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# CEJ Cancers After Sleeve: Myth or Reality

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# Disclosures

- Honoraria
  - Medtronic, Stryker, Ethicon, Novo Nordisk

# Reality

The onset of post-VGS GERD is higher than 30%, although with large variations between groups (22%–50

Endoscopic follow-up every 2–3 years after VGS is also essential

risk of developing EAC is approximately .33% per year for patients without [dysplasia](#) and .19% per year for short-segment BO

- Aufroy et al

# Gastroesophageal Reflux Disease, Esophagitis, and Barrett's Esophagus 3 to 4 Years Post Sleeve Gastrectomy

Samer Elkassem <sup>1</sup> <sup>2</sup>

- 58 patients
- De novo reflux developed in 13 pts (30.9%)
- Of the 16 pts with GERD pre-op, 37.5% improved, 25% had stable disease, and 37.5% had worsening symptoms
- Esophagitis went from 37.9% pre-op to 70.6% post-op

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> [Obes Surg.](#) 2021 Dec;31(12):5148-5155. doi: 10.1007/s11695-021-05688-0. Epub 2021 Oct 2.

## [Gastroesophageal Reflux Disease, Esophagitis, and Barrett's Esophagus 3 to 4 Years Post Sleeve Gastrectomy](#)

Samer Elkassem <sup>1</sup> <sup>2</sup>

- A majority of post-op pts had mild esophagitis (87.8%), with 12.1% with LA classes C and D. Asymptomatic esophagitis was found in 68.2% of post-op pts
- The incidence of BE was 12.7% post-op, with de novo BE developing in 4 pts, representing 7.2%

## Reflux and Barrett's esophagus after sleeve gastrectomy: analysis of a statewide database

Eric Swei <sup>1</sup>, Laura Helmkamp <sup>2</sup>, Jason Samuels <sup>3</sup>, Jonathan Schoen <sup>3</sup>, Frank I Scott <sup>1</sup>, Sachin Wani <sup>1</sup>, Shelby Sullivan <sup>4</sup>

5562 patients who underwent SG between 2012 and 2017

1972 patients (35.5%) had at least 1 diagnostic record of upper endoscopy

The preoperative incidences of a diagnosis of GERD, esophagitis, and BE were 54.9%, 14.6%, and .9%


The predicted postoperative incidences of GERD, esophagitis, and BE, respectively, were 18%, 25.4%, and 1.6% at 2 years and 32.1%, 85.0%, and 6.4% at 5 years

Oesophago-  
Gastric  
Malignancies  
After  
Obesity/Bariatric  
Surgery: OGMOS  
study

- Retrospective, multicentre, observational study of patients operated on between 1985 and 2020 (OGMOS study)
- Interval between bariatric surgery and cancer diagnosis was  $5.9 \pm 4.1$  years after VGS,  $9.4 \pm 7.1$  years after RYGB,  $10.5 \pm 5.7$  years after adjustable gastric banding, and  $2.0 \pm 1.4$  years after one-anastomosis GB



Oesophago-  
Gastric  
Malignancies  
After  
Obesity/Bariatric  
Surgery: OGMOS  
study


- Tumour location equally distributed in the esophagus, esophago-gastric junction, or stomach after VGS or RYGB
  - Adenocarcinomas were 82.9%
  - One third of the patients had metastases at diagnosis
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> Cancer Manag Res. 2021 Apr 15:13:3327-3334. doi: 10.2147/CMAR.S303590. eCollection 2021.

## Esophagogastric Cancer After Sleeve Gastrectomy: A Systematic Review of Case Reports

Wenhui Chen <sup># 1</sup>, Yucheng Wang <sup># 1</sup>, Jie Zhu <sup>1</sup>, Cunchuan Wang <sup>1</sup>, Zhiyong Dong <sup>1</sup>

- Seventeen esophagogastric cancer patients after SG
- The age of the patients ranged from 21 to 64 years
- Tumors were diagnosed after an interval of  $33.9 \pm 22.8$  months from SG (range 4 months-96 months)
- There were 4 esophageal cancers, 4 gastroesophageal cancers and 9 gastric cancers; adenocarcinoma was the most frequent tumor histology (88.2%)



> [Surg Obes Relat Dis.](#) 2021 May;17(5):879-887. doi: 10.1016/j.soar.2020.12.011.  
Epub 2020 Dec 29.

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

Amin Andalib <sup>1</sup>, Philippe Bouchard <sup>2</sup>, Sebastian Demyttenaere <sup>2</sup>, Lorenzo E Ferri <sup>3</sup>,  
Olivier Court <sup>2</sup>

- A total of 4121 patients had reflux-prone procedures and 852 underwent RYGB
- Mean follow-up of 7.6 years, 8 cases of esophageal cancer were identified after bariatric surgery. Compared with RYGB, IRR for esophageal cancer in reflux-prone group was 1.45 (95%CI: .19-65.5) and HR = .83 (95%CI: .10-7.27).
- The crude incidence rate of esophageal cancer in the reflux-prone group was higher than that of nonsurgical controls (n = 12,159; IRR = 3.46, 95%CI: 1.00-12.5), but after adjustment the difference disappeared (HR = 2.47, 95%CI: .82-7.45)

Review > *Obes Surg.* 2023 Jun;33(6):1910-1915. doi: 10.1007/s11695-023-06599-y.  
Epub 2023 Apr 14.

## Insights into the Paradox of the Weak Association Between Sleeve Gastrectomy and Barrett's Esophagus

Rafaella Orlow <sup>1</sup>, Fernando A M Herbella <sup>2</sup>, Rafael C Katayama <sup>1</sup>, Marco G Patti <sup>3</sup>

- Sleeve gastrectomy (SG) is deemed a refluxogenic operation but with a low incidence of postoperative Barrett's esophagus (BE)
- Potential paradox of the weak association between SG, BE and esophageal adenocarcinoma (EAC)
- The high incidence of GERD after SG is not followed by an increased rate of BE and EAC, as these rates are similar to the general population

Comparative Study > Surg Obes Relat Dis. 2025 May;21(5):587-594.

doi: 10.1016/j.soard.2024.12.002. Epub 2024 Dec 12.

## **Risk assessment for esophageal cancer after bariatric surgery: a comparative cohort study between sleeve gastrectomy and gastric bypass**

Andrea Lazzati <sup>1</sup>, Tigran Poghosyan <sup>2</sup>, Seydou Goro <sup>3</sup>, Caroline Gronnier <sup>4</sup>

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- 370,271 patients included, 68.4% underwent SG and 31.6% underwent GB
  - The median follow-up was 7.4 years
    - approximately 81,000 patients followed for at least 10 years
  - 96 cases of esophageal cancer were identified: 25 in the GB group and 71 in the SG group

Comparative Study > Surg Obes Relat Dis. 2025 May;21(5):587-594.

doi: 10.1016/j.soard.2024.12.002. Epub 2024 Dec 12.

## Risk assessment for esophageal cancer after bariatric surgery: a comparative cohort study between sleeve gastrectomy and gastric bypass

Andrea Lazzati <sup>1</sup>, Tigran Poghosyan <sup>2</sup>, Seydou Goro <sup>3</sup>, Caroline Gronnier <sup>4</sup>

- The incidence rates were 2.6 per 100,000 person-years for GB and 3.9 for SG, resulting in an incidence rate ratio of .64 (95% confidence interval [CI]: .40-1.01, P = .055)
- In multivariate analysis, no significant difference in cancer incidence was found between SG and GB

Case Reports > J Surg Case Rep. 2023 Sep 24;2023(9):rjad518. doi: 10.1093/jscr/rjad518.  
eCollection 2023 Sep.

## Gastroesophageal junction adenocarcinoma 1-year after sleeve gastrectomy

Kevin C Brown <sup>1</sup>, Gabriela Esnaola <sup>1</sup>, Dan Boffa <sup>1</sup>, John M Morton <sup>1</sup>

- 70-year-old male with a BMI of 46 underwent laparoscopic sleeve gastrectomy with normal endoscopy
- 10 months postop, the patient had reduced BMI to 30.5
- Eleven months postop, he presented with emesis and endoscopy showed severe stenosis at the gastroesophageal junction with EUS showing a circumferential mass
- Patient had adenocarcinoma of the distal esophagus: poorly differentiated invasive adenocarcinoma with negative margins.



# Conclusions

- GERD after sleeve can lead to Barrett's
  - Adenocarcinoma while not common is a possibility
  - Endoscopy should be done postoperatively at periodic intervals and patients should be counseled as such
  - Remember the asymptomatic GERD patient
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