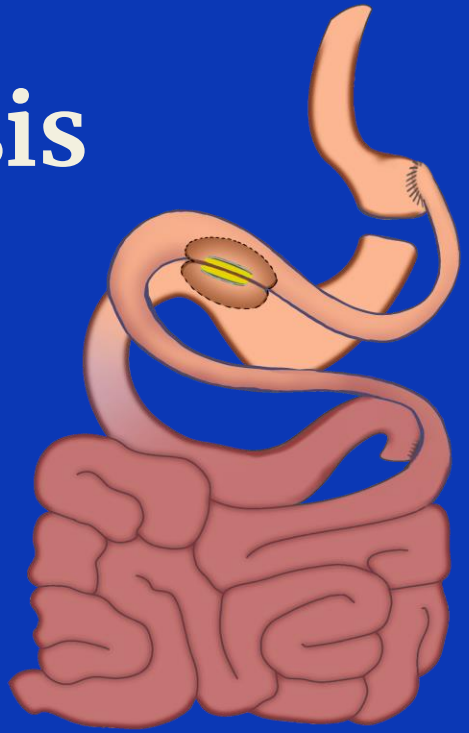
Reversal of Gastric Bypass Using Magnetic Compression Anastomosis

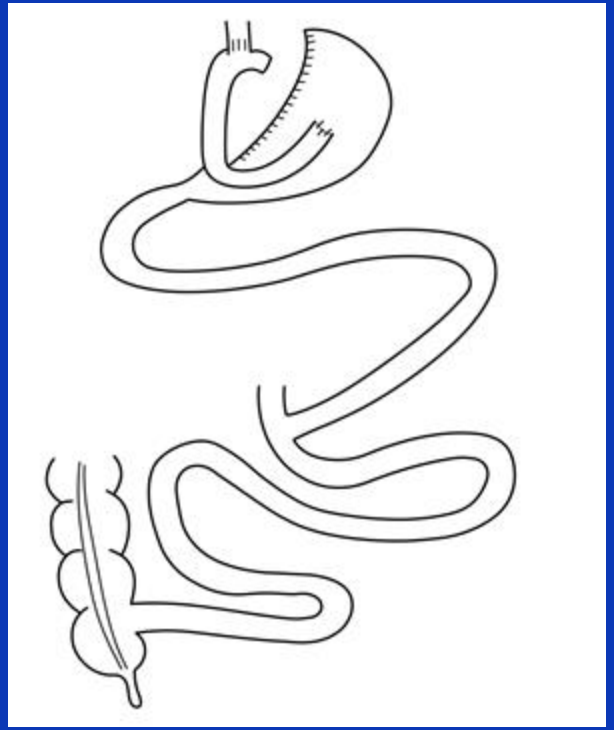
James A Foote MD FACS



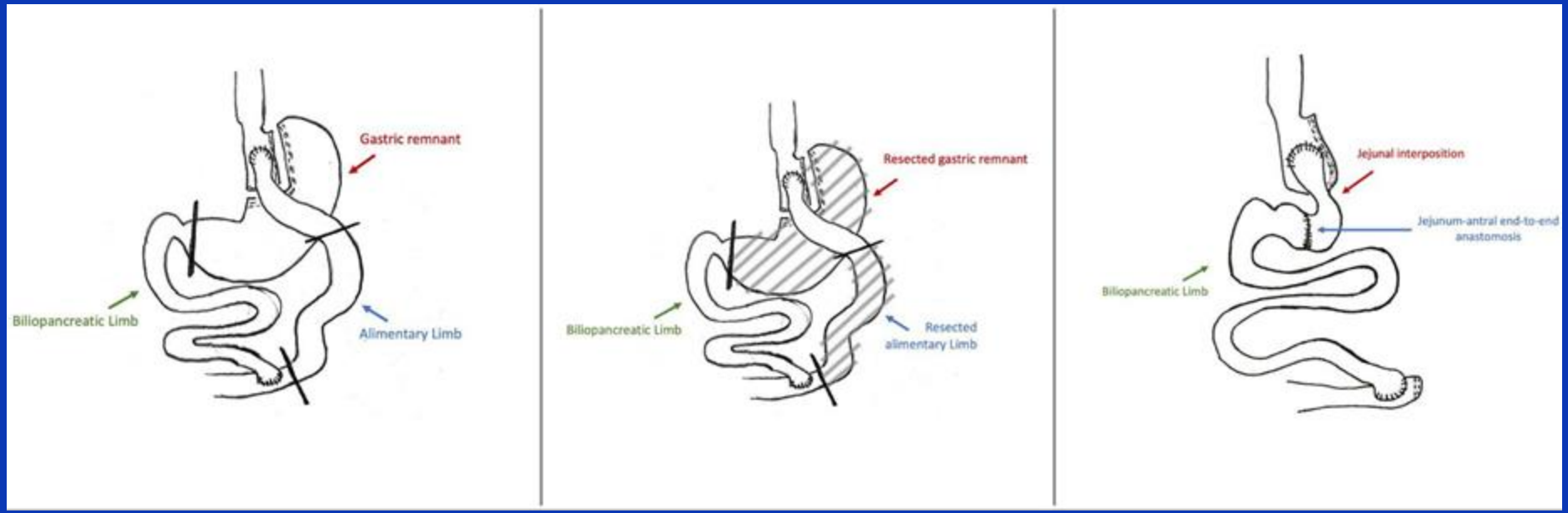
Background

- Post-operatively, RYGB may lead to hypoglycemia, marginal ulcers, malnutrition, vitamin deficiency and uncontrollable diarrhea and frequent stools.
- This may be treated with reversal of RYGB up to 88% of the time to reestablish normal anatomy for passage of food and reestablish normal hormonal mechanisms.[1]
- The majority of RYGB reversals are done with gastrogastrostomy.[2,3]
- The Henley-Longmire Loop has been described which uses an esophageal-jejunal anastomosis and gastro-jejunal anastomosis to restore normal anatomy.[4]
- The Branco-Zorron Switch has been described which uses a jejunal interposition, resection of the remnant stomach, and resection of residual roux limb in order to restore normal anatomy.[5]

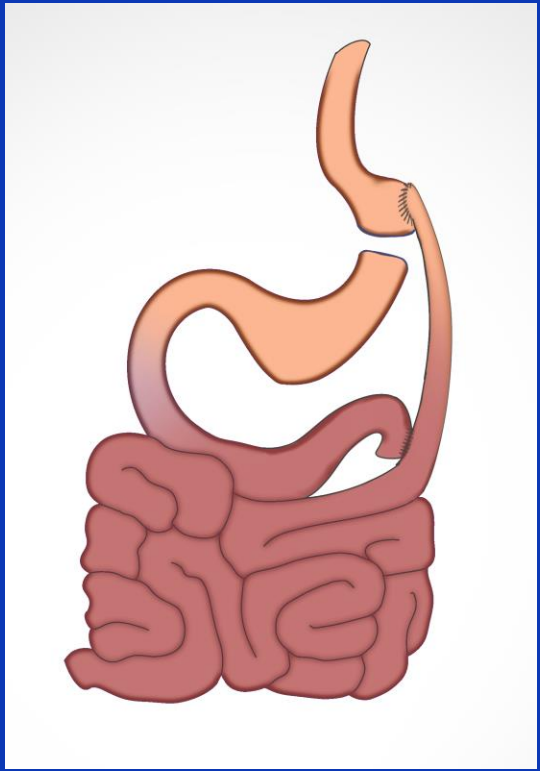
Henley-Longmire Intestinal Loop

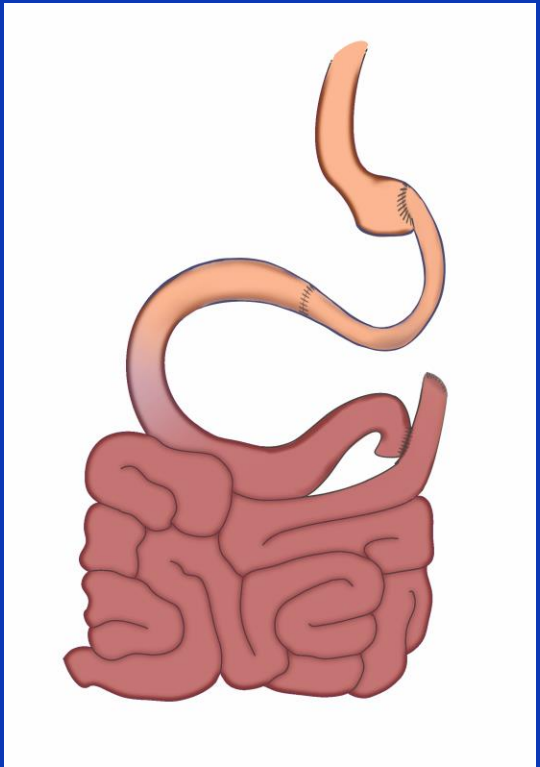


Bronco Zoron Switch



Suture Reversal Technique



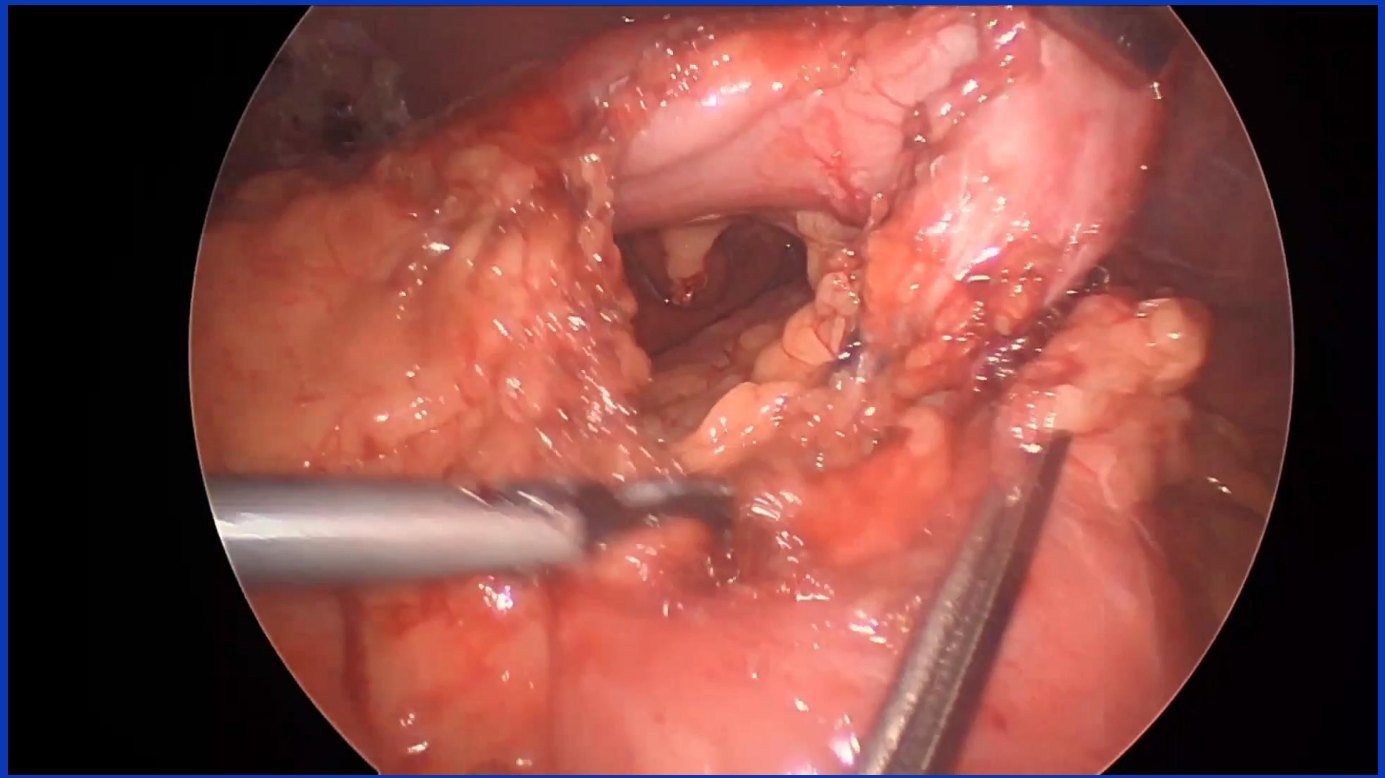


Suture Reversal Patient Case

- 37 year old female
- PMH: obesity, asthma, PCOS
- PSH: laparoscopic sleeve gastrectomy and hiatal hernia repair, laparoscopic conversion to gastric bypass, cholecystectomy, and hiatal hernia repair, hysterectomy
- BMI 45.56 > 33.89
- Daily episodes of hypoglycemia to 30 resulting in desire for RYGB reversal

James A Foote MD FACS

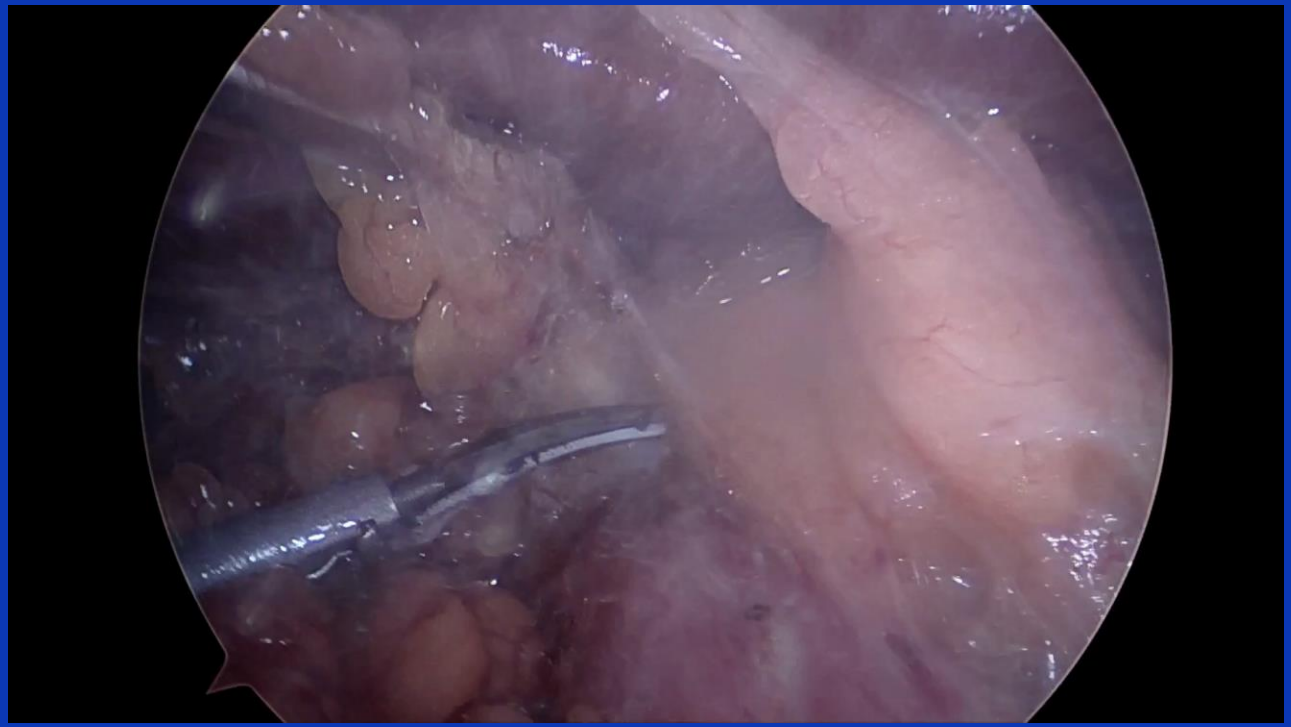
Suture Reversal Patient Case



Magnetic Reversal Patient Case #1

- 27 year old female
- BMI 58.17 kg/m2
- Underwent LRNYGBP 12/04/24, 150cm ROUX limb
- Patient suffered from severe diarrhea and dehydration with up to 6 stools daily
- 10/13/2025 we performed laparoscopic reversal of gastric bypass with duodenal-jejunal magnetic compression anastomosis

Magnetic Reversal Patient Case #1



Magnetic Reversal Patient Case #2

- 58 year old female
- Underwent laparoscopic sleeve gastrectomy in 2016, motor vehicle accident in 2020 with small bowel resection, conversion to RNYGB 2/19/2025 for severe GERD. BMI drops to 20 kg/m2 and patient cannot maintain her weight. Had to place a feeding tube in her remenant stomach.
- 2/23/2026 Patient underwent laparoscopic reversal of gastric bypass with duodenal-jejunal magnetic compression anastomosis

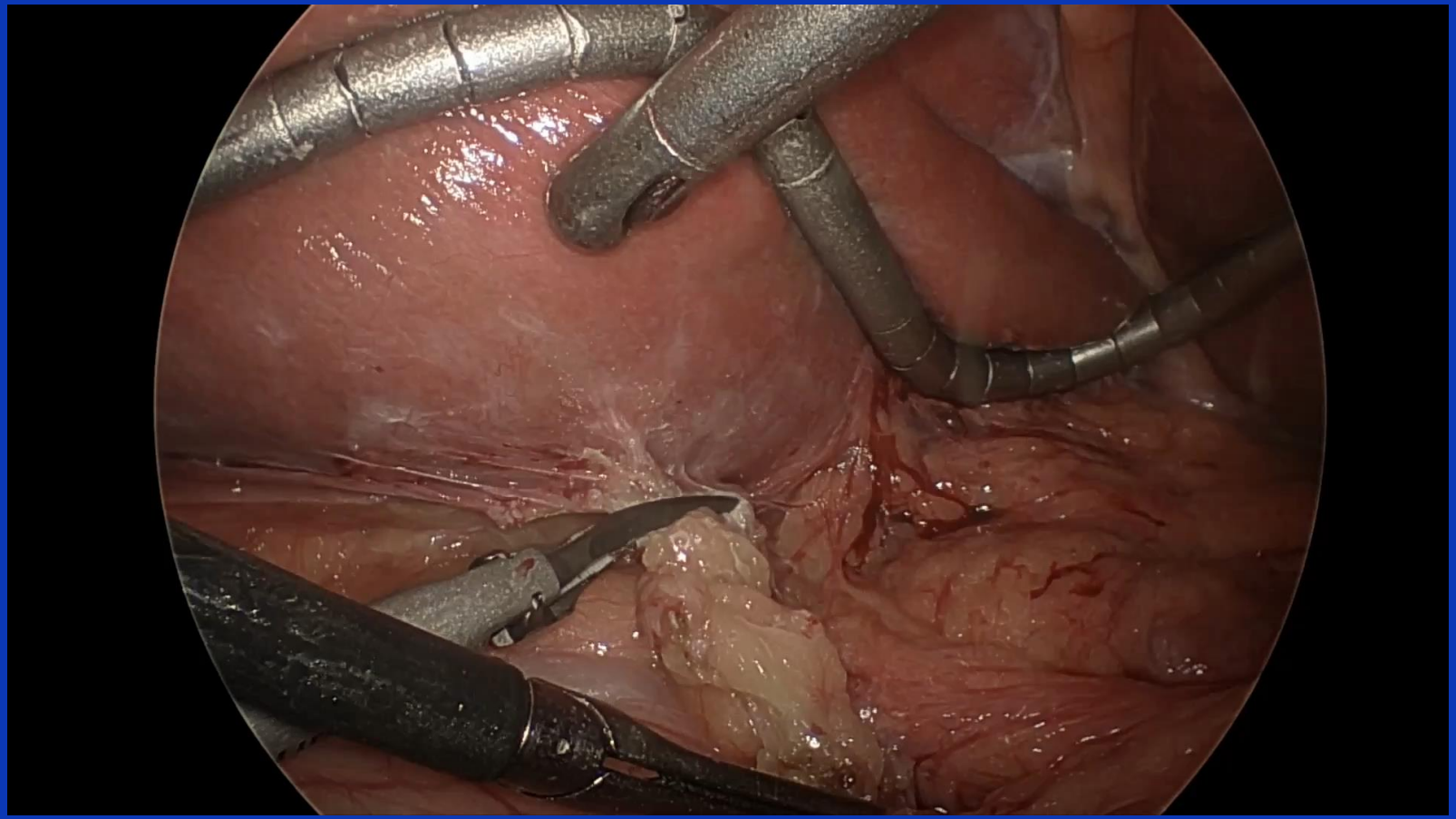
James A Foote MD FACS

Magnetic Reversal Patient Case #2

History-S/P total gastrectomy

- 34 y/o female, BMI 37.5 HTN, OSA, Dyslipidemia
- Laparoscopic sleeve gastrectomy on 9/7/2016
- 9/21/2016 staple line leak identified, stent placed
- 3/15/2017 surgical feeding tube placed
- Total gastrectomy, Roux en Y, Esophagojejunostomy

Retrograde Duodenal Magnet Placement



Citations

1. Xu Q, Zou X, You L, et al. Surgical Treatment for Postprandial Hypoglycemia After Roux-en-Y Gastric Bypass: a Literature Review. Obes Surg. 2021;31(4):1801–1809. doi:10.1007/s11695-021-05251-x
2. Shoar S, Nguyen T, Ona MA, et al. Roux-en-Y gastric bypass reversal: a systematic review. Surgery for Obesity and Related Diseases. 2016;12(7):1366–1372.
3. Shah K, Gislason H. Roux-en-Y Gastric Bypass Reversal: A Novel Technique With Functional Reversal - Case Series. Obes Surg. 2020;30(4):1589–1595. doi:10.1007/s11695-020-04420-8
4. Auctores. Gastric Bypass Reversion with Henley-Longmire Intestinal Loop, Surgical Treatment of Recurrent Marginal Ulcer - A Case Report. Auctores. Accessed September 5, 2024. https://auctoresonline.org/article/gastric-bypass-reversion-with-henley-longmire-intestinal-loop-surgical-treatment-of-recurrent-marginal-ulcer-a-case-report
5. Zorron R, Branco A, Sampaio J, et al. One-Anastomosis Jejunal Interposition with Gastric Remnant Resection (Branco-Zorron Switch) for Severe Recurrent Hyperinsulinemic Hypoglycemia after Gastric Bypass for Morbid Obesity. OBES SURG. 2017;27(4):990–996.

Special thanks to Aryana Sharrak MD who presented the sutured duodenal jejunal anastomosis at SAGES