De Novo Gastric Reflux in LSG

Melbourne Gastro Surgery
A BRAND OF BODY GENESIS INSTITUTE

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ST VINCENT'S HOSPITAL MELBOURNE
A FACILITY OF ST VINCENT'S HEALTH AUSTRALIA

Northern Health

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Why did we do the study?

- LSG works

- What about reflux post LSG?
  - 11-34%, 9– 83.33% (Oor JE - 2016, Pavone G - 2022)
  - Heterogeneity in opinion and technique ie. omentopexy (Mahawar 2020)
  - Rates of BE 18% (Sebastianelli 2019)

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So what do we tell our patients?

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AIMS

Single centre	Perioperative protocols
Technique	bougie, hiatal dissection, omentopexy
Single surgeon	Selection, perioperative assessment + care

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Inclusion	Exclusion
1. No pre-operative symptoms (not de novo reflux) 2. Able to attend follow up at 24 months	1. PPIs 2. Preoperative symptoms of GORD on clinical history 3. Medium size (>4 cms) or larger hiatal hernias 4. Undergoing revision from lap band to LSG. 5. Subsequent revision to RNY gastric bypass due to surgical complications of leak or stricture formation

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METHODS

Primary end points:

De novo reflux disease.

- +ve EGD and/or Histo

Secondary end points:

Asymptomatic reflux

- <8 on the RDQ prior EGD with +ve EGD/histo/both.
- BE on histo

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Eligible participants at pre-gastroscopy interview

- ie. post op weight, height, smoking, RDQ

Endoscopic findings:

LA classification, Prague classification for BE,
Macroscopic evidence of GERD or BE

Histological evidence of GERD or BE determined by pathologist

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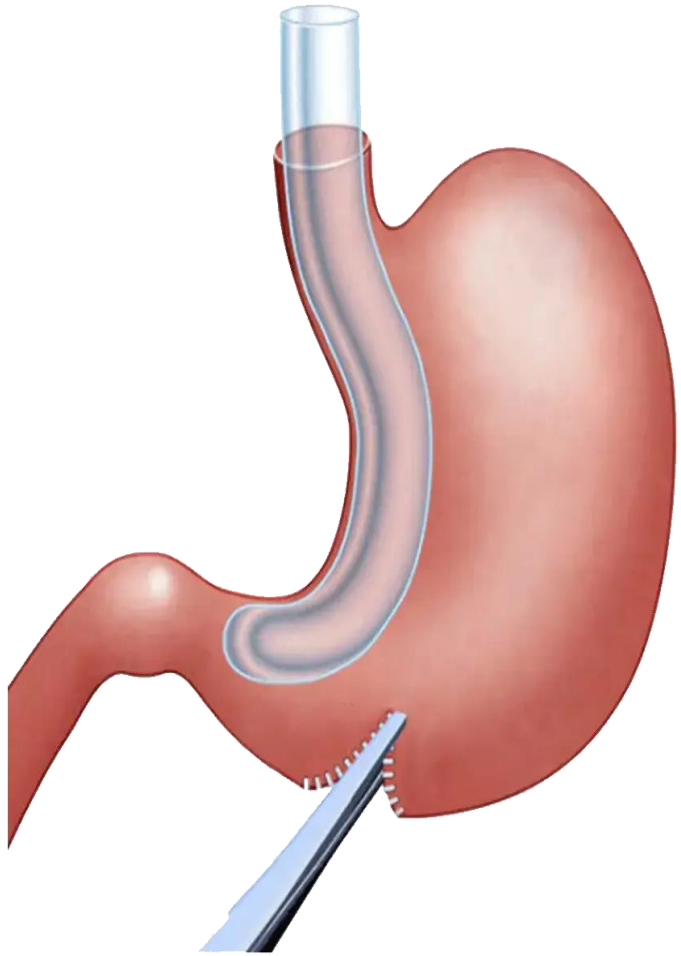
SURGICAL TECHNIQUE

1. Placement of Bougie – 36Fr
2. Gastrectomy 4-5cm from pylorus
3. Full exposure L crus
4. Preserve pleural peritoneal membrane if no HH
5. Cruraplasty only if dimple present
6. Omentopexy using V-Loc absorbable



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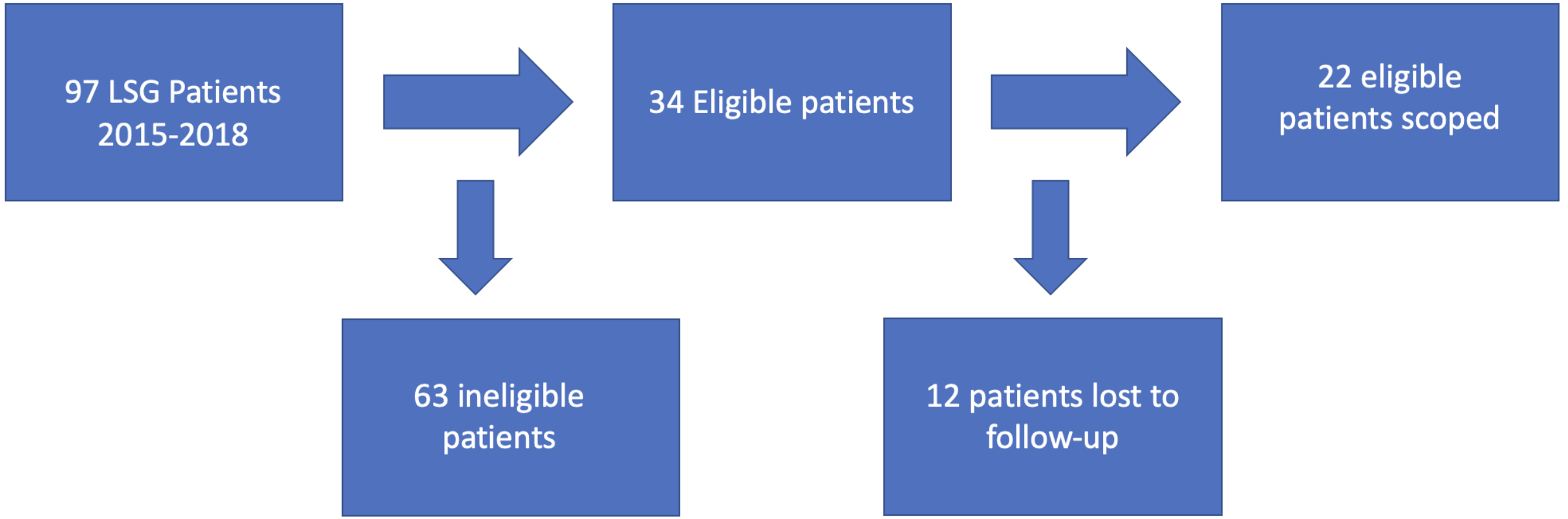
RESULTS



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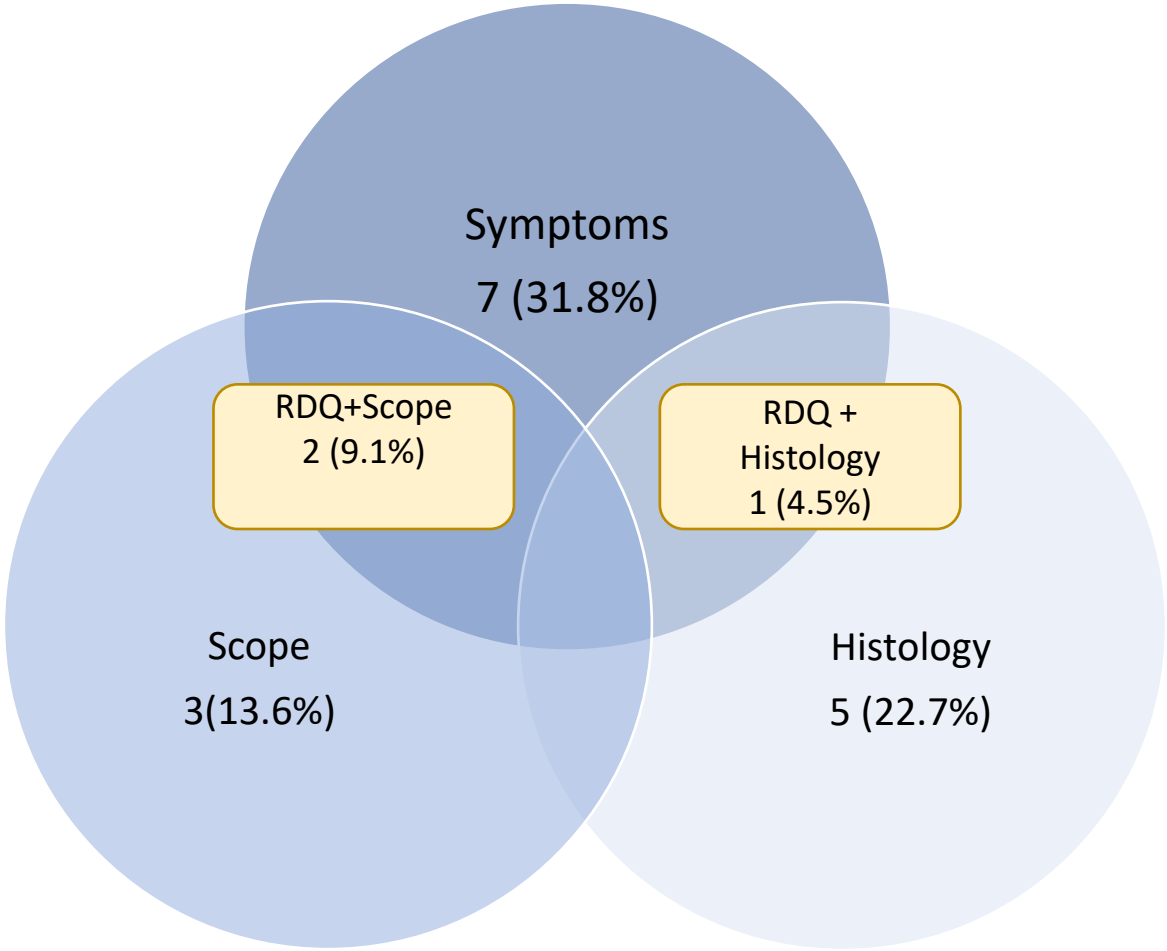

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RESULTS

- Average follow up: 62.2 months
- Reflux on EGD: 13.6%
- GERD on histology: 21.7%
- Criteria was either scope or histology therefore **TOTAL: 36.4%**
  - No BE on scope

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RESULTS: Group Analysis

De novo reflux	No de novo reflux
• 8 patients • Av. Age: 49 • Duration FU: 55.5 months • Post op BMI: 37.91 (p=0.1) • 50% regular alcohol (RR1.75, p=0.31, OR 2.5 p=0.32) • Diabetic: 25%	• 14 patients • Av. Age: 46 • Duration FU: 61.5 months • Post op BMI: 33.96 (p=0.1) • 0% regular alcohol • Diabetic 21%

Mean weight loss: 21.6kg in both groups

What did we learn?

- Incidence of De Novo reflux
- Higher total BMI more likely to develop De Novo reflux
- Challenges of doing clinical research during lockdown in COVID