 600,000 routine endoscopy costs
US $ 281,000 Costs of controversial findings
US $ 761,000 Costs of exclusion findings
US $ 2'554,500 Costs of exclusion of cancer

BECAUSE OF THE HIGH COST - THE BENEFIT OF ROUTINE PREOP ENDOSCOPY MUST BE INDIVIDUALIZED

Routine Screening Endoscopy before Bariatric Surgery: Is It Necessary?

Victoria Go´mez, MD,¹ Rajat Bhalla, MD,¹ Michael G. Heckman, MS,¹ Paul T. Kro¨ner Florit, MD,¹ Nancy N. Diehl, BS,¹ Bhupendra Rawal, MS,¹ Scott A. Lynch, MD,¹ and David S. Loeb, MD¹

BARIATRIC SURGICAL PRACTICE AND PATIENT CARE Volume 9, Number 4, 2014

232 endoscopies 2006 – 2013

Co-Morbidities:

Sleep Apnea	57.8%
HBP	56.9%
GERD	44.8%
Arthritis	40.5%

Type of surgery:

RYGBP.	66.6%
Sleeve	20.2%
Band	13.2%

Gastrointestinal problems:

Burning	28.9%
Acid regurgitation	18.5%
Abdominal pain	6.5%
Nausea	4.7%

Abnormal Endoscopic Findings:

One or more abnormal findings in the screening	61.6%
Hiatal Hernia	23.7%
Esophagitis	19.4%
Gastric Erosion	11.2%
Gastric polyps	9.5%
Barrett´s esophagus without dysplasia.	9.5%
Gastritis (biopsy)	9.1%

Changes with the screenign endoscopy

15.1%. Changes in the medical treatment

1.7%. Changes or surgery cancelled

Conclusion: Despite of some important findings, rarely the surgery planned must be changed, thus, it is not justified to perform it as a routine.
cost – benefit to perform a routine screening endoscopy before BS

Is Endoscopy before Roux-en-Y gastric bypass or sleeve gastrectomy mandatory?

Arvid Schigt, M.D.[a,1], Usha Coblijn, M.D.[a,*,1], Sjoerd Lagarde, M.D., Ph.D.[a], Sjoerd Kuiken, M.D., PhD.[b], Pieter Scholten, M.D.[b], Bart van Wagensveld, M.D., Ph.D.[a]

Surgery for Obesity and Related Diseases **2014**

523 patients 2007 al 2012 programmed for Gastric Bypass or Sleeve .

Gastric Bypass	72.7%
Gastric sleeve	7.1%
Revisional surgery	20.9%

No abnormalities	48.9%
Abnormalities without treatment changes	17.2%
Helicobacter Pilori Positive	26.8%
In IBP´s treatment	14.3%
Required new endoscopy PRE-Op	1.1%
Surgery cancelled for Barrett´s with cancer	0.2%

Endoscopic findings:	**Postponed**	**Suspended**
Barrett´s	0	1
Duodenitis	0	0
Gastric Tumor	1	0
Gastric Ulcer	3	0
Gastritis	3	1
Helicobacter	3	0
Esophagitis	1	1
Hiatal hernia	2	1
Schatzky ring	0	0

Conclusion: IT IS NOT JUSTIFIED to perform routine preoperative endoscopy in bariatric patients.
There is a high number of patients that are programmed to surgery.
The COST – BENEFIT is not justified.

Preoperative EGD in patients without reflux symptoms undergoing Laparoscopic sleeve gastrectomy: utility or futility?

Clinical and Experimental Gastroenterology 2019:12 295–301

Tagleb S Mazahreh, Abdelwahab J Aleshawi, Nabil A Al-Zoubi, Mohammed Z Allouh, Khaled A Jadallah Rasheed Elayyan, Nathan M Novotny

1/2

219 patients **WITHOUT gastroesophageal reflux programmed for Sleeve Gastrectomy**. 2016 to 2018

Group A. **WITH** Preop. Endoscopy

Group B. **WITHOUT** Preop. Endoscopy

GROUP A. Preop. Endoscopy	
NO Pathology.	77.5%
Gastritis.	18.9%
Suspicious Area with normal biopsy	2.7%
Reflux esophagitis by biopsy	0.9%

Preoperative EGD in patients without reflux symptoms undergoing Laparoscopic sleeve gastrectomy: utility or futility?

Clinical and Experimental Gastroenterology 2019:12 295–301

Tagleb S Mazahreh, Abdelwahab J Aleshawi, Nabil A Al-Zoubi, Mohammed Z Allouh, Khaled A Jadallah Rasheed Elayyan, Nathan M Novotny

219 patients **WITHOUT gastroesophageal reflux programmed for Sleeve Gastrectomy**. 2016 to 2018

Group A. **WITH** Preop. Endoscopy

Group B. **WITHOUT** Preop. Endoscopy

Postoperative Variables	Group A N1 (% from Group A)	Group B N2 (% from Group B)	p-value
Complication[a]			NS
Bleeding	2 (1.8)	1 (0.9)	
Leak	0 (0)	1 (0.9)	
Gastric histopathology results[b]			
Normal	39 (35.1)	54 (50.0)	NS
Active gastritis	15 (13.5)	32 (29.6)	<0.01
Chronic gastritis	56 (50.5)	22 (20.4)	<0.01
Intestinal metaplasia	1 (0.9)	0 (0.0)	NS
Length of hospitalization (d) (mean ± S.E)[c]	3.01±0.6	3.14±0.8	NS
Symptomatic GERD at 1-year[a]	13 (11.7)	10 (9.3)	NS

Conclusion: It is not mandatory to perform a preoperative endoscopy in ASYMPTOMATIC REFLUX previous to a Sleeve gastrectomy. There is NO difference of postoperative problems in both groups. THERE IS MORE NEED OF RCTS.

ESTUARDO BEHRENS MD NACG FACS FICS FASMBS

CONCLUSION

1.- Very High Cost-Benefit to indicate a routine preoperative endoscopy in BS patients.

2.- There are very scarce important endoscopic findings 0.3 a 2.0%.

3.- Hiatal Hernia is the most frequent finding.

4.- The guidelines do not recommend to repair hiatal hernia type I unless it is symptomatic.

5.- The use of EGD contrast studies is cheaper for the preoperative screening than endoscopy.

6.- The diagnosis of H. pylori with the BREATH TEST is effective and more cheaper than biopsy.

Is preoperative pH and manometry study necessary?

- Patients with gastroesophageal reflux disease should have pH and manometry study in preoperative laparoscopic sleeve gastrectomy
  - 32.8 % versus 50%; p = .033
- Increased IGP in 77%.
- Increased reflux episodes in 52% after LSG

*High resolution Impedance manometry after Sleeve Gastrectomy : Increased intragastric pressure and Reflux Are frequent events. Mion F. *Obesity Surgery* 2016.
*Is Preoperative manometry in restrictive bariatric procedures necessary? Weiss H., Klaus A. *Obesity Surgery* 2008.
*Outcome of LSG by means of esophageal manometry and pHmetry before and afterLSG.

Bariatric Surgery 2020.

THANK YOU FOR YOUR KIND ATTENTION

Guatemala, Centro América

Dr. Estuardo Behrens

MACG | FACS | FICS | FASMBS

ADVANCED LAPAROSCOPIC SURGERY

BARIATRIC AND METABOLIC SURGERY

PAST PRESIDENT IFSO LAC
IFSO MEMBER AT LARGE LAC