

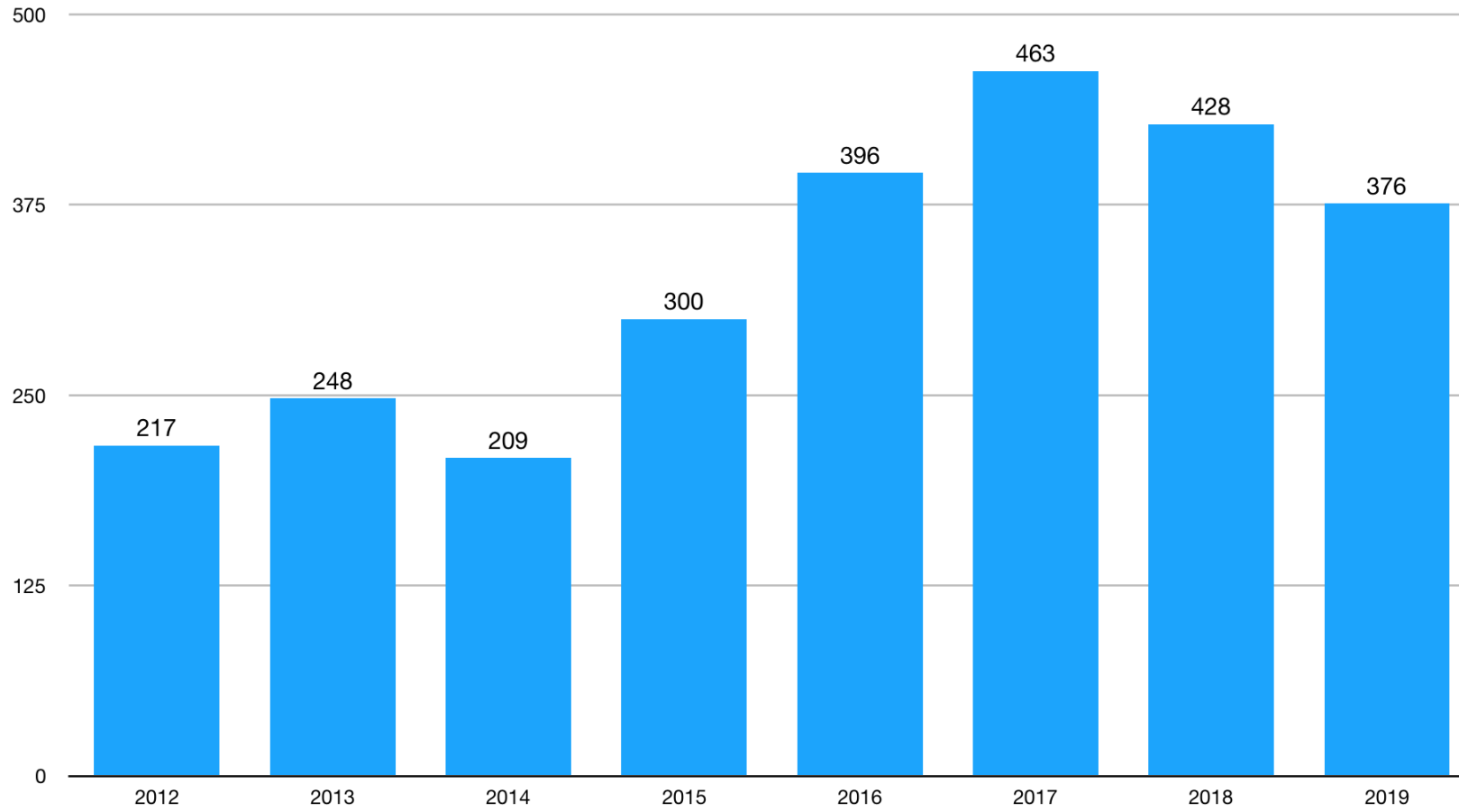
Sucralfate and PPI after Bariatric Surgery

CAN IT DECREASE READMISSIONS RATES?

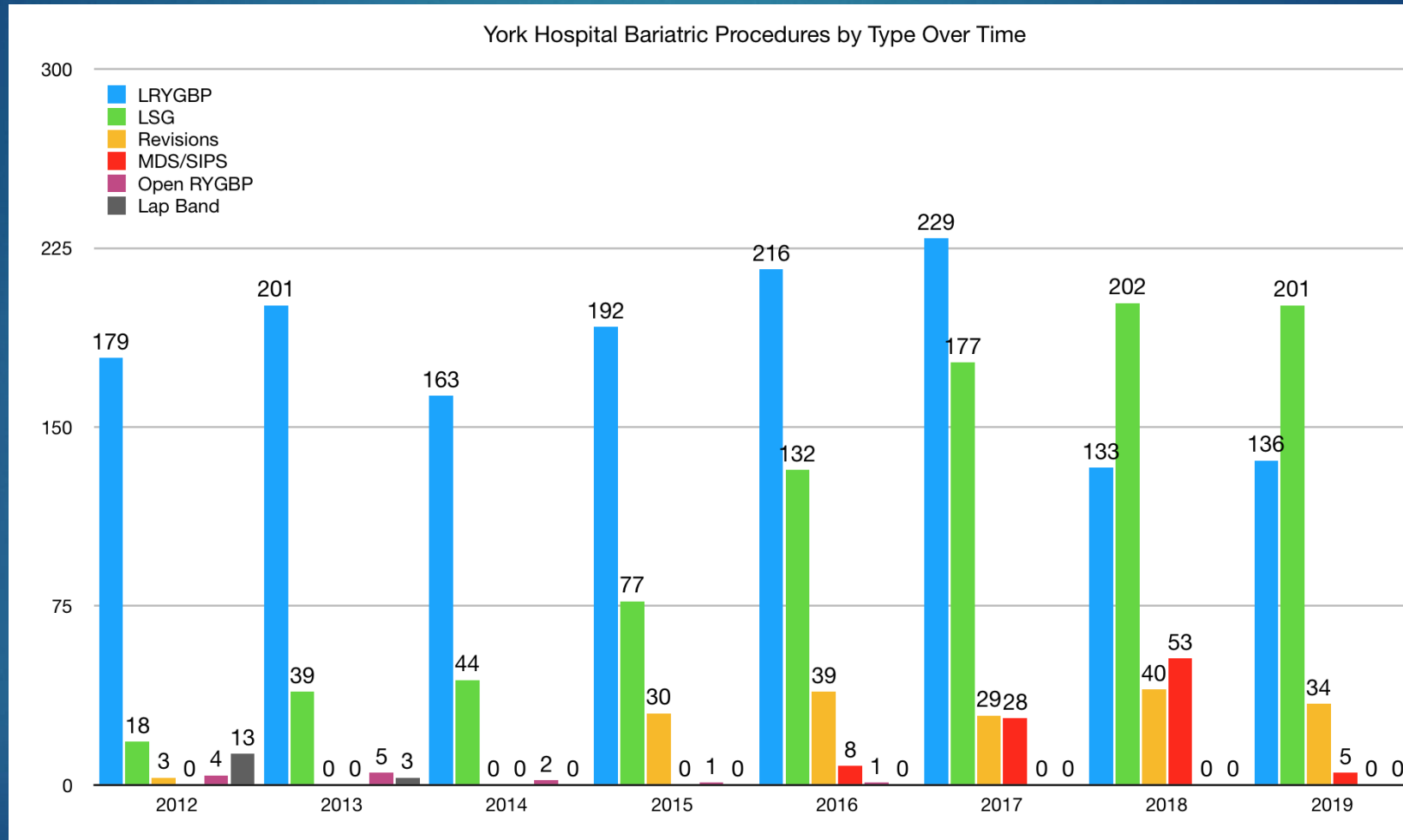
History of Our Program

- The program was initially accredited in 2005 making it one of the first 20 programs in the country to gain this distinction
 - There are now 826 MBSAQIP Accredited Bariatric Centers of Excellence in the US.
- The program has successfully passed through 4 reaccreditation cycles

York Hospital Total Number of Bariatric Procedures Over Time



Number of cases per Category:

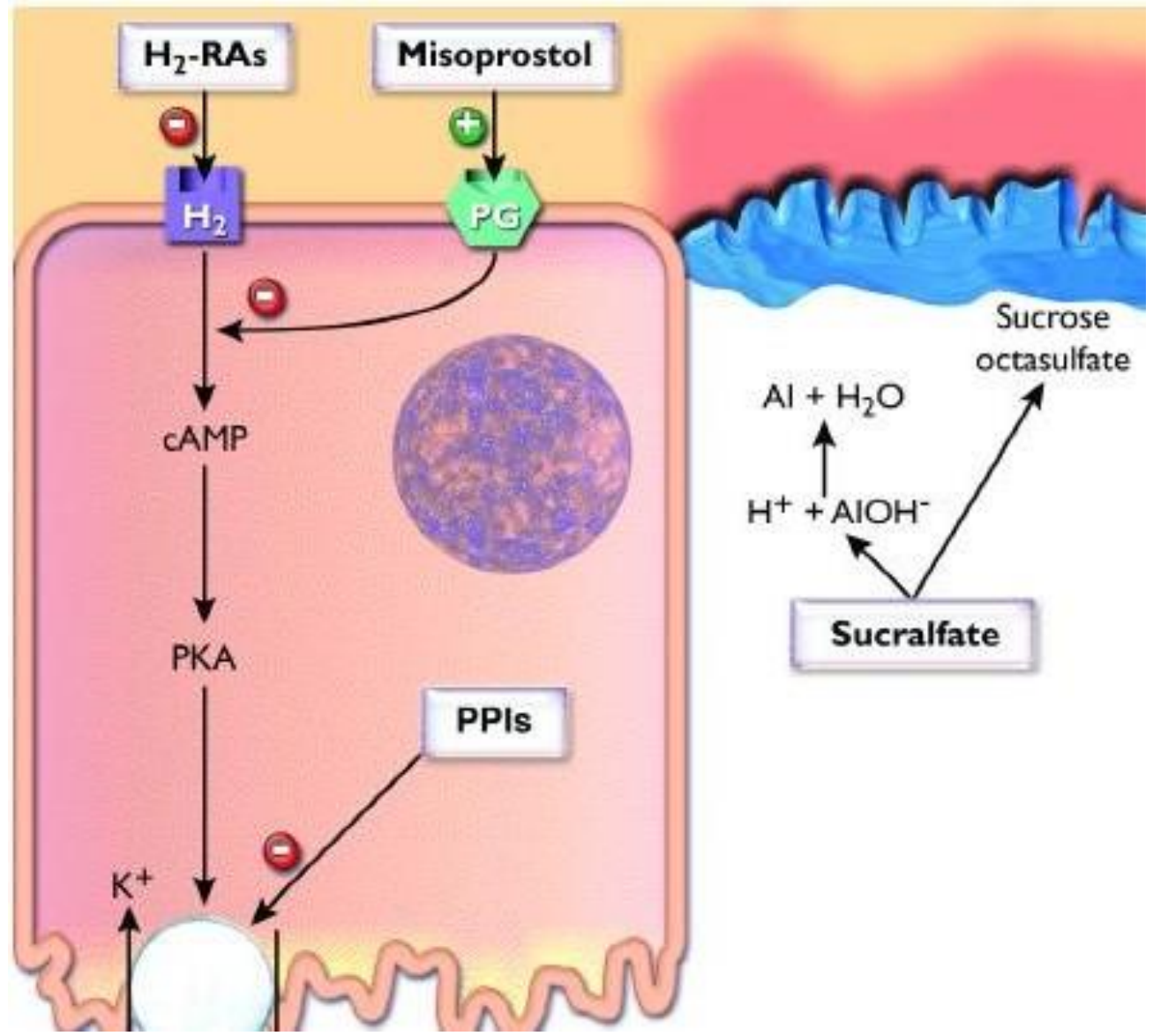


GERD

- LSG appears to increase the incidence of GERD in the initial post operative period.
- Howard et al 18% new onset GERD GI series, 22% clinical GERD symptoms.
- Possibly relating to increased intragastric pressure and changes in the angle of His.
- However, with increased gastric compliance in the long term there may be an alleviation of symptoms relating to GERD

Marginal ulcer

- Marginal ulcers represent one of the most problematic postoperative complications following Roux-en-Y gastric bypass.
- A marginal ulcer, or stomal ulceration, refers to the development of mucosal erosion at the gastrojejunal anastomosis, typically on the jejunal side
- Incidence of marginal ulcers is quite variable, ranging from 0.6 to 16 percent. (Sanyal AJ, Sugerman HJ, Kellum JM, et al. Stomal)



Sucralfate

Sucralfate mechanism of action:

- it acts locally, when in acidic environment ($\text{pH} < 4$) will react with HCl in the stomach to form a cross-linking viscous, past like material capable of acting as an acid buffer for as long as 6 to 8 hours after a single dose.
- It also attaches to proteins on the surface of the ulcer, such as albumin and fibrinogen, forming stable insoluble complexes.
- These complexes serve as a protective barriers at the ulcer surface, preventing further damage.

Conversion
in acidic
environment
 $\text{pH} < 4$



Cross-linking
and formation
of paste



Coating of
mucosal
defects →





Sucralfate and soluble sucrose octasulfate bind
and stabilize acidic fibroblast growth factor

**Administration of Sucralfate Prolongs Survival
of Animals with Experimental Peptic Ulceration**

ANNA MALL, PH.D., JOAN FOLMIE, PH.D., HEATHER McLEOD, DIP. MED. TECHNOLOGY, ASTRID MUSCHOL,
M.B.Ch.B., J.A.H. CAMPBELL, M. MED. (PATH), ROSEMARY HICHMAN, D.M., Cape Town, South Africa

Ligation of the pig bile duct (BDL) results in
100% incidence of pars esophageal ulceration

Among the many agents that have been used in
the treatment of peptic ulceration, sucralfate

[J Clin Gastroenterol](#). 1992 Apr;14(3):192-8.

**Topically active drugs in the treatment of peptic ulcers. Focus on colloidal bismuth subcitrate
and sucralfate.**

[Bianchi Porro G](#), [Parente E](#).

A thin layer of sucrose octasulfate
protects the oesophageal mucosal
epithelium in reflux oesophagitis

[Takuya Hayakawa](#), [Shizuka Kawasaki](#), [Yutaka Hirayama](#), [Takuya Tsutsui](#), [Eiji Sugiyama](#), [Kiyomi Adachi](#), [Ryo Kon](#), [Makoto Suematsu](#) & [Yuki Sugiura](#)

PUD
Gastritis
Esophagitis
Stimulate healing
Prevent stricture
formation

Review of NSQIP data

- Total number of patients received Scuralfate 247(101 RYGB, 146 LGS), control group 379(147 RYGB, 222 LGS).
- date was from 1/2/2018 -9/12/2019.
- Readmission rate was 3.6% in the intervention group vs 6.8 in the control group P Value 0.09.

	Yes	No	Readmission rate %
Intervention	9	238	3.643725
Control	26	353	6.860158

Bypass Group

	Yes	No	Readmissions %
Intervention	6	95	5.940594
Control	17	140	10.82803

p=0.19

Gastric Sleeve Group

	Yes	No	Readmission %
Intervention	3	143	2.054795
Control	9	213	4.054054

p=0.29