

# Conversional OAGB: A Safe and Effective Procedure

The Efficacy of Conversional One Anastomoses Gastric Bypass post Sleeve Gastrectomy and Gastric Band: A Large Single Cohort Series

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# No Disclosures

# cOAGB

- Conversional One Anastomosis Gastric Bypass (cOAGB)
- Option alongside conversional roux-Y-gastric bypass (RYGB)
- Indications: reflux and suboptimal weight loss

1. Safety

2. Efficacy

3. Patient-reported  
outcomes

# Methodology

- Retrospective review of 7-year prospective database
- Single-surgeon, single-centre
- Technique: stomach divided 3cm below incisura with stapler - handsewn GJ anastomosis
- Patient survey:
  - GERD-QOL questionnaire (significant symptoms if  $>12 / 30$ )
  - Satisfaction score (0-10)
  - Are they happy with this procedure? (Y/N)
  - Would they have had this procedure again? (Y/N)

[> Aliment Pharmacol Ther.](#) 2010 Feb 1;31(3):452-60. doi: 10.1111/j.1365-2036.2009.04187.x. Epub 2009 Oct 31.

**Development and validation of a disease-specific quality of life questionnaire for gastro-oesophageal reflux disease: the GERD-QOL questionnaire**

Y Chan <sup>1</sup>, J Y L Ching, C M Y Cheung, K K F Tsoi, S Polder-Verkiel, S H Y Pang, W L Quan, K M Kee, F K L Chan, J J Y Sung, J C Y Wu

# Baseline Parameters

Mean age	48.6 years
Sex: females	223 (85.4%)
Indications:	
Suboptimal weight loss	176 (67.4%)
Reflux	138 (52.9%)
Other (band complications, dysphagia)	20 (7.7%)
Previous bariatric procedure:	
LAGB	159 (60.9%)
SG	87 (39.1%)
Both (LAGB converted to SG)	15 (5.8%)
Concurrent procedures:	
Band removal	125 (47.9%)
Cholecystectomy	15 (5.7%)
Hiatal hernia repair	40 (15.3%)
Inguinal or ventral hernia repair	6 (2.3%)

# cOAGB Evaluation

1. Safety

2. Efficacy

3. Patient-  
reported  
outcomes

# cOAGB Evaluation

## 1. Safety

98.9% home the following day

	Perioperative Morbidity (<30 days)	Late Interventions (>30 days)
<b>High Grade (&lt; Clavien-Dindo grade 3a)</b>	<b>1.1%</b> (n=3) <ul style="list-style-type: none"> <li>1 escharotomy at band removal site</li> <li>1 stomach perforation at site of removed lap band</li> <li>1 bleeding anastomotic ulcer</li> </ul>	<b>Non-reflux related: 2.6%</b> (n=6) <ul style="list-style-type: none"> <li>3 port-site hernias</li> <li>2 perforated stomal ulcers (1 RYGB, 1 patch repair)</li> <li>1 adhesive small bowel obstruction</li> </ul>
		<b>Reflux related: 6.9%</b> (n=18) <ul style="list-style-type: none"> <li>2 RYGB</li> <li>16 enteroenterostomy</li> </ul>
<b>Low Grade (&lt; Clavien-Dindo grade 3a)</b>	<b>5%</b> (n=13) <ul style="list-style-type: none"> <li>9 minor port-site infections</li> <li>3 low Hb levels</li> <li>One peri-anastomotic haematoma</li> </ul>	<b>5.7%</b> (n=15) <ul style="list-style-type: none"> <li>14 anastomotic ulcers</li> <li>1 reflux oesophagitis</li> </ul>

# Comparison to Literature

> [Surg Obes Relat Dis.](#) 2021 Jun;17(6):1080-1087. doi: 10.1016/j.soard.2021.01.020.

Epub 2021 Jan 23.

## Revisional bariatric surgery to single-anastomosis gastric bypass: a large multi-institutional series

Andrew Phillip Maurice <sup>1</sup>, Scott Warren Miron <sup>2</sup>, Lachlan Robert Yaksich <sup>2</sup>,  
George Herbert Hopkins <sup>2</sup>, Benjamin Rees Dodd <sup>2</sup>

N=254 cOAGB

<30 days = 19% >Clavien-Dindo grade 3a

Multicenter Study > [Obes Res Clin Pract.](#) 2024 May-Jun;18(3):195-200.

doi: 10.1016/j.orcp.2024.06.001. Epub 2024 Jul 1.

## 30-day morbidity and mortality of revisional bariatric surgery - An international multi-centre collaborative (BROAD) study

Amrit Manik Nasta <sup>1</sup>, Ramen Goel <sup>2</sup>, Rishi Singhal <sup>3</sup>, Luc Lemmens <sup>4</sup>, Sarfaraz Baig <sup>5</sup>, Et al.

<30 day complications:

cOAGB: N=145, 6.2%

cRYGB: N=308, 12.6%



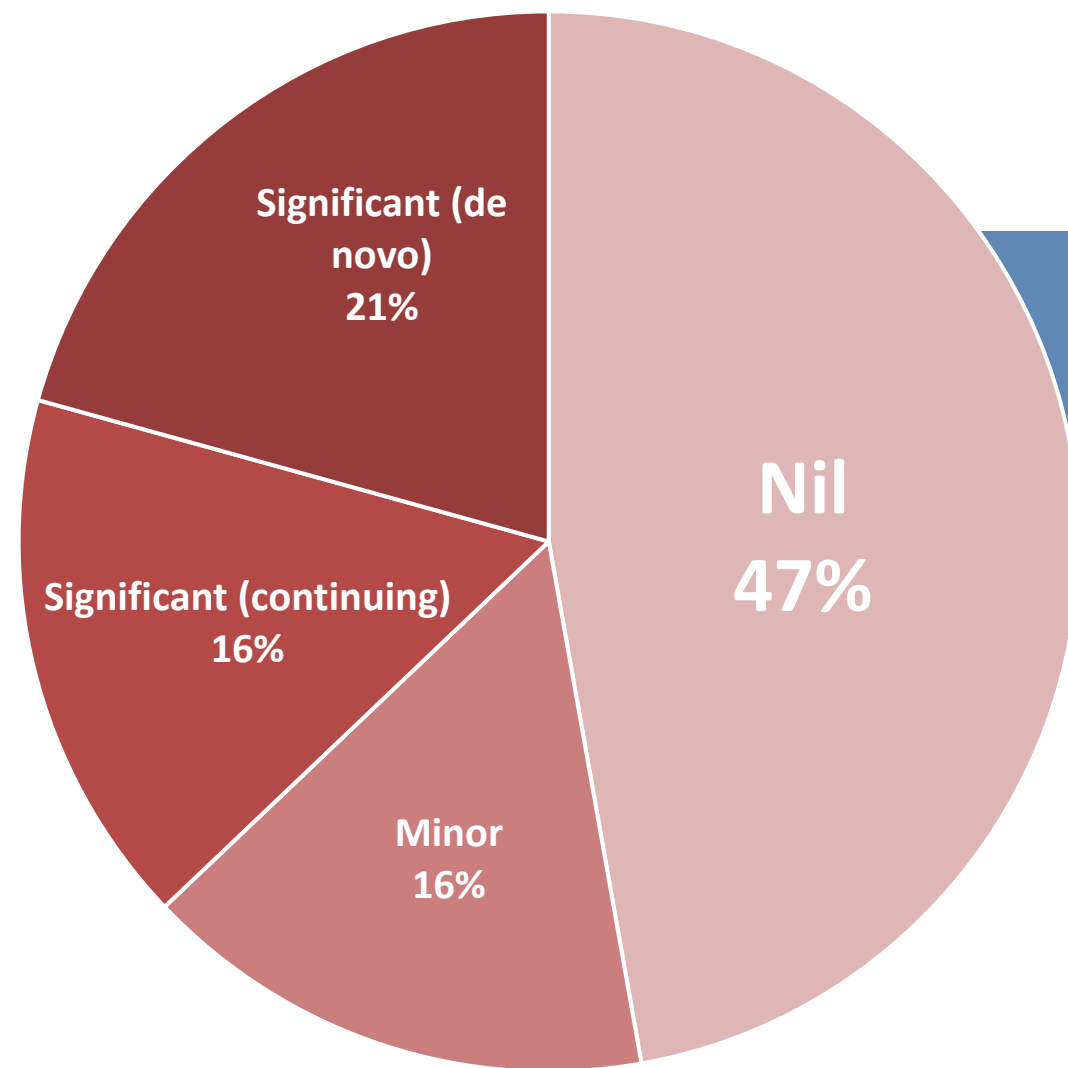
# cOAGB Evaluation

## 2. Efficacy

# Weight Loss

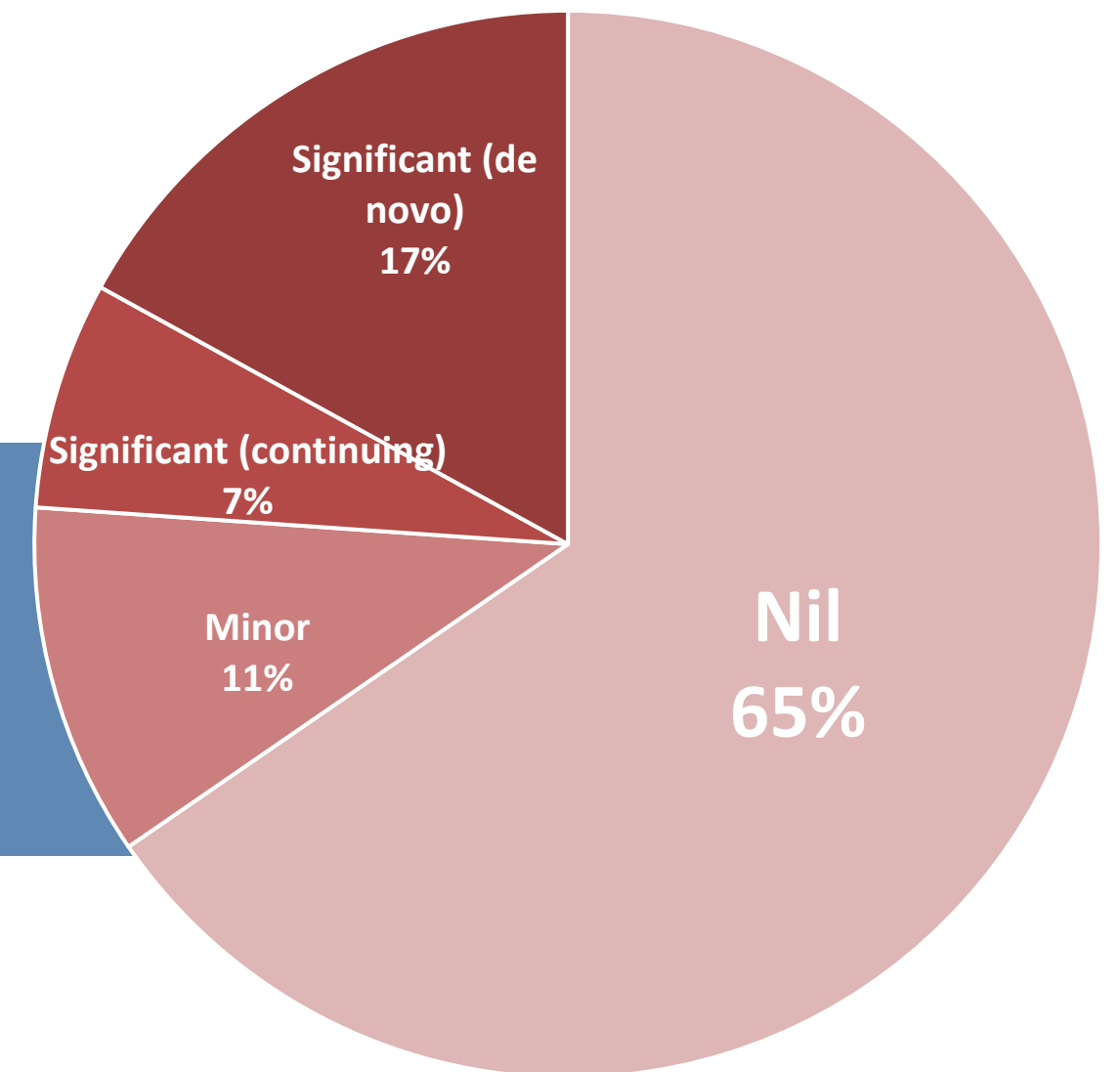
Follow-up Period	Mean % TBWL, % (SD)	Mean %EWL (SD)
<1 year	18.9	41.0
1 year	20.7	58.2
2 years	25.1	80.0
3 years	22.1	68.6
4 years	26.3	62.9
≥ 5 years	19.8	56.6

# Postoperative Reflux



**Heartburn symptoms**

**Regurgitation symptoms**



# Post-Operative Complications

- 59.1% on reflux medication ( $\geq 1$ /week)
- Limited effect of taking medications on quality of life was 1.9 / 5

# Intractable Reflux

- Intractable reflux requiring reoperation in 18 patients (6.9%)
- 16 enteroenterostomy (Braun loop) - afterwards, all happy with the cOAGB and would have undergone it again

> [Obes Surg.](#) 2021 Aug;31(8):3880-3882. doi: 10.1007/s11695-021-05443-5. Epub 2021 Apr 29.

## **Braun Procedure Is Effective in Treating Bile Reflux Following One Anastomosis Gastric Bypass: a Case Series**

Muhammad Qutayba Almerie <sup>1</sup>, Jennifer H Darrien <sup>2</sup>, Shafiq Javed <sup>2</sup>, David D Kerrigan <sup>2</sup>

> [Ann Med Surg \(Lond\).](#) 2022 Mar 28;76:103544. doi: 10.1016/j.amsu.2022.103544. eCollection 2022 Apr.

## **Comparison between Roux-en-Y gastrojejunostomy and Billroth-II with Braun anastomosis following partial gastrectomy: A randomized controlled trial**

Azita Shishegar <sup>1</sup>, Matin Vahedi <sup>2</sup> <sup>3</sup>, Fereshteh Kamani <sup>2</sup>, Mehrdad Fathi Kazerouni <sup>3</sup>, Morteza Aghajanjpour Pasha <sup>4</sup>, Farhad Fathi <sup>2</sup>

# Reflux in the Literature

Multicenter Study > [Obes Surg.](#) 2021 Jul;31(7):2927-2934.

doi: 10.1007/s11695-021-05334-9. Epub 2021 Mar 25.

## Sleeve Gastrectomy Failure–Revision to Laparoscopic One–Anastomosis Gastric Bypass or Roux–n–Y Gastric Bypass: a Multicenter Study

Shlomi Rayman <sup>1 2</sup>, Dan Assaf <sup>3</sup>, Carmil Azran <sup>4</sup>, Gideon Sroka <sup>5 6</sup>, Ahmad Assalia <sup>7</sup>, Nahum Beglaibter <sup>8</sup>, Ram Elazary <sup>9</sup>, Shai Meron Eldar <sup>10</sup>, Orly Romano-Zelekha <sup>11</sup>, David Goitein <sup>3 12</sup>

GORD rate at 1 year post:

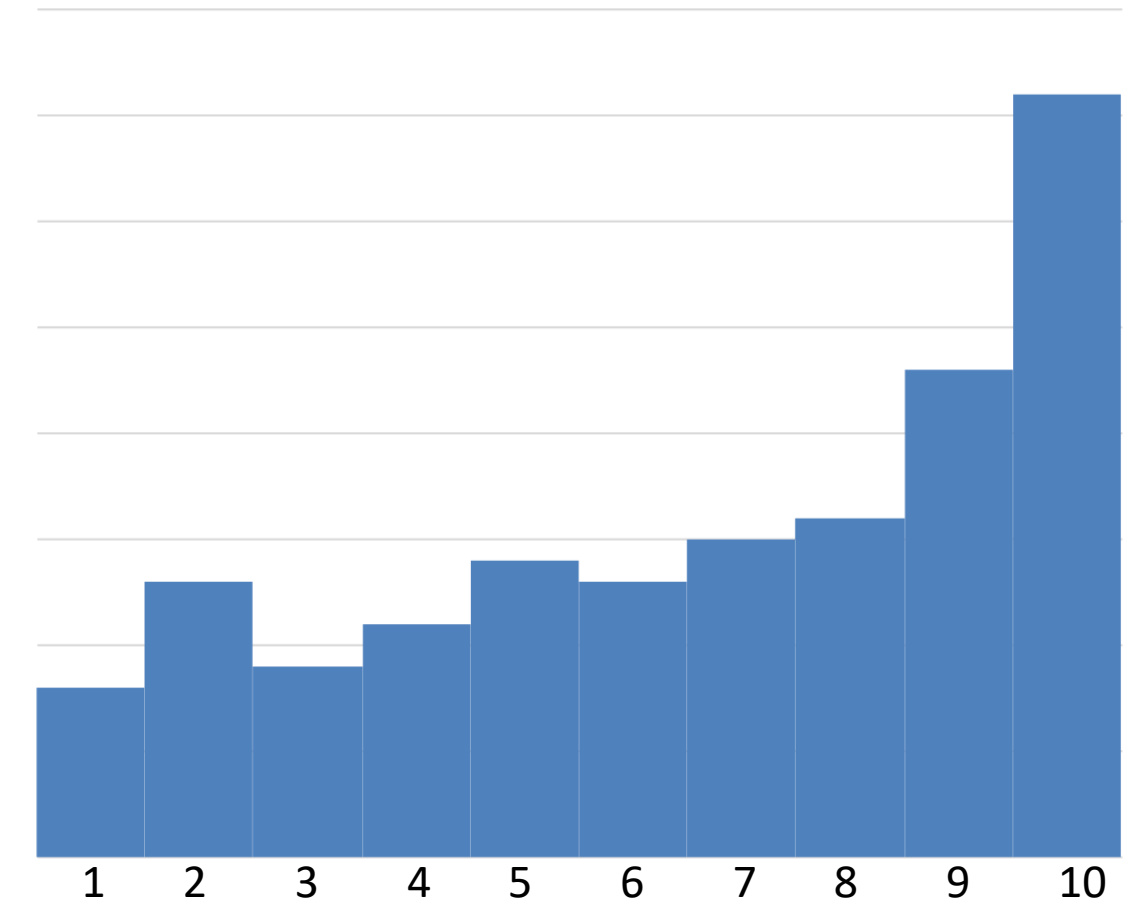
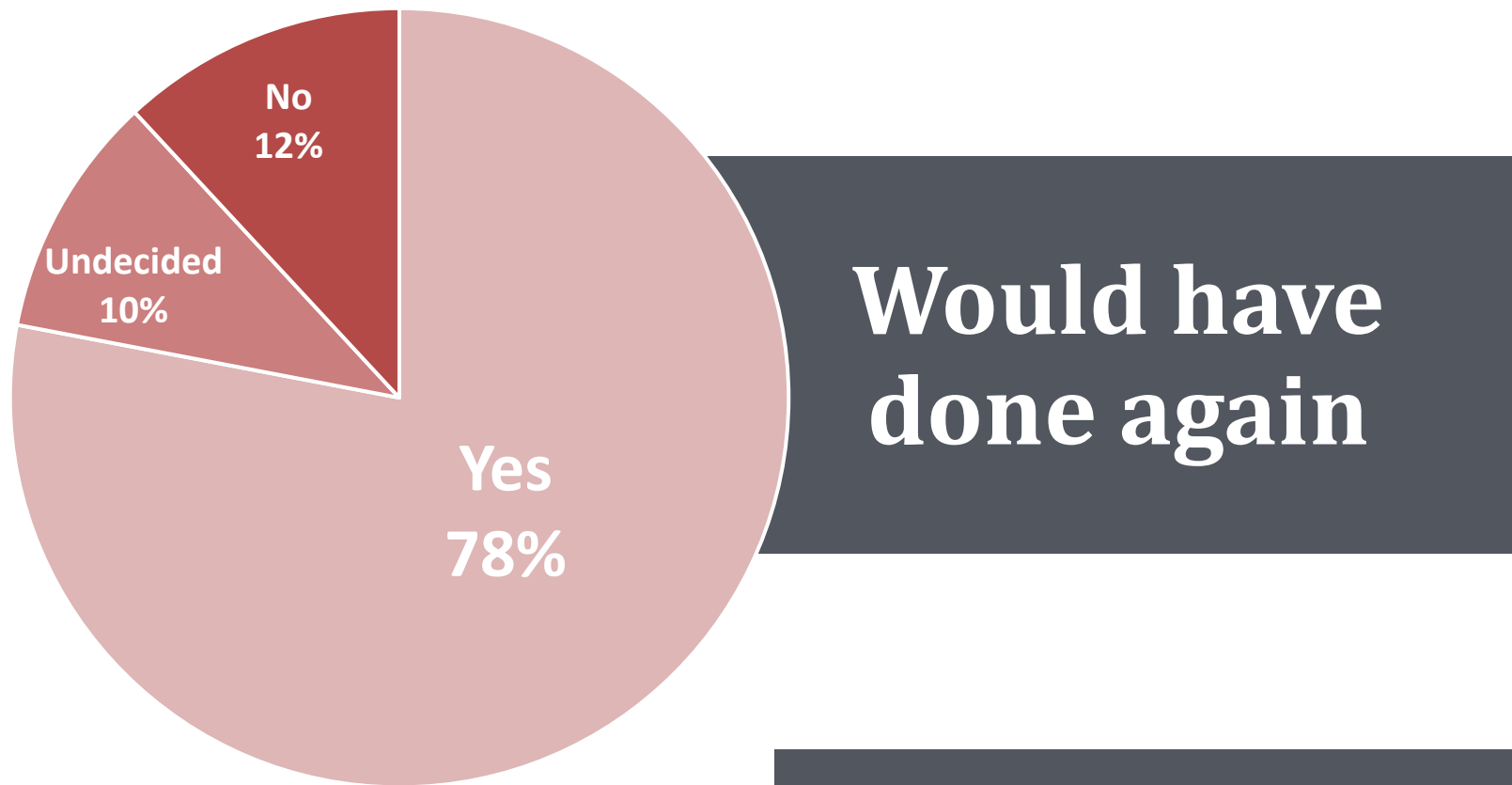
**cOAGB** (n=144) = **17.4%**

**cRYGB** (n= 119) = **7.6%**

# cOAGB Evaluation

**3. Patient-  
reported  
outcomes**

# Patient Satisfaction



Satisfaction score distribution (out of 10)



# Limitations

- Follow-up
  - Especially with survey responses
- Objective measures of outcomes
  - pH, impedance monitoring, routine endoscopy

# Conclusions

## **cOAGB is safe and works well.**

- Minimal early morbidity - ~99% home following morning
- Reflux may persist or develop
  - Enteroenterostomy is a good tool to consider (100% satisfaction)